



QUARTERLY REPORT

Local Projects
Q1 FY 2011 | 2012
July 2, 2011 — October 1, 2011

Rebuilding Today for a Better Tomorrow

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1. PROGRAM DESCRIPTION

The Water System Improvement Program (WSIP) is a \$4.6 billion dollar, multi-year capital program to upgrade the City of San Francisco's regional and local drinking water systems. The program will deliver improvements that enhance the City's ability to provide reliable, affordable, high quality drinking water to its 26 wholesale customers and regional retail customers in Alameda, Santa Clara, and San Mateo Counties, and to 800,000 retail customers in San Francisco, in an environmentally sustainable manner. The WSIP is structured to cost-effectively meet water requirements, improve seismic and delivery reliability, and achieve water supply goals.

Built in the early to mid-1900s, many components of the water system are nearing the end of their working life, with crucial facilities crossing or in close proximity to three major earthquake faults. The San Francisco Public Utilities Commission (SFPUC) initiated the WSIP to repair, replace, and seismically upgrade the system's deteriorating pipelines, tunnels, dams, reservoirs, pump stations, storage tanks, and treatment facilities.

The program consists of 35 local projects located within San Francisco and 46 regional projects spread over seven different counties from the Sierra foothills to San Francisco. Local projects only benefit San Francisco residents whereas regional projects benefit both City residents and the 26 wholesale agencies that receive water from the SFPUC. The management of local projects is divided into 4 sub-programs – Reservoirs, Pump Stations / Tanks, Pipelines / Valves, and Miscellaneous.

The Local program originally included local water supply projects. These projects 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. The management and implementation of the five (5) local water supply projects was transferred from the WSIP to the Water Enterprise Capital Improvement Program (CIP) as of July 1, 2011.

The WSIP is funded through the issuance of revenue bonds. Local Measures A and E, which were approved by San Francisco voters in November 2002, allowed for the financing of improvements to the City's water system using revenue bonds and/or other forms of revenue financing. Increases in the water rates of retail and wholesale customers will be used to pay back the debt service on the bonds.

The program budget and schedule were originally adopted by the San Francisco Public Utilities Commission on March 1, 2003. The program at the time was referred to as the Capital Improvement Program (CIP). scope of the CIP was changed significantly following the adoption of Levels of Service (LOS) goals in early 2005. The program changes were so substantial that the program was renamed the WSIP and a new program budget and schedule were adopted on November 29, 2005. Since the scope of the 2005 Revised WSIP is in general representative of the program being implemented today, the 2005 budget and schedule are considered the "Baseline Budget and Schedule."

Subsequently, the WSIP Baseline Budget and Schedule were revised in 2007, 2009 and 2011, and they were approved by the San Francisco Public Utilities Commission on February 26, 2008, July 28, 2009, and July 12, 2011, respectively. Refer to Appendix A for a scope description of all the local projects included in the WSIP.

Program Revision	Commission Approval	Budget (\$Million)	Schedule ^(*)
2003 (Original)	March 1, 2003	\$3,628	03/15/16
2005 (Baseline)	November 29, 2005	\$4,343	06/30/14
2007 (Revised)	February 26, 2008	\$4,392	12/18/14
2009 (Revised)	July 28, 2009	\$4,586	12/04/15
2011 (Latest Approved)	July 12, 2011	\$4,586	07/26/16

^{*} Final Program Completion Date

2. PROGRAM STATUS

This first (1st) Quarterly Report for Fiscal Year (FY) 2011-2012 presents the progress made on the WSIP local projects between July 2, 2011 and October 1, 2011. The program's schedule and budget were last approved by the San Francisco Public Utilities Commission (SFPUC or Commission) on July 12, 2001. The progress made on the regional projects of the WSIP is presented in a separate quarterly report.

Figure 2.1 shows the total Approved Budget for the local projects remaining in each phase of the program as of October 1, 2011. The number of projects currently active in each phase is shown in parenthesis.

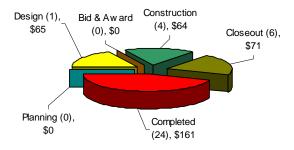


Figure 2.1 Total Approved Budget for Projects Active in Each Phase (\$Million)

Figure 2.2 shows the number of local projects in the following stages of the program as of October 1, 2011: Pre-construction, Construction, and Post-construction.

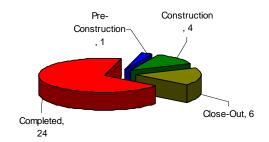


Figure 2.2 Number of Projects in Pre-construction, Construction, and Post-construction

Figure 2.3 summarizes the environmental review and permitting status of the WSIP 35 local projects as of October 1, 2011.

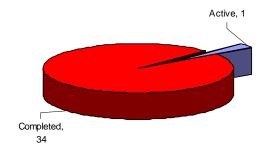


Figure 2.3 Program Environmental and Permitting Status

3. PROGRAM COST SUMMARY

Table 3.1 provides an overall program-level cost summary of the WSIP Local Program. It shows the Expenditures to Date; the 2005 Baseline, 2011 Approved, Current Approved and Q1/FY11-12 Forecasted Budgets; and the Cost Variance between the Current Approved and Forecasted Budgets.

The total Current Approved WSIP Budget (including Regional and Local Programs, Program Management Reserve, and Financing Costs) is \$4,586 million and the currently Forecasted Cost at completion is \$4,586 million (\$0.1 million over the Current Approved Budget). The Approved WSIP Budget for the Local Improvement Projects is \$361 million and the currently Forecasted Cost at completion is \$360 million (\$1.1 million under the Current Approved Budget). The Current Approved WSIP Budget for the Regional Program is \$3,326 million and the currently Forecasted Cost at completion is \$3,328 million (\$1.3

million over the Current Approved Budget). Refer to Appendix B for a graphical representation of how the WSIP budget and actual expenditures have changed over time.

Table 3.2 provides the status of construction contingencies. For each sub-program, it shows the Approved Contingency; the Q1/FY11-12 Forecasted Change Orders; the Q1/FY11-12 Forecasted Trends; and the Q1/FY11-12 Forecasted Remaining Contingency. As of October 1, 2011, the Total Forecasted Remaining Contingency is \$8.1 million.

Table 3.1 Program Cost Summary

Cost Categories	Expenditure s To Date (\$ Million)	2005 Baseline Budget (\$ Million)	2011 Approved Budget (\$ Million)	Current Approved Budget (\$ Million)	Q1/FY11-12 Forecasted Cost (\$ Million)	Cost Variance (\$ Million)
Local Improvement	(A)	(B)	(C)	(D)	(E)	(F = D - E)
Projects	\$278	\$383	\$360.6	\$360.6	\$359.5	\$1.1
Construction Cost ⁽¹⁾	\$197	\$289	\$264.2	\$264.2	\$264.1	\$0.1
Program Delivery Cost ⁽²⁾	\$80	\$91	\$95.4	\$95.4	\$94.4	\$0.9
Other Costs ⁽³⁾	\$1	\$3	\$1.0	\$1.0	\$1.0	\$0.0
Regional Subtotal	\$1,445	\$3,407	\$3,310.5	\$3,326.3	\$3,327.5	(\$1.3)
Regional and Local Total	\$1,723	\$3,791	\$3,671.1	\$3,686.9	\$3,687.0	(\$0.1)
Local Water Supply Projects ⁽⁴⁾	\$28		\$281.3	\$281.3	\$281.3	\$0.0
Program Management Reserve			\$161.4	\$145.7	\$145.7	\$0.0
Finance		\$552	\$471.7	\$471.7	\$471.7	\$0.0
PROGRAM TOTAL	\$1,752	\$4,343	\$4,585.6	\$4,585.6	\$4,585.7	(\$0.1)

Notes:

- 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.
- 4. Local Water Supply Projects managed as part of the Water Enterprise Capital Improvement Program (CIP) are (1) Lake Merced Water Level Restoration, (2) San Francisco Groundwater Supply, (3) San Francisco Westside Recycled Water, (4) Harding Park Recycled Water, and (5) San Francisco Eastside Recycled Water.
- D The budget and schedule approved as part of the June 2011 Revised WSIP, plus any additional budget and schedule changes approved by the Commission as part of additional contingencies on construction contracts.

Sub Program	2011 Approved Contingency (\$ Million)	Current Approved Contingency (\$ Million)	Q1/FY11-12 Forecasted Change Orders (\$ Million) (C)	Q1/FY11-12 Forecasted Trends (\$ Million)	Q1/FY11-12 Forecasted Remaining Contingency (\$ Million) (E = B-C-D)	
Reservoirs	\$9.62	\$9.62	\$5.10	\$0.01	\$4.51	
Pump Stations / Tanks	\$6.96	\$6.96	\$2.21	\$1.16	\$3.59	
Pipelines / Valves	\$0.55	\$0.55	\$0.51	\$0.00	\$0.04	
Miscellaneous	\$0.01	\$0.01	\$0.01	\$0.00	\$0.00	
Local Total	\$17.14	\$17.14	\$7.83	\$1.17	\$8.14	

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 2005 Baseline, 2011 Approved and Q1/FY11-12 Forecasted Schedules for the WSIP Local Program. 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 WSIP (including Regional and Local Programs) and for the Regional Program is July 2016 and the currently Forecasted Schedule completion is the same. The Approved Schedule completion for the WSIP Local Program is June 2015 and currently Forecasted Schedule completion is the same. Refer to Appendix C for a graphical presentation of the WSIP Approved Project-Level Schedule.

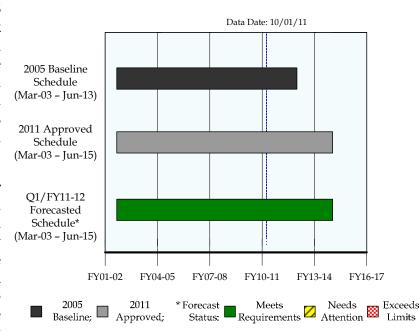


Figure 4.1 Program Schedule Summary

Table 4.1 2011 Approved vs. Q1/FY11-12 Forecasted Schedule Dates

Category	2005 Baseline Start	2011 Approved Start	Current* Approved Start	Actual Start	2005 Baseline Finish	2011 Approved Finish	Current* Approved Finish	Q1/FY11-12 Forecasted Finish	Schedule Variance (Months)
Local Program	03/01/03	03/31/03	03/31/03	03/01/03✓	06/28/13	06/05/15	06/05/15	06/05/15	-
Regional Program	03/01/03	03/31/03	03/31/03	03/01/03✓	06/30/14	07/29/16	07/29/16	07/29/16	ı
Overall WSIP	03/01/03	03/01/03	03/01/03	03/01/03✓	06/30/14	07/29/16	07/29/16	07/29/16	-

^{*} The budget and schedule approved as part of the June 2011 Revised WSIP, plus any additional budget and schedule changes approved by the Commission as part of additional contingencies on construction contracts.

WSIP Quarterly Report Q1-FY2011-2012 (07/02/11 - 10/01/11)

5. PROJECT PERFORMANCE SUMMARY*

All costs are shown in \$1,000s as of 10/01/11

Project Name	Active Phase (**)	2005 Baseline Budget (a)	2011 Approved Budget (b)	Current Approved Budget (c)	Q1/FY11-12 Forecasted Cost (d)	Expenditures To Date (e)	Cost Variance (f= c - d)	Cost Status (+)	2005 Baseline Completion (g)	2011 Approved Completion (h)	Current Approved Completion (i)	Q1/FY11-12 Forecasted Completion (j)	Schedule Variance (k = i - j)	Schedule Status (+)	Project Data Sheet
Reservoirs															
CUW31901 - Hunters Point Reservoir Rehab & Seismic Upgrade	CN	\$ 8,123	\$ 3,597	\$ 3,597	\$ 3,767	\$ 2,614	(\$170)	1	05/04/12	08/20/12	08/20/12	08/20/12	-	*	See Section 6
CUW33701 - Sutro Reservoir Rehab & Seismic Upgrade	DS	\$ 31,372	\$ 65,000	\$ 65,000	\$ 64,675	\$ 3,766	\$ 325	*	07/15/11	06/05/15	06/05/15	06/05/15	•	*	See Appendix D
Pump Stations / Tar	nks														
CUW30901 - Lake Merced Pump Station Essential Upgrades	CN	\$ 69,093	\$ 47,292	\$ 47,292	\$ 48,321	\$ 38,208	(\$1,029)	1	07/15/11	09/28/12	09/28/12	09/28/12	-	*	See Section 6
CUW32001 - Forest Hill Pump Station Upgrades	CN	\$ 4,446	\$ 7,583	\$ 7,583	\$ 7,583	\$ 1,576	-	*	12/02/11	09/20/13	09/20/13	09/12/13	<1 mo. Early	*	See Appendix D
CUW33801 - La Grande Pump Station Upgrades	CN	\$ 5,311	\$ 5,225	\$ 5,225	\$ 5,225	\$ 3,068	-	*	11/05/10	11/26/12	11/26/12	11/26/12	-	*	See Appendix D

* 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-Ou

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

+ Cost and Schedule Status

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



Need Attention: Forecasted Cost is over Approved Budget by greater than \$50K and less than 10%. Or Forecasted Schedule is over Approved Schedule by greater than 1 month and less than 6 months and less than 10%.

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

6. PROJECTS NOT WITHIN BUDGET AND/OR SCHEDULE

CUW31901 - Hunters Point Reservoir Rehab & Seismic Upgrade

Project Description: This project is the upgrade of the existing Hunters Point Reservoir to meet current seismic standards and conform to all State Health requirements and includes correction of circulation problems and new inlet/outlet structure.

Region: Reservoirs	Project Sta	tus: Construction	Environmental Status: Completed (CatEx)			
Project Cost:		Project Schedu	ıle:			
Approved	\$3.60 N	M Approved Feb-0	8	Aug-12		
Forecast*	\$3.77 N	M Forecast* Feb-0	8	Aug-12		
Actual	\$2.61 N	M Project Percent (Complete: 81.3%			
Approved; Actua	l Cost; * Forecast Status:	Meets Requirements	Needs Attention	Exceeds Limits		
Key Milestones:	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion		
Current Forecast	08/25/10√	09/14/10√	02/07/11√	02/16/12		

Progress and Status:

Construction is progressing with all the seismic related work and most of the steel platform work completed. Pipeline and cathodic protection work have been completed as well as a majority of mechanical work scope. Electrical work started this quarter and will continue through next quarter. Landscape and other miscellaneous work will start next quarter.

Issues and Challenges:

None at this time.



Reservoir Roof

CUW30901 - Lake Merced Pump Station Essential Upgrades

Project Description: This project will rebuild the Lake Merced pump station. Specific improvements include a new reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

Region: Pump Stations / Ta	nks Project Sta	tus: Construction	Environmental St (Cat	-
Project Cost:		Project Schedu	ıle:	
Approved	\$47.29 N	M Approved Jan-06	5	Sep-12
Forecast*	\$48.32 M	M Forecast* Jan-06	5	Sep-12
Actual	\$38.21 N	M Project Percent C	Complete: 82.7%	
Approved; Actual	Cost; * Forecast Status:	Meets Requirements	Needs Attention	Exceeds Limits
Key Milestones:	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	12/28/07✓	10/20/08√	06/01/09√	04/25/12

Progress and Status:

Completed 7-day system reliability testing of the new Lake Merced pump station, excluding the Sutro and Lake Draw system pumps. Released new pump station for operational service with functional Sunset system pumps. Completed demolition and removal of the existing pipe manifolds and compaction grouting of area between existing and new pump buildings. Continue construction of the tie-back anchoring system to cement buttress wall. Continue pipe construction to connect the Lake Draw and Sutro pipelines to existing. Continue selective demolition, hazardous material abatement, and seismic retrofit of the existing pump building structure. Disinfection, water quality testing, and startup and commissioning of the Sutro and Lake Draw pumps are anticipated to begin next quarter.

Issues and Challenges:

A formal department letter was issued to San Francisco Fire Department (SFFD) regarding the design intent of LMPS backup generator system and general water system facility operation. The letter aims to address SFFD's concerns regarding the continuous operation of LMPS and the role the backup power generators play. SFFD agreement on this issue is needed to resolve of the outstanding Fire Permit for this facility.

Unforeseen hazardous materials was discovered during the selective demolition of the existing pump station building. Additional work to abate the hazmat materials is necessary and may delay construction progress



Mechanical pump arrangement inside the new LMPS building

Current cost variance reflects contingency estimate for refurbishment of the existing pump station building for office staff.

7. On-Going Construction

		Schedule			Budget		Variance (Original - Forecast)		
Construction Contract	NTP Date	l (midinal	Q1/FY111-12 Forecasted Construction Final Completion	Original Contract Cost	Q1/FY111-12 Forecasted Cost*	Schedule (Cal. Days)	Cost	Planned % Complete	Actual % Complete
Reservoirs									
CUW31901 - Hunters Point Reservoir Rehab & Seismic Upgrade	02/07/11	01/02/12	02/16/12	\$ 1,680,000	\$ 1,846,611	(45)	(\$166,611)	63.2%	85.9%
Pump Stations / Tanks									
CUW30901 - Lake Merced Pump Station Essential Upgrades Project	06/01/09	10/23/11	04/25/12	\$ 31,584,000	\$ 33,209,992	(185)	(\$1,625,992)	99.0%	83.7%
CUW32001 - Forest Hill Pump Station Upgrade	09/12/11	03/14/13	03/14/13	\$ 3,651,050	\$ 3,651,050	-	-	0.0%	0.0%
CUW33801 - La Grande Pump Station Upgrade	05/27/10	01/11/12	05/23/12	\$ 2,586,000	\$ 2,586,000	(133)	-	67.7%	52.1%

Program Total	Original	Q1/FY11-12	Varia	nce
for On-Going	Contract Cost	Forecasted Cost*	Cost	Percent
Construction	\$ 39,501,050	\$ 41,293,653	(\$1,792,603)	(4.5%)

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

8. PROJECTS IN CLOSE-OUT

Project Title	2005 Baseline Construction Phase Completion	Phase	Actual Construction Phase Completion	2005 Baseline Construction Phase Budget	2011 Approved Construction Phase Budget	Construction Phase Expenditures To Date
Reservoirs						
CUW30701 - Summit Reservoir Rehabilitation	06/02/06	06/26/06	06/26/06	\$ 9,649,877	\$ 7,760,609	\$ 7,861,726
Pump Stations/ Tanks						
CUW32101 - Forest Knolls Pump Station Upgrades	01/04/08	12/03/09	12/03/09	\$ 3,912,000	\$ 4,561,400	\$ 4,561,400
CUW32301 - Alemany Pump Station Upgrades (McLaren Park)	01/09/09	02/25/11	02/25/11	\$ 8,150,000	\$ 24,181,984	\$ 24,181,984
CUW33001 - Forest Knolls Tank Seismic Upgrade	01/04/08	12/03/09	12/03/09	\$ 2,185,000	\$ 2,447,633	\$ 2,447,633
CUW34001 - Vista Francisco Pump Station Upgrades	11/06/09	12/17/10	12/17/10	\$ 3,936,000	\$ 3,185,607	\$ 3,172,920
Pipelines / Valves						
CUW31201 - Lincoln Way Transmission Line	08/04/06	11/10/06	11/10/06	\$ 11,369,200	\$ 9,345,426	\$ 9,345,426
TOTAL				\$ 39,202,077	\$ 51,482,660	\$ 51,571,089

9. COMPLETED PROJECTS

	2005	2011		2005	2011	
n ' crid	Baseline	Approved	Actual	Baseline	Ammunicad	Project
Project Title	Project	Project	Project	Project	Project	Expenditures
		Completion	Completion	Budget	Budget	To Date
D	Completion	Completion		Duaget	Duaget	
Reservoirs						
CUW33401 - Stanford Heights	03/05/10	04/01/11	04/01/11	\$ 19,172,308	\$ 23,635,000	\$ 23,632,660
Reservoir Rehabilitation		, ,	, ,	, ,		
CUW33501 - Potrero Heights	07/13/07	08/11/08	08/11/08	\$ 7,610,033	\$ 6,836,736	\$ 6,836,736
Reservoir Rehabilitation						
Pump Stations/						
Tanks						
CUW30601 - Crocker Amazon	10/31/06	03/27/08	03/27/08	\$ 4,823,675	\$ 4,126,498	\$ 4,126,498
Pump Station Upgrades						
CUW31401 - La Grande Tank	06/07/07	12/18/08	12/18/08	\$ 7,919,543	\$ 6,987,728	\$ 6,987,728
Seismic Upgrade						
CUW31801 - Forest Hill Tank	01/05/07	08/31/07	08/31/07	\$ 3,204,561	\$ 2,936,199	\$ 2,936,199
Rehab & Seismic Upgrade	06/04/07	00/44/00	00 /44 /00	ф. 4.7.c2.007	ф. 4.0.4 5.0 4.5	ф 4 0 4 F 0 4 F
CUW32201 - Lincoln Park	06/01/07	08/11/08	08/11/08	\$ 4,762,027	\$ 4,345,215	\$ 4,345,215
Pump Station Upgrades CUW32401 - Mount Davidson	08/06/09	03/30/11	03/30/11	\$ 5,223,489	\$ 4,578,500	\$ 4,327,966
Pump Station Upgrades	00/00/09	03/30/11	03/30/11	Φ 3,223,469	φ 4,376,300 	φ 4,327,900
CUW32501 - Palo Alto Pump	04/10/09	11/16/10	11/16/10	\$ 5,225,506	\$ 6,254,000	\$ 6,255,038
Station Upgrades	01/10/07	11/10/10	11/10/10	Ψ 0,220,000	Ψ 0,201,000	φ 0,200,000
CUW32601 - Sky View - Aqua	07/11/08	08/11/09	08/11/09	\$ 5,717,647	\$ 4,751,094	\$ 4,751,094
Vista Pump Station Upgrade		, , , ,	, , ,	, , , , , ,		, , , , , , ,
CUW32701 - Summit Pump	03/20/08	08/11/08	08/11/08	\$ 6,396,784	\$ 6,546,113	\$ 6,546,113
Station Upgrades						
CUW32801 - McLaren #1 Tank	10/10/08	08/11/08	08/11/08	\$ 5,354,512	\$ 4,659,910	\$ 4,659,741
Rehab & Seismic Upgrade	8					
CUW32901 - Potrero Heights	07/13/07	08/11/08	08/11/08	\$ 1,281,714	\$ 1,084,863	\$ 1,084,863
Tank Seismic Upgrade	06/01/07	00 /11 /00	00 /11 /00	Ф 2 00 5 460	Ф. 2 (00 (5 (Φ.2.606.656
CUW33101 - Lincoln Park Tank Seismic Upgrade	06/01/07	08/11/08	08/11/08	\$ 3,085,460	\$ 2,690,656	\$ 2,686,656
CUW33201 - McLaren #2 Tank	10/10/08	08/11/08	08/11/08	\$ 5,329,017	\$ 4,458,201	\$ 4,458,201
Rehab & Seismic Upgrade	10/10/00	00/11/00	00/11/00	ψ 5,527,017	ψ 4,450,201	ψ 4,400,201
CUW33301 - Mount Davidson	08/06/09	03/30/11	03/30/11	\$ 3,927,838	\$ 2,829,000	\$ 2,568,414
Tank Seismic Upgrade		00,00,11	00,00,11	Ψ 0,521,000	4 2,023,000	\$ 2 ,000,111
CUW33901 - Potrero Heights	07/13/07	08/11/08	08/11/08	\$ 733,242	\$ 605,670	\$ 605,670
Pump Station Upgrades			, ,			·
Pipelines / Valves						
•	05 /07 /40	06/20/44	06/00/11	ф 00 11 4 5 0 4	Ø 11 450 000	ф. 0.000 7 4 Г
CUW30401 - North University Mound System Upgrade	05/07/10	06/30/11	06/30/11	\$ 23,114,504	\$ 11,450,000	\$ 9,999,715
CUW30801 - Key Motorized	11/06/07	08/11/08	08/11/08	\$ 11,447,747	\$ 10,984,746	\$ 10,984,746
and Other Critical Valves	11/00/07	00/11/00	00/11/00	Ψ 11, 11 /,/4/	ψ 10,704,740	Ψ 10,704,740
CUW31101 - Sunset	07/06/06	07/06/06	07/06/06	\$ 8,224,379	\$ 7,073,054	\$ 7,073,164
Circulation Improvements	11, 20, 00	,,	2., 20, 00	+ 0,1,000		
CUW31301 - Noe Valley	02/11/11	06/03/11	06/03/11	\$ 11,956,364	\$ 5,657,000	\$ 5,641,390
Transmission Main, Phase 2		' '				
CUW31501 - East / West	04/10/09	03/21/11	03/21/11	\$ 22,955,659	\$ 27,755,000	\$ 27,753,751
Transmission Main						
CUW31601 - Fulton @ Sixth	08/08/08	08/11/08	08/11/08	\$ 4,842,437	\$ 4,713,931	\$ 4,713,931
Ave - 30" Main Replacement						

				Q1-FY2011-2	012 (07/02/1	1 - 10/01/11)
Project Title	2005 Baseline Project Completion	2011 Approved Project Completion	Actual Project Completion	2005 Baseline Project Budget	2011 Approved Project Budget	Project Expenditures To Date
Miscellaneous						
CUW30301 - Vehicle Service Facility Equipment Safety Upgrade	07/02/09	08/11/09	08/11/09	\$ 5,245,082	\$ 4,043,540	\$ 4,043,540
CUW30501 - Fire Protection @ CDD	06/30/06	01/30/07	01/30/07	\$ 1,988,892	\$ 1,675,476	\$ 1,675,476
TOTAL				\$ 179,542,420	\$ 160,678,130	\$ 158,694,505

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APPENDICES

- A PROJECT DESCRIPTIONS
- B WSIP BUDGET AND EXPENDITURES HISTOGRAM
- C WSIP 2009 APPROVED PROJECT-LEVEL SCHEDULE
- D PROJECTS WITHIN BUDGET AND SCHEDULE
- **E LIST OF ACRONYMS**

APPENDIX A. PROJECT DESCRIPTIONS

Reservoirs

CUW30701 - Summit Reservoir Rehabilitation

This project consists of the upgrade of the existing Summit Reservoir to meet current seismic standards and conform to all State Public Health requirements. The project includes a new inlet/outlet structure to correct circulation problems.

CUW31001 - New Northwest Reservoir (Deleted)

This project is the construction of a new 5MG reservoir in the northeast zone of San Francisco. This reservoir will provide both fire protection and pressurized supply to areas currently served from the Sunset and Lombard Zones.

CUW31901 - Hunters Point Reservoir Rehab & Seismic Upgrade

This project is the upgrade of the existing Hunters Point Reservoir to meet current seismic standards and conform to all State Health requirements and includes correction of circulation problems and new inlet/outlet structure.

CUW33401 - Stanford Heights Reservoir Rehabilitation (Completed)

This project consists of the upgrade of the existing Stanford Heights Reservoir to meet current seismic standards and conform to all State Public Health requirements. The project includes a new inlet/outlet structure to correct circulation problems.

CUW33501 - Potrero Heights Reservoir Rehabilitation (Completed)

This project is the upgrade of the existing Potrero Heights Reservoir to meet current seismic standards and conform to all State Health requirements and includes correction of circulation problems and new inlet/outlet structure.

CUW33701 - Sutro Reservoir Rehab & Seismic Upgrade

This project is the upgrade of the existing Sutro Reservoir to meet current seismic standards and conform to all State Health requirements and includes correction of circulation problems and new inlet/outlet structure.

Pump Stations / Tanks

CUW30601 - Crocker Amazon Pump Station Upgrades (Completed)

This project will rebuild the Crocker-Amazon pump station, including a reinforced concrete structure, three pumps, stand-by generator, hydropneumatic tanks, security fencing, monitoring and disinfection systems, and landscaping.

CUW30901 - Lake Merced Pump Station Essential Upgrades

This project will rebuild the Lake Merced pump station. Specific improvements include a new reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

CUW31401 - La Grande Tank Seismic Upgrade (Completed)

The project will include the replacement of the La Grande tank, including a concrete tank foundation, new 350,000 gal steel tank, inlet/outlet piping, valves, security fencing, water quality monitoring systems, demolition of existing facility.

CUW31801 - Forest Hill Tank Rehab & Seismic Upgrade (Completed)

This project is the seismic upgrade of the Forest Hill concrete tank, including seismic work, new foundation, inlet/outlet, valves; retaining wall; security fencing and monitoring system, and site improvements.

CUW32001 - Forest Hill Pump Station Upgrades

This project will rebuild the Forest Hill pump station. Specific improvements include a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

CUW32101 - Forest Knolls Pump Station Upgrades

This project will rebuild the Forest Knolls pump station, including a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, water quality monitoring and sampling systems, and landscaping.

CUW32201 - Lincoln Park Pump Station Upgrades (Completed)

This project will rebuild the Lincoln Park pump station. Specific improvements include a new reinforced concrete structure, pumps, stand-by generator, security fencing, tanks, SCADA, monitoring and disinfection systems, and landscaping.

CUW32301 - Alemany Pump Station Upgrades (McLaren Park)

This project will rebuild the Alemany Pump Station, including a reinforced concrete structure, pumps, stand-by generators, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

CUW32401 - Mount Davidson Pump Station Upgrades (Completed)

This project will rebuild the Mount Davidson pump station. Specific improvements include a new reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

CUW32501 - Palo Alto Pump Station Upgrades (Completed)

This project will rebuild the Palo Alto Pump Station, including a seismically reinforced concrete structure, pumps, replacement of hydro pneumatic tanks, stand-by generator, security fencing, SCADA, landscaping, and demolition of existing facility.

CUW32601 - Sky View - Aqua Vista Pump Station Upgrade (Completed)

This project will rebuild the Sky View-Aqua Vista pump station, including a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, water quality monitoring and sampling systems, and landscaping.

CUW32701 - Summit Pump Station Upgrades (Completed)

This project will rebuild the Summit Pump Station, including a reinforced concrete structure, retaining walls, pumps, inlet-outlet piping, seismic reinforcing of existing generator building, security fencing, SCADA, landscaping, and demolition of existing facility.

CUW32801 - McLaren #1 Tank Rehab & Seismic Upgrade (Completed)

This project consists of the rehabilitation and seismic upgrade of the McLaren #1 Tank including seismic bracing, interior lining replacement, cathodic protection, new exterior coating, lead paint abatement, new inlet/drain/overflow piping and valves, security fencing, electrical improvements, paving, and landscaping.

CUW32901 - Potrero Heights Tank Seismic Upgrade (Completed)

This project is the demolition of the existing Potrero Heights Tank. The tank became nonessential upon completion of the Sunset Circulation Improvements Project.

CUW33001 - Forest Knolls Tank Seismic Upgrade

This project will include the replacement of the Forest Knolls Tank, including a new 100,000 gallon concrete tank, inlet/outlet piping, valves, security fencing, monitoring systems, demolition, and site improvements.

CUW33101 - Lincoln Park Tank Seismic Upgrade (Completed)

The project consists of the replacement of the Lincoln Park tank. Specific improvements include a new 100,000G concrete tank, inlet/outlet piping, valves, security fencing, monitoring systems, demolition, and site improvements.

CUW33201 - McLaren #2 Tank Rehab & Seismic Upgrade (Completed)

This project consists of the rehabilitation and seismic upgrade of the McLaren #2 tank including seismic bracing, interior lining replacement, cathodic protection, new exterior coating, lead paint abatement, new inlet/drain/overflow piping and valves, security fencing, electrical improvements, paving, and landscaping.

CUW33301 - Mount Davidson Tank Seismic Upgrade (Completed)

The project consists of the seismic retrofit of the existing 75,000G Mount Davidson tank. Specific improvements include a drilled pier foundation, inlet/outlet piping, valves, security fencing, monitoring systems, demolition, and site improvements.

CUW33801 - La Grande Pump Station Upgrades (Completed)

This project will rebuild the La Grande pump station, including a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

CUW33901 - Potrero Heights Pump Station Upgrades (Completed)

This project is the demolition of the existing Potrero Heights Pump Station. The pump station became nonessential upon completion of the Sunset Circulation Improvements Project.

CUW34001 - Vista Francisco Pump Station Upgrades

This project will rebuild the Vista Francisco pump station, including a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

Pipelines / Valves

CUW30401 - North University Mound System Upgrade (Completed)

This project will improve the supply reliability of the University Mound (UM) system, linking the two independent University Mound and Sunset Supply systems. In order to diminish the impact on the neighborhoods, sewer, domestic water distribution main, and pavement replacement work has been added to the scope.

CUW30801 - Key Motorized and Other Critical Valves (Completed)

This project consists of installing motorized valves at several critical locations. These valves will assist during emergency shutdowns after events such as main breaks, earthquakes, or other situations requiring immediate system isolation.

CUW31101 - Sunset Circulation Improvements (Completed)

This project improved the operation of the Sunset Zone by allowing McLaren tanks to feed the Potrero Heights System. This improved circulation and created a more reliable water supply for the Potrero System.

CUW31201 - Lincoln Way Transmission Line

This project is a new transmission main to serve as a backup to the deteriorated Sunset main from Sunset Reservoir to 5th Avenue and Lincoln Way. Under this project, approximately 13,000 LF of 48-inch steel pipe will be constructed.

CUW31301 - Noe Valley Transmission Main, Phase 2 (Completed)

This project is a new transmission main that will extend the Noe Valley main. The existing main, which ends at Sanchez and 20th Streets, needs to be extended to supply additional

pressure to areas where low pressure is a problem.

CUW31501 - East / West Transmission Main (Completed)

This project is a new main from Alemany PS to the western part of the City. This transmission main will enable the SFPUC to move water from the east side of the City into the Sunset system in the event of a peninsula pipeline failure or emergency.

CUW31601 - Fulton @ Sixth Ave - 30" Main Replacement (Completed)

This project consists of construction of a 30" main to replace the deteriorated Richmond supply main in the Golden Gate Park from Lincoln Way at 6th Avenue to Fulton at 6th. The main will extend the Sunset zone to increase the pressure and supply at the northern end of the zone.

Miscellaneous

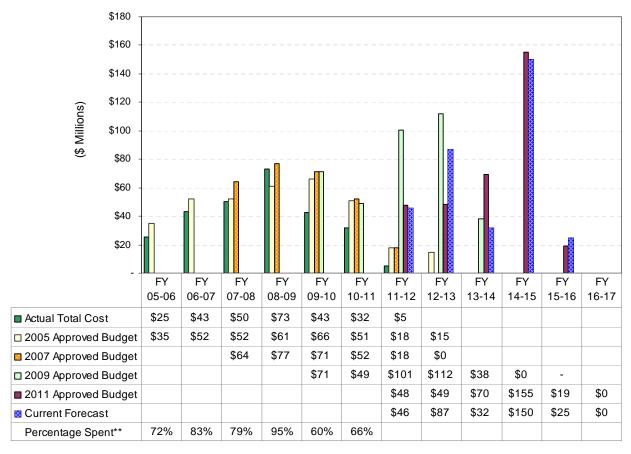
CUW30301 - Vehicle Service Facility Equipment Safety Upgrade (Completed)

This project will upgrade the vehicle service center, machine shop, and various other City Distribution Division (CDD) shops to correct seismic deficiencies and comply with worker safety standards and health department regulations.

CUW30501 - Fire Protection @ CDD (Completed)

This project covers the final phase of construction to complete the fire detection and monitoring systems needed at the City Distribution Division facilities.

APPENDIX B. BUDGET AND EXPENDITURE HISTOGRAM*



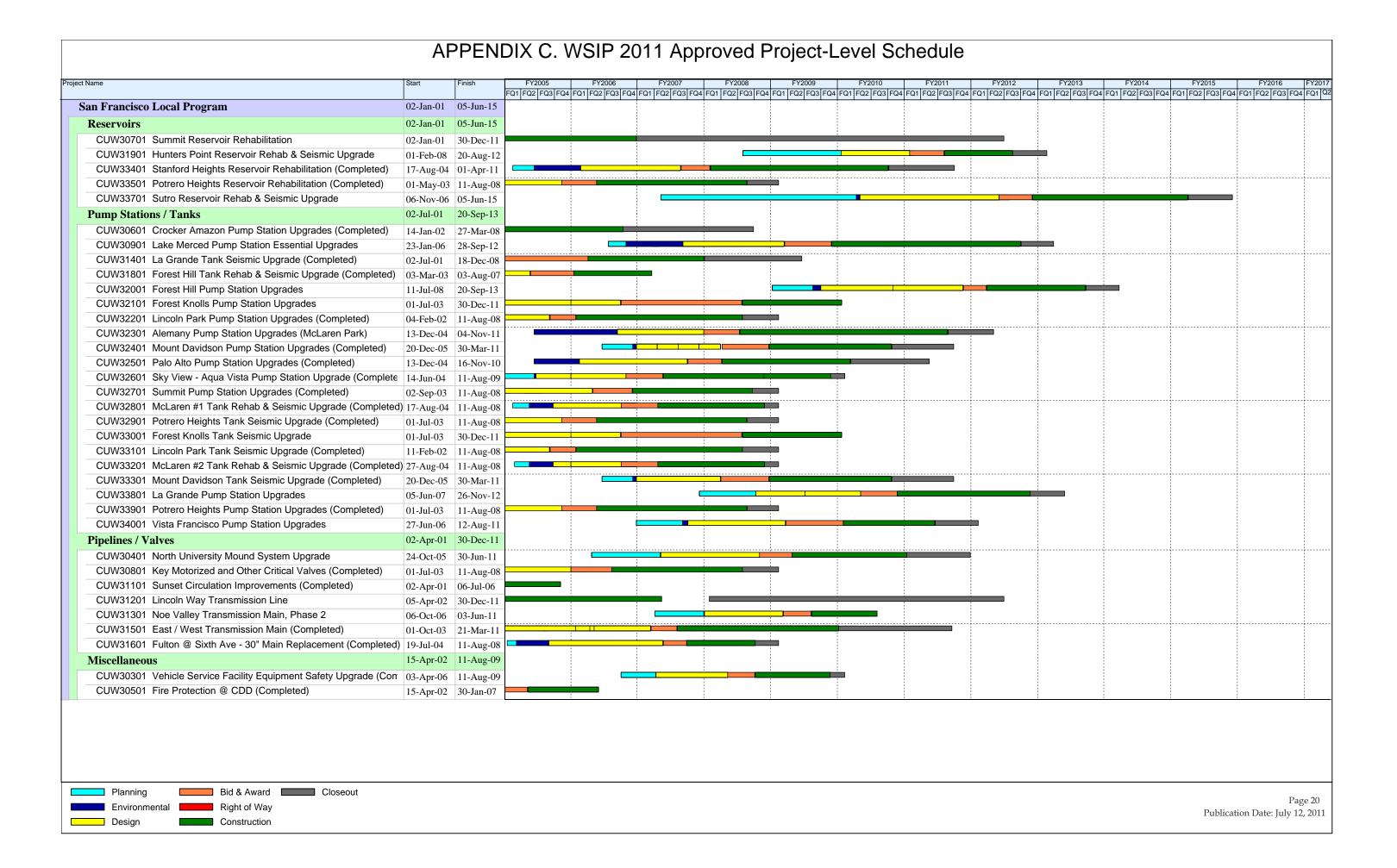
All costs are shown in \$ Millions.

Figure B Annual Budgeted Spending Plans vs. Actual Expenditures

Figure B compares the spending plans associated with the various WSIP Approved Budgets to Actual Expenditures. It shows total annual expenditures from FY05-06 through Q1/FY11-12 and cost projections (Current Forecast) from FY11-12 through program completion in July 2017. Actual annual expenditures have ranged from 60% to 95% of planned expenditures.

^{*} The histogram does not reflect budget and expenditures prior to FY 2005-2006.

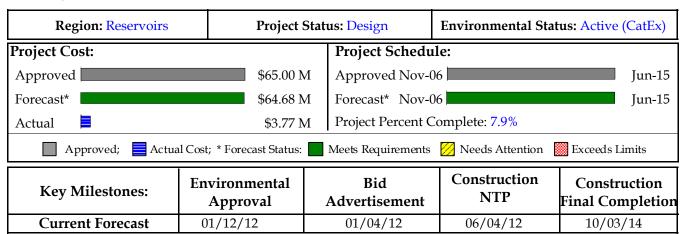
^{**} Percentage Spent calculated as Actual Expenditures over the most current Approved Budget for each individual Fiscal Year.



APPENDIX D. PROJECTS WITHIN BUDGET AND SCHEDULE

CUW33701 - Sutro Reservoir Rehab & Seismic Upgrade

Project Description: This project is the upgrade of the existing Sutro Reservoir to meet current seismic standards and conform to all State Health requirements and includes the correction of circulation problems and new inlet/outlet structure.



Progress and Status:

The project team hired an environmental consultant to provide the required air quality analysis. At the request of the consultant, the conceptual equipment/ vehicle usage and associated emissions during construction were developed by the project team. Preliminary modeling results are expected in mid-July. These results will determine the required CEQA compliance document for the project. The design team completed and presented to CDD the 95% design as scheduled in this quarter. The in-house and independent technical reviews of the 95% set are completed. The scope of the tunnel and outlet pipe repair was finalized in this quarter and was incorporated in the design. The outlet pipe will receive FRP (fiber reinforced polymer) lining and the exterior deteriorated coating will be repaired. The concrete tunnel and the under drain alarms will be repaired and the existing gate valve will be replaced.

Issues and Challenges:

The work inside the outlet tunnel will likely require multiple shutdowns, since the valve replacement needs to be completed within a few hours to avoid any disruption in the system. In addition, the lining inside the outlet pipe will require alternative means of water delivery to the distribution zone for a few weeks. The project team and CDD operations started planning for the shutdowns and strategizing temporary delivery options. The detail of project constraints and accepted



Interior of Sutro Reservoir

sequencing will be incorporated in the specifications in the next quarter.

The embankment retrofit for this project was eliminated based on the agreement with DSOD. Consequently, the planned test jet-grouting during the design phase was eliminated and the consultant budget was reduced by \$325 k.

CUW32001 - Forest Hill Pump Station Upgrades

Project Description: This project will rebuild the Forest Hill pump station. Specific improvements include a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

Region: Pump Stations / Tar	nks Project Sta	tus: Construction	Environmental S (Cat	*
Project Cost:	Project Sched	ule:		
Approved	\$7.58 N	M Approved Jul-08	8	Sep-13
Forecast* \$7.58 M		M Forecast* Jul-08	Sep-13	
Actual	M Project Percent (Complete: 24.0%		
Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits				
Key Milestones:	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	11/23/10√	06/01/11√	09/12/11√	03/14/13

Progress and Status:

Completed review of bids and awarded the contract to the low bidder, NTK Construction, on the 7/26/11 Commission meeting. Completed certification and issued NTP on 9/12/11. On site mobilization and construction startup is anticipated in early October of next quarter. Categorical Exemption Determination was achieved on 11/18/10 and General Plan Conformity Determination was received on 12/2/10.

Issues and Challenges:

None at this time.



Rendering of Proposed Forest Hill Pump Station

CUW33801 - La Grande Pump Station Upgrades

Project Description: This project will rebuild the La Grande pump station, including a reinforced concrete structure, pumps, stand-by generator, security fencing, SCADA, monitoring and disinfection systems, and landscaping.

Region: Pump Stations / Ta	nks Project Sta	tus: Construction		tatus: Completed tEx)	
Project Cost:	Project Sched	Project Schedule:			
Approved	\$5.23 N	M Approved Jun-0	07	Nov-12	
Forecast* \$5.23 M		M Forecast* Jun-0	7 Nov-12		
Actual \$3.07 M		M Project Percent	Complete: 61.3%		
Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits					
Key Milestones:	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion	
Current Forecast	12/01/08✓	11/12/09√	05/27/10√	05/23/12	

Progress and Status:

Completed construction of pipe trench, and lower perimeter walls. Completed installation of ductile iron piping below slab. Completed construction of all interior concrete walls and continuing to form and place rebar for remaining exterior front concrete wall. Started placement of roof beams and deck at rear of pump station. Continue installation of electrical conduit embedment.

Issues and Challenges:

None at this time.



Rendering of Proposed La Grande Pump Station

APPENDIX E. LIST OF ACRONYMS

AAR AB ACDD ACFCD ACFE ACOE ACWD ADA AGM	Alternative Analysis Report Assembly Bill Alameda Creek Diversion Dam Alameda County Flood Control District Alameda Creek Fishery Enhancement Army Corps of Engineers (also shown as USACE) Alameda County Water District Americans with Disabilities Act Assistant General Manager	COH COZEEP CRLF CRT CSBPL CSPL CSPS CS-SA CSSC	City of Hayward Construction Zone Enhancement Enforcement Program California Red Legged Frog Coast Range Tunnel Crystal Springs Bypass Pipeline Crystal Springs Pipeline Crystal Springs Pump Station Crystal Springs - San Andreas California Seismic Safety Commission Design, Build
ASCE	American Society of Civil	DBO	Design, Build, Operate
BAAOMI	Engineers DBay Area Air Quality	DCR DGM	Design Criteria Report
Dilitqivil	Management District	DGM	Deputy General Manager Department of Public Works
BART	Bay Area Rapid Transit	DRB	Dispute Review Board
BAWSCA	Bay Area Water Supply and	DSOD	Division of Safety of Dams (State
	Conservation Agency		of California)
BCWS	Budgeted Cost Work Scheduled	DTSC	Department of Toxic Substances
BDPL	Bay Division Pipeline		Control (State of California)
BEM	Bureau of Environmental	EBMUD	East Bay Municipal Utility District
DI (D	Management	ECCM	Environmental Construction
BMP	Best Management Practices	EID	Compliance Manager
BO CAB	Biological Opinion Contract Administration Bureau	EIR	Environmental Impact Report
CATEX	Categorical Exemption	EMB	Engineering Management Bureau
CCSF	City and County of San Francisco	EPM	Environmental Project Manager Earned Value
CDD	City Distribution Division	EV EVM	
CDFG	California Department of Fish	FAQ	Earned Value Management Frequently Asked Questions
	and Game	FONSI	Finding of No Significant Impact
CDPH	California Department of Public	FRP	Fiber Reinforced Polymer
	Health	FY	Fiscal Year
CEQA	California Environmental Quality	GM	General Manager
	Act	HDPE	High Density Polyethylene
CER	Conceptual Engineering Report	HH	Hetch Hetchy
CHP	California Highway Patrol	HMP	Habitat Management Plan
CIDH	Cast-In-Drilled Holes	HRP	Habitat Reserve Program
CIP	Capital Improvement Program	HTWTP	Harry Tracy Water Treatment
CM	Construction Management		Plant
CMB	Construction Management	IPTF	Interagency Permitting Task
CMIC	Bureau Construction Management		Force
CMIS	Construction Management	IS	Initial Study
CO	Information System Change Order	ITS	Information Technology Services
COF	City of Fremont	JOC LBE	Job Order Contract Local Business Enterprise
	J	LVL	Local Daonicoo Litterprioc

Q1-FY2011-2012 (07/0211 - 10/01/11)

LCSD	Lower Crystal Springs Dam	RWQCB	Regional Water Quality Control
LLNL	Lawrence Livermore National		Board
	Laboratory	SABPL	San Antonio Backup Pipeline
LMPS	Lake Merced Pump Station	SAPL	San Antonio Pipeline
LOS	Levels of Service	SAPS	San Antonio Pump Station
LT2ESW	O	SCADA	Supervisory Control and Data
	Surface Water Treatment Rule		Acquisition
MEA	Environmental Analysis Division	SFFD	San Francisco Fire Department
	(SF Planning Department)	SFPUC	San Francisco Public Utilities
MG	Million Gallon	CTTDC	Commission
MGD	Million Gallons per Day	SHPO	State Historic Preservation
MIS	Management Information System	CIPI	Officer
MMRP	Mitigation Monitoring and	SJPL	San Joaquin Pipeline
1010	Reporting Program	SMP	Surface Mining Permit
MND	Mitigated Negative Declaration	SPI	Schedule Performance Index
MOA	Memorandum of Agreement	SSTF	Seismic Safety Task Force
MOU	Memorandum of Understanding	SVWTP	Sunol Valley Water Treatment Plant
NAR	Needs Assessment Report	SWPPP	Stormwater Pollution Prevention
NCSBT	New Crystal Springs Bypass	TDD	Plan
NEC DE	Tunnel	TBD TBM	To be determined
NEG DE	C Negative Declaration (also shown	TWR	Tunnel Boring Machine Treated Water Reservoir
NEPA	as ND) National Environmental Policy	USACE	
NLIA	Act	USEPA	US Army Corps of Engineers United States Environmental
NMFS	National Marine Fisheries Service	OSEIA	Protection Agency
INIVII	(under NOAA)	USFWS	US Fish & Wildlife Services
NOA	Naturally Occurring Asbestos	UM	University Mount
NOAA	National Oceanic and	UV	Ultra Violet
1107171	Atmospheric Agency	VOC	Volatile Organic Compound
NOP	Notice of Preparation	WEIP	Watershed Environmental
NTP	Notice to Proceed	******	Improvement Program
OSHA	Occupational Safety and Health	WSIP	Water System Improvement
	Administration		Program
PCCP	Pre-stressed Concrete Cylinder		- 0
	Pipe		
PCE	Project Controls Engineer		
PCM	Program Construction		
	Management		
PCSB	Program Control and Support		
	Bureau		
PE	Project Engineer		
PEIR	Program Environmental Impact		
	Report		
PG&E	Pacific Gas and Electric		
ROW	Right-of-Way		
RPD	San Francisco Recreation & Parks		
	Department		

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