



# Castaic Lake Water Agency Memorandum

ITEM NO.

October 1, 2009

To:

**CLWA Board of Directors** 

From:

Brian J. Folsom BOF

**Engineering and Operations Manager** 

**Subject:** 

Engineering and Operations Department Report

# TREATMENT PLANT OPERATIONS AND MAINTENANCE

# **Completed Work:**

Deliveries to the purveyors in September totaled 4,663 acre-feet (AF), for an average daily flow rate of 51 million gallons per day (MGD). September 2009 deliveries were 8.7% above September 2008 deliveries. The fiscal-year-to-date (FYTD) deliveries for FY 2009/2010 are 15,036 AF, which is 2.2% above FYTD 2008/2009. Monthly flows for 2006, 2007, 2008 and 2009 are presented in the attached table. (FY 09/10 Action A1.1. Meet all purveyor water demands and Action B3.9: Meet all applicable water quality regulations.)

FYTD electrical use for FY 2009/10 at the Agency's major facilities is shown in the attached "Energy Usage at Major Facilities" table and equals 2,990,433 kWh at a total cost of \$343,452.77.

Inspection and maintenance activities during September included cleaning wash water return basins, chemical feed pump monthly maintenance, on-line analyzer maintenance and fabrication of clarifier screens at RVWTP.

Distribution system maintenance activities during September included preventive maintenance on air release and vacuum valves and pump outs, and exercising of valves. Grading at Sand Canyon Reservoir was completed.

#### **Inspector Activities**

Pressure recorders/data loggers readings and GPS coordinates were gathered at various points throughout the system.

Magic Mountain Pipeline/Recycled Water Pipeline Modification: Performed inspections of Security Paving's construction of the Magic Mountain Pipeline Vault Replacement.

Rio Vista Water Treatment Plant Expansion: Inspected soil borings, located underground facilities and collected GPS coordinates of existing utilities throughout jobsite.

Completed 50 dig alerts.

#### Work in Progress:

Maintenance of air release and vacuum valves and pump-outs throughout the distribution system continues. Ozone injector preventive maintenance is ongoing. At RVWTP, a leak was discovered near the plant water line and the area was excavated to determine the source of the leak. Repair of the leak is nearly complete. Electrical switch gear preventive maintenance and testing at all facilities continues.

#### Planned Actions:

Install ozone generator cooling water closed loop system. Perform repairs on plant water tank at Rio Vista Water Treatment Plant.

# PERCHLORATE CONTAMINATION PROGRAM MANAGEMENT

(FY 2009/10 Action A4.1: Complete construction of the Groundwater Production Restoration Project; Action A4.2: Complete construction and startup of the Perchlorate Treatment Project; Action A4.8: Develop replacement wells for capacity lost due to perchlorate contamination.)

#### SUMMARY

Work continues on multiple tasks to address the groundwater contamination stemming from past manufacturing activities on the Whittaker-Bermite site. The Agency and purveyors are proceeding to restore the production capacity of the groundwater supply wells contaminated by perchlorate, while working on the objectives of containing the downgradient migration of perchlorate and recovering costs incurred in responding to the perchlorate contamination.

# PERCHLORATE CONTAMINATION PROGRAM MANAGEMENT

The following table provides a status report on the activities and tasks:

Task Group	Tasks	Consultant	Status
Settlement Activities	Project Description	K/J	Complete.
	Final Settlement	K/J, Nossaman	Settlement agreement took effect on 7/13/07 with U.S. District Court approval.
DTSC Approval Activities	Remedial Investigation (RI)	K/J	DTSC approved 8/16/05.
	Feasibility Study (FS)	K/J	DTSC approved 8/16/05.
	Final Remedial Action Plan	K/J	Public hearing held 9/7/05. DTSC approved 1/20/06.
U.S. Army Corps of Engineers Feasibility Phase Study	Conceptual Hydrogeology Technical Memorandum	CH2MHill	Final distributed 1/19/05. Progress report with model construction calibration distributed 10/11/05.
DPH Approval Activities (97-005)	Source Water Assessment	B&V, CE	Received comments on revised document from DPH 4/27/06.
	Effective Monitoring and Treatment	B&V, CE, CH2MHill	Received comments on revised document from DPH 4/27/06.
	Water Quality Investigation	B&V, CE	Received comments on revised document from DPH 4/27/06.
	Human Health Risk	B&V	Received comments on revised document from DPH 4/27/06.
	Source Protection Plan	B&V	Received comments on revised document from DPH 4/27/06.

# <u>PERCHLORATE CONTAMINATION PROGRAM MANAGEMENT</u> (Continued from previous page...)

Task Group	Tasks	Consultant	Status				
	Alternatives Evaluation	B&V, CE	Received comments on revised document from DPH 5/10/06. Revised document will be returned to DPH with Engineer's Report.				
	Engineers Report	B&V	Final submitted to DPH 1/29/09.				
	CEQA	B&V	Mitigated Negative Declaration certified 9/14/05.				
	Operations and Maintenance Report	K/J	Staff is reviewing K/J draft report submitted on 8/19/09.				
	Permit Application	B&V	Will be submitted with documents.				
	Public Hearing	B&V	Will take place upon approval of all documents.				
	DPH Evaluation and Permit	B&V	Awaiting response from DPH.				
Implementation Activities	Easements and Right of Way	K/J	Easement and right-of-way acquisition completed 1/08.				
	Treatment Project	K/J	Project is 96% complete.				
	Pipeline Project	K/J	Project is 98% complete.				
	Well Rehabilitation	SCP/GPC	General Pump completed the rehabilitation work on 2/3/09 and installed the new pumps.				
	Start-up and Monitoring	K/J	Scheduled fall 2009.				
	Sentinel Wells	Environ	Wells have been installed. Disposal of investigation derived wastes awaits results of laboratory analyses.				

The monthly Technical Committee Meeting was held on September 9, 2009. The next Technical Committee Meeting is scheduled for October 13, 2009. The next Whittaker-Bermite Multi-Jurisdictional Task Force meeting is scheduled for December 9, 2009. A ribbon cutting event was held at the new Perchlorate Treatment Facility on September 22, 2009.

## **FINANCIAL STATUS**

The Settlement Agreement among CLWA, the purveyors, Whittaker-Bermite and insurance carriers is in effect. Reimbursement requests have been submitted and payments have been made for expenses through July 31, 2009.

## CAPITAL IMPROVEMENT PROJECTS

## Sand Canyon Pipeline and Reservoir

## **Completed Work:**

Nye and Nelson, Inc. completed construction work on July 31, 2009. The Agency approved the Certificate of Acceptance for the project on August 26, 2009 and recorded the Notice of Completion on September 2, 2009.

#### Work In Progress:

Construction contract is in close-out phase.

#### Planned Actions:

Close out project and process final payment to contractor.

#### Rio Vista Water Treatment Plant Expansion

(FY 2009/10 Action B1.26: Complete construction of the RVWTP Expansion Project.)

#### **Completed Work:**

The contractor has installed the foundation rebar for the new washwater return basin and the formwork for a portion of the chlorine building walls. The contractor has also constructed a portion of the ozone injection sample stations and prepared the subgrade for the new clarifier structure.

# Work In Progress:

The contactor is working on the remaining submittals and Kennedy/Jenks Consultants (K/J) is reviewing the submitted submittals. The contractor is installing the formwork for the chlorine building walls and preparing the clarifier structure area for rebar installation. The contractor is also installing electrical duct banks.

#### **Planned Actions:**

The contractor will continue to prepare and submit his construction submittals and K/J will continue to review them. Construction activities will continue.

#### **Modification to MWDSC Foothill Feeder Connection**

(FY 2009/10 Action B1.25: Complete construction of the permanent raw water connection to MWDSC's Foothill Feeder pipeline.)

## **Completed Work:**

The connection agreement has been executed. The 60% design submittal has been completed.

## Work in Progress:

MWDSC and staff are reviewing the 60% submittal.

#### **Planned Actions:**

MWDSC and staff will be submitting comments to K/J for action.

#### Honby Parallel Phase II

(FY 2009/10 Action B1.3: Complete design of the Honby Parallel Pipeline Phase 2; Action B1.24: Complete construction of the Honby Parallel Pipeline Phase 2.)

## **Completed Work:**

The City has approved the pipeline alignment and geotechnical data.

## Work in Progress:

Permits, license agreements and easements are in the process of being acquired. K/J is revising the plans and specifications to address LADWP comments.

#### **Planned Actions:**

Complete and submit the traffic control plans to the City for approval. Mail notification letters to businesses along the project route to inform them of the project. Acquire permits, license agreement and easements. Submit the revised plans and specifications to LADWP.

## **RVWTP Relocate Entrance Gate and Security Kiosk**

(FY 2009/10 Action B6.2: Complete design of RVWTP entrance gate and security kiosk relocation.)

## **Completed Work:**

Lee & Ro completed the PDR.

## Work In Progress:

Staff is in the process of requesting Board approval of the final design services.

#### **Planned Actions:**

Start final design.

#### **RVWTP Warehouse and Storage Facilities**

(FY 2009/10 Action B1.16: Complete design of the RVWTP Maintenance Facility Expansion Project.)

# **Completed Work:**

Lee & Ro completed the preliminary plans.

## Work in Progress:

Staff is reviewing the preliminary plans.

## **Planned Actions:**

Staff will meet with Lee & Ro to discuss staff's comments to the preliminary plans.

#### **ESFP Chemical Storage and Delivery**

#### **Completed Work:**

SoCal Pacific Construction completed 99% of the construction contract. Remaining work was evaluated and credits and liquidated damages were issued as deductive contract change orders. Notice of Completion for the project was recorded in the Los Angeles County Recorder's Office on August 20, 2009 and the final payment was released on September 30, 2009.

## **ESFP Chemical Storage and Delivery**

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## Work in Progress:

Construction contract is in closeout phase.

#### **Planned Actions:**

Agency staff will complete the remaining construction items.

## **ESFP Drainage and Paving Improvements**

(FY 2009/10 Action B1.23: Complete construction of the ESFP Drainage and Paving Improvements Project.)

- a) Planning and Preliminary Design for ESFP Drainage and Paving Improvements.
- b) ESFP Ozone Injection Station Canopy, Lighting and Pavement Improvements.

# **Completed Work:**

- a) Notice to Proceed was issued to Civiltec Engineering, Inc. on November 13, 2008. Civiltec completed topographic survey, subsurface investigations, initial Base Map and submitted the Geotechnical Investigation Report and a draft of a Preliminary Design Report. On September 30, 2009, Civiltec submitted recommended alternatives for discussion.
- b) Design drawings have been completed.

#### Work in Progress:

- a) Civiltec Engineering, Inc. is finalizing the recommendations for a Preliminary Design Report draft.
- b) The specifications are being finalized.

#### Planned Actions:

- a) Staff will review the proposed design alternatives.
- b) Advertise the project for construction bids.

#### **ESFP Railing and Platform Modifications**

(FY 2009/10 Action B2.16: Complete modifications of the ESFP railings and platforms.)

# Completed Work:

The topographic survey has been completed. Construction drawings for the railing and platform improvements at washwater basin are being finalized. The design of railing and platform improvements at filter gallery was added to the project scope in April 2009. Hits Consulting Group, Inc. collected and reviewed record drawings information and conducted field investigations and provided 90% submittals plans and specifications for staff review and comments.

## Work in Progress:

Hilts Consulting Group is reviewing the comments and modifying the plans and specifications.

# ESFP Railing and Platform Modifications

(Continued from previous page...)

#### Planned Actions:

On October 5, 2009, meet with the consultant to field verify proposed design details. Consultant anticipates submitting final plans and specifications for staff review and approval in October 2009.

## Recycled Water Program Phase II

(FY 2009/10 Action B1.27: Complete design and construct Recycled Water Program Phase II.)

## **Completed Work:**

The draft initial study for Phase 2A has been completed. The draft evaluation for the old Honby Pump Station has been completed. The draft design has been completed for the installation of inspection access structures for the old Honby Pipeline.

# Work in Progress:

Staff is reviewing the draft initial study for Phase 2A and the draft evaluation of the old Honby Pump Station for Phase 2B. K/J is analyzing potential recycled water facilities near Lost Canyon for Phase 2B. Staff is reviewing the draft design of the inspection access structures for the old Honby Pipeline.

#### **Planned Actions:**

Complete the draft environmental documentation for Phase 2A. Finalize the evaluation of the old Honby Pump Station.

#### Kennedy/Jenks Consultants' General Engineering Services Work Authorization

During September, K/J assisted the Agency staff with various engineering tasks including coordinating with the Los Angeles County Sanitation District regarding the treatment and availability of recycled water at the Saugus Water Reclamation Plant and coordinating with Civiltec Engineering, Inc. on the development of the water system hydraulic model and the system emergency storage study.

#### **FACILITY CAPACITY FEES**

(Goal C1.: Fairness Doctrine - Apply all costs using the Fairness Doctrine by applying costs to those who benefit from an expenditure and ensuring that existing and future users will pay their fair share.)

#### **Completed Work:**

During September, 20 new certificates were issued and \$145,894 was collected in facility capacity fees, representing approximately 11.7 acre-feet of water demand. For the fiscal year, 54 new certificates have been issued and \$1,129,853 has been collected in developer impact fees representing 100.26 acre-feet of water demand.

#### Attachments



# CASTAIC LAKE WATER AGENCY

SWP Water Deliveries to Purveyors (Acre-Feet)

2006	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACo	807 821 490 68	775 875 347 75	428   622 158 52	545 887 245 55	1,603 1,736 589 113	2,051 2,050 454 146	2,648 2,360 828 178	2,410 1,412 625 161	2,183 1,614 647 143	1,495 1,574 464 112	1,267 1,327 597 105	936 1,035 455 81	17,146 16,313 5,898 1,289
Total	2,186	2,072	1,260	1,732	4,041	4,701	6,013	4,608	4,586	3,644	3,295	2,508	40,646
Cum. YTD	2,186	4,258	5,518	7,250	11,291	15,992	22,005	26,613	31,199	34,843	38,138	40,646	Control Carlos
Cum. FYTD	26,700	28,772	30,032	31,763	35,804	40,505	6,013	10,622	15,207	18,852	22,146	24,654	
2007	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACo	984 983 436 83	684 640 185 63	1,217 1,212 397 92	1,423 908 578 102	2,023 1,871 712 137	2,370 2,003 586 151	2,732 2,046 765 174	2,773 1,857 910 168	2,229 1,767 630 138	1,906 1,428 443 122	1,403 1,270 420 107	926 922 418 69	20,669 16,906 6,478 1,406
Total	2,485	1,572	2,918	3,012	4,742	5,110	5,717	5,707	4,764	3,899	3,200	2,334	45,459
Cum. YTD	2,485	4,056	6,974	9,986	14,729	19,838	25,555	31,262	36,026	39,925	43,125	45,459	A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1
Cum. FYTD	27,139	28,711	31,629	34,641	39,383	44,493	5,717	11,424	16,188	20,087	23,286	25,621	
2008	Jan	Feb	Mar	Apr_	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACo	764 815 414 56	707 583 300 53	1,203 1,631 270 92	1,273 1,443 344 116	1,795 1,640 505 134	2,333 ± 1,845 640 ± 158	2,446 2,159 767 167	2,283 1,761 671 163	2,064 1,577 505 144	2,044 1,419 493 127	1,162 1,000 302 82	638 547 217 62	18,712 16,419 5,427 1,353
Total	2,049	1,642	3,196	3,175	4,074	4,975	5,539	4,879	4,290	4,083	2,546	1,465	41,912
Cum. YTD	2,049	3,692	6,887	10,062	14,136	19,111	24,650	29,529	33,819	37,901	40,447	41,912	2.57
Cum. FYTD	27,670	29,312	32,508	35,683	39,757	44,732	5,539	10,418	14,708	18,790	21,336	22,801	green to be get
2009	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACo	910 518 242 75	367 364 132 38	1,106 923 210 73	1,448 1,242 415 102	2,135 1,135 467 134	1,896 996 427 121	2,073 2,102 937 152	2,300 2,063 599 149	2,032 2,011 477 143	0 0 0	0 0 0	0 0 0	14,267 11,353 3,904 986
Total	1,744	901	2,312	3,207	3,870	3,440	5,263	5,110	4,663	0	0	0	30,510
Cum. YTD	1,744	2,645	4,957	8,164	12,034	15,474	20,737	25,847	30,510	30,510	30,510	30,510	

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# CASTAIC LAKE WATER AGENCY

Recycled Water Deliveries to Purveyors (Acre-Feet)

2006	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACp	14	11	6	12	42	66	75	63	67	33	20	12	427 0
Total*	14	16		12	42	66	75	63	67	33	20	12	426
Cum. YTD	14	30		48	90	156	231	294	361	394	414	426	
Cum. FYTD	284	30	306	318	360	426	75	142	209	242	262	274	A PROPERTY OF
2007	Jan	Feb_	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACo	17	1.	4 43	38	58	63	78	67	55	37	25	7	0 501 0 0
Total*	17	14		38	58	63	78	67	55	37	25	7	501
Cum. YTD	17	32	74	112	170	233	311	378	433	469	494	501	
Cum. FYTD	291	30	348	386	444	507	78	133	187	224	249	256	
2008	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VW¢ NCWD LACo	4	1	1 39	37.	56	34	26	63	44	38	4	1	358 (
Total*	4	11	39	37	56	34	26	63	44	38	4	1	358
Cum. YTD	4	16	54	92	147	182	208	271	315	353	357	358	esson and a second
Cum. FYTD	260	27	1 310	348	403	438	26	89	133	171	175	176	
2009	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC VWC NCWD LACo	8		3 24	39	30	46	71	59	17	0	0	0	( 298 (
Total*	8	3	24	39	30	46	71	59	17	0	0	0	298
Cum. YTD	8	11	35	74	104	150	221	280	298	298	298	298	and Colonia

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FY 2009/10 Energy Usage at Major Facilities

Service Date From	Service Date To	Usage kWh Total	Usage kVarh Total	Total \$ Amount
Earl Schmidt Inta	ka Duma Station			
07/01/09	07/29/09	4,008	4,302	\$489.20
07/29/09	08/27/09	7,226	10,163	\$6,311.53
01120100	00/21/00	Total	10,100	\$6,800.73
Earl Schmidt Filtr	ation Plant			
07/01/09	07/28/09	118,668	89,844	\$12,575.44
07/28/09	08/26/09	124,925	97,018	\$13,573.19
		Total	51,515	\$26,148.63
Honby Pump Stat	ion			
07/01/09	07/22/09	0		\$67.28
07/22/09	08/20/09	0		\$94.80
		Total		\$162.08
Recycled Water N	leter			
07/01/09	07/10/09	10,987	4,197	\$1,617.58
07/10/09	08/10/09	37,110	14,067	\$5,325.10
		Total		\$6,942.68
Rio Vista Intake P	ump Station			
07/01/09	07/29/09	578,750	206	\$73,917.27
06/29/09	07/29/09			\$10.00
07/29/09	08/27/09	632,506	142,890	\$80,482.94
		Total		<b>\$154,410.21</b>
Rio Vista Water T	reatment Plant			
07/01/09	07/29/09	183,775		\$15,847.44
07/29/09	08/27/09	190,833		\$16,335.09
		Total		\$32,182.53
Sand Canyon Pur				
07/01/09	07/29/09	467,599	168,661	\$53,803.10
07/29/09	08/27/09	574,056	202,627	\$63,002.81
				\$116,805.91
				<b>4 2 2 2 2 2 2 2 2 2 2</b>
	TOTAL	2,930,443		\$343,452.77