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**Castaic Lake Water Agency, "Memorandum regarding Engineering and  
Operations Department Report" (February 2, 2009)**



# Castaic Lake Water Agency

## Memorandum

ITEM NO.

4.1

February 2, 2009

**To:** CLWA Board of Directors  
**From:** Brian J. Folsom *BTF*  
Engineering and Operations Manager  
**Subject:** Engineering and Operations Department Report

### TREATMENT PLANT OPERATIONS AND MAINTENANCE

#### **Completed Work:**

Deliveries to the purveyors in January totaled 1,744 acre-feet (AF), for an average daily flow rate of 18 million gallons per day (MGD). January 2009 deliveries were 14.9% below January 2008 deliveries. The fiscal-year-to-date (FYTD) deliveries for FY 2008/09 are 24,545 AF, which is 11.3% below FYTD 2007/08. Monthly flows for 2006, 2007, 2008 and 2009 are presented in the attached table. *(FY 2008/09 Action A2.4: Meet all purveyor water demands and Action B3.3: Meet all applicable water quality regulations.)*

Fiscal-year-to-date electrical use for FY 2008/09 at the Agency's major facilities is shown in the attached "Energy Usage at Major Facilities" table and equals 7,280,621 kWh at a total cost of \$820,281.65.

RVWTP was placed back in service on January 11, 2009 after annual maintenance and inspections were completed. No major deficiencies were noted during the inspection. Maintenance activities included repair of the treated water sample line; cleaning wash water return basins; trac-vac maintenance; ozone diffuser dispersion testing and diffuser inspection; various pipeline inspections, chemical pump preventive maintenance and hose replacement on the clearwell cover rainwater collection pumps.

ESFP was shut down for annual maintenance and inspection on January 11, 2009. Inspection and maintenance activities included inspection of the raw water line and ozone injection points; cleaning wash water return basins; chemical feed pump annual maintenance; analyzer maintenance and ozone generator cleaning and inspection.

#### Inspector Activities

Pitchess Pipeline modification work at Hasley Canyon: Coordinated with Security Paving. Inspected relocation of pump-out.

Recycled Water Pipeline Phase I modification work at Magic Mountain/The Old Road: Attended utility coordination meeting with staff from CLWA, City of Santa Clarita and Security Paving; photographed activity at V-9 and coordinated paving work around air release valves on The Old Road.

ESFP Chemical Storage and Delivery Project: Performed inspections, coordinated with Harris & Associates and attended progress meetings.

Sand Canyon Reservoir Access Road: Performed inspections and coordinated with Harris & Associates.

#### **Work in Progress:**

At ESFP, the chemical feed meters for the ferric chloride, caustic soda and cationic polymer feed systems will be replaced and a sludge collection system in the washwater recovery basins will be installed.

Maintenance of air vacs and pump-outs throughout the distribution system continues.

## Planned Actions:

The Metropolitan Water District of Southern California (MWDSC) has scheduled a six-day shutdown of the Foothill Feeder from Castaic Lake to the Jensen Filtration Plant to install a valve at the influent to the San Fernando Tunnel. The Department of Water Resources (DWR) has scheduled a six-day shutdown to run concurrently with the MWDSC shutdown. As a result of these shutdowns, the Rio Vista Water Treatment Plant and Earl Schmidt Filtration Plant will be out of service starting February 23, 2009 at 12:01 AM. CLWA is coordinating the shutdown with its purveyors to use local groundwater sources and available storage from CLWA and the purveyors to supply enough water to meet demands for the duration of the six-day shutdown.

## PERCHLORATE CONTAMINATION PROGRAM MANAGEMENT

*(FY 2008/09 Action A4.2: Complete construction of the Groundwater Production Restoration Project; Action A4.3: Complete construction and startup of the Perchlorate Treatment Project; Action A4.5: 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
<b>Settlement Activities</b>	Project Description	K/J	Complete.
	Final Settlement	K/J, Nossaman	Settlement agreement took effect on 7/13/07 with U.S. District Court approval.
<b>DTSC Approval Activities</b>	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.
<b>DPH Approval Activities (97-005)</b>	Source Water Assessment	B&V, CE	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.

**PERCHLORATE CONTAMINATION PROGRAM MANAGEMENT** (Continued from previous page...)

<b>Task Group</b>	<b>Tasks</b>	<b>Consultant</b>	<b>Status</b>
	Effective Monitoring and Treatment	B&V, CE, CH2MHill	Received comments on revised document from DPH 4/27/06.
	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	Forthcoming
	Permit Application	B&V	Awaiting response from DPH.
	Public Hearing	B&V	Awaiting response from DPH.
	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	Notice to Proceed issued 11/14/07. Project is 91% complete.
	Pipeline Project	K/J	Notice to Proceed issued 12/14/07. Project is 55% complete.
	Well Rehabilitation	SCP/GPC	General Pump completed the rehabilitation work on 2/3/09.
	Start-up and Monitoring	K/J	Scheduled mid-2009.

The monthly Technical Committee Meeting was held on January 13, 2009. The next Technical Committee Meeting is scheduled for February 10, 2009. The next Whittaker-Bermite Multi-Jurisdictional Task Force meeting will be held on March 25, 2009.

**FINANCIAL STATUS**

The Settlement Agreement among CLWA, the purveyors, Whittaker-Bermite and insurance carriers is in effect. Payments have been made for most expenses through October 31, 2008. Approval of payments will be considered (retroactively) at future Technical Committee meetings.

## **CAPITAL IMPROVEMENT PROJECTS**

### **Sand Canyon Pipeline and Reservoir**

*(FY 2008/09 Action B1.5: Complete construction for the Sand Canyon Reservoir Access Road project.)*

#### **Completed Work:**

Notice to Proceed was issued to Nye and Nelson, Inc. on November 10, 2008.

#### **Work In Progress:**

Nye & Nelson, Inc. mobilized on November 17, 2008 and construction is approximately 33% complete.

#### **Planned Actions:**

Provide construction support as needed.

### **Rio Vista Water Treatment Plant Expansion**

*(FY 2008/09 Action B1.2: Complete design of the RVWTP Expansion Project; Action B1.7: Complete bidding process and start construction of the RVWTP Expansion Project.)*

#### **Completed Work:**

Construction bids were opened on January 28, 2009.

#### **Work In Progress:**

The construction bids are being evaluated.

#### **Planned Actions:**

Recommend construction award, engineering services during construction and construction management services at the February Planning and Engineering Committee meeting.

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

*(FY 2008/09 Action B1.3: Complete design of the new raw water connection to MWDSC's Foothill Feeder pipeline.)*

#### **Completed Work:**

Staff has completed review of the connection agreement and has submitted comments to MWDSC. The 30% design plans have also been submitted to MWDSC for review.

#### **Work in Progress:**

MWDSC is finalizing and executing the agreement.

#### **Planned Actions:**

After the agreement is executed, MWDSC will review the submitted 30% design plans.

### **Honby Parallel Phase II**

*(FY 2008/09 Action B1.16: Complete construction of the Honby Parallel Phase 2.)*

#### **Completed Work:**

Staff met with LADWP at the site to discuss the project.

#### **Work in Progress:**

The permits, license agreements and easements are in the process of being acquired. The Honby Agreement with Newhall Land is being revised. The City is reviewing the requested information to address its concerns. K/J is revising the plans and specifications to address LADWP comments.

## **Honby Parallel Phase II**

*(Continued from previous page...)*

### **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 2008/09 Action B6.2: Complete design of RVWTP entrance gate and security kiosk relocation.)*

### **Completed Work:**

Lee & Ro performed its data collection.

### **Work In Progress:**

Lee & Ro is analyzing the data and developing alternative solutions.

### **Planned Actions:**

Lee & Ro is to submit its findings for review by the end of February 2009.

## **RVWTP Warehouse and Storage Facilities**

*(FY 2008/09 Action B1.11: Complete design of the RVWTP Maintenance Facility Expansion Project.)*

### **Completed Work:**

Staff recommended the approval of a work authorization for design services to be performed by Lee & Ro at the January Planning and Engineering Committee meeting.

### **Work in Progress:**

Staff is researching data in response to the comments received at the January Planning and Engineering Committee meeting.

### **Planned Actions:**

Staff will recommend the approval of a work authorization for design services to be performed by Lee & Ro at the February Board meeting.

## **ESFP Chemical Storage and Delivery**

*(FY 2008/09 Action B1.8: Complete construction of the ESFP chemical storage and delivery project.)*

### **Completed Work:**

The project construction is 99% completed.

### **Work in Progress:**

Construction is near completion.

### **Planned Actions:**

Complete construction. Anticipated construction completion date is February 16, 2009.

### **ESFP Drainage and Paving Improvements**

*(FY 2008/09 Action B2.8: 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) Work Authorization was issued to Civiltec Engineering, Inc. Site survey and geotechnical investigation exploratory borings were conducted.
- b) Design drawings have been completed.

#### **Work in Progress:**

- a) Civiltec Engineering, Inc. is preparing base map, geotechnical investigation report and developing evaluation alternatives report.
- b) The design is being finalized.

#### **Planned Actions:**

- a) Meet with Civiltec Engineering, Inc. to discuss the results of the research and field work and to review existing site conditions. Anticipated meeting date is February 19, 2009.
- b) Advertise the project for construction bids.

### **ESFP Railing and Platform Enhancements**

*(FY 2008/09 Action B2.4: Complete modifications of the ESFP railings and platforms.)*

#### **Completed Work:**

The topographic survey has been completed. Preliminary drawings for the platform extension have been completed.

#### **Work in Progress:**

The design is being finalized for bidding.

#### **Planned Actions:**

Advertise the project for construction bids.

### **Recycled Water Program Phase II**

*(FY 2008/09 Action B1.14: Complete CEQA compliance and design of the Recycled Water Program Phase II.)*

#### **Completed Work:**

A draft Preliminary Design Report (PDR) has been significantly completed.

Kennedy/Jenks Consultants presented its findings and recommendations to the purveyors and the Los Angeles County Sanitation District on October 30, 2008.

#### **Work in Progress:**

Kennedy/Jenks Consultants is revising the PDR.

#### **Planned Actions:**

Staff will be issuing a Request for Proposals for environmental documentation work. Staff is planning to meet with the purveyors on February 19, 2009 to discuss the revised PDR.

**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 January, 11 new certificates were issued and \$38,641 was collected in facility capacity fees, representing approximately 3.5 acre-feet of water demand. For the fiscal year, 147 new certificates have been issued and \$1,054,239 has been collected in developer impact fees representing 107 acre-feet of water demand.

Attachments

*STW*



**CASTAIC LAKE WATER AGENCY**  
**SWP Water Deliveries to Purveyors (Acre-Feet)**

<b>2006</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
SCWC	807	775	428	545	1,603	2,051	2,648	2,410	2,183	1,495	1,267	936	17,146
VWC	821	875	622	887	1,736	2,050	2,360	1,412	1,614	1,574	1,327	1,035	16,313
NCWD	490	347	158	245	589	454	828	625	647	464	597	455	5,898
LACo	68	75	52	55	113	146	178	161	143	112	105	81	1,289
<b>Total</b>	<b>2,186</b>	<b>2,072</b>	<b>1,260</b>	<b>1,732</b>	<b>4,041</b>	<b>4,701</b>	<b>6,013</b>	<b>4,608</b>	<b>4,586</b>	<b>3,644</b>	<b>3,295</b>	<b>2,508</b>	<b>40,646</b>
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	
Cum. FYTD	26,700	28,772	30,032	31,763	35,804	<b>40,505</b>	6,013	10,622	15,207	18,852	22,146	24,654	
<b>2007</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
SCWC	984	684	1,217	1,423	2,023	2,370	2,732	2,773	2,229	1,906	1,403	926	20,669
VWC	983	640	1,212	908	1,871	2,003	2,046	1,857	1,767	1,428	1,270	922	16,906
NCWD	436	185	397	578	712	586	765	910	630	443	420	418	6,478
LACo	83	63	92	102	137	151	174	168	138	122	107	69	1,406
<b>Total</b>	<b>2,485</b>	<b>1,572</b>	<b>2,918</b>	<b>3,012</b>	<b>4,742</b>	<b>5,110</b>	<b>5,717</b>	<b>5,707</b>	<b>4,764</b>	<b>3,899</b>	<b>3,200</b>	<b>2,334</b>	<b>45,459</b>
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	
Cum. FYTD	27,139	28,711	31,629	34,641	39,383	<b>44,493</b>	5,717	11,424	16,188	20,087	23,286	25,621	
<b>2008</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
SCWC	764	707	1,203	1,273	1,795	2,333	2,446	2,283	2,064	2,044	1,162	638	18,712
VWC	815	583	1,631	1,443	1,640	1,845	2,159	1,761	1,577	1,419	1,000	547	16,419
NCWD	414	300	270	344	505	640	767	671	505	493	302	217	5,427
LACo	56	53	92	116	134	158	167	163	144	127	82	62	1,353
<b>Total</b>	<b>2,049</b>	<b>1,642</b>	<b>3,196</b>	<b>3,175</b>	<b>4,074</b>	<b>4,975</b>	<b>5,539</b>	<b>4,879</b>	<b>4,290</b>	<b>4,083</b>	<b>2,546</b>	<b>1,465</b>	<b>41,912</b>
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	
Cum. FYTD	27,670	29,312	32,508	35,683	39,757	<b>44,732</b>	5,539	10,418	14,708	18,790	21,336	22,801	
<b>2009</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
SCWC	910	0	0	0	0	0			0	0			910
VWC	518	0	0	0	0	0	0	0	0		0	0	518
NCWD	242	0	0	0	0	0	0	0	0	0	0	0	242
LACo	75	0	0	0	0	0			0	0	0	0	75
<b>Total</b>	<b>1,744</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,744</b>
Cum. YTD	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	1,744	
Cum. FYTD	24,545	24,545	24,545	24,545	24,545	<b>24,545</b>	0	0	0	0	0	0	

# 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													0
VWC	14	16	6	12	42	66	75	63	67	33	20	12	427
NCWD													0
LACo													0
<b>Total*</b>	14	16	6	12	42	66	75	63	67	33	20	12	<b>426</b>
Cum. YTD	14	30	36	48	90	156	231	294	361	394	414	426	
Cum. FYTD	284	300	306	318	360	<b>426</b>	75	142	209	242	262	274	
2007	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC													0
VWC	17	14	43	38	58	63	78	67	55	37	25	7	501
NCWD													0
LACo													0
<b>Total*</b>	17	14	43	38	58	63	78	67	55	37	25	7	<b>501</b>
Cum. YTD	17	32	74	112	170	233	311	378	433	469	494	501	
Cum. FYTD	291	306	348	386	444	<b>507</b>	78	133	187	224	249	256	
2008	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC													0
VWC	4	11	39	37	56	34	26	63	44	38	4	1	357
NCWD													0
LACo													0
<b>Total*</b>	4	11	39	37	56	34	26	63	44	38	4	1	<b>357</b>
Cum. YTD	4	16	54	92	147	182	207	271	314	352	356	357	
Cum. FYTD	260	271	310	348	403	<b>438</b>	26	89	133	171	175	176	
2009	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SCWC													0
VWC	8	0	0	0	0	0	0	0	0	0	0	428	436
NCWD													0
LACo													0
<b>Total*</b>	8	0	0	0	0	0	0	0	0	0	0	428	<b>436</b>
Cum. YTD	8	8	8	8	8	8	8	8	8	8	8	436	
Cum. FYTD	183	183	183	183	183	<b>183</b>	0	0	0	0	0	428	

**FY 2008/09**  
**Energy Usage at Major Facilities**

<b>Service Date From</b>	<b>Service Date To</b>	<b>Usage kWh Total</b>	<b>Usage kVarh Total</b>	<b>Total \$ Amount</b>
<b>Earl Schmidt Intake Pump Station</b>				
06/12/08	07/14/08	4,779		\$807.70
07/14/08	08/12/08	4,514		\$757.41
08/12/08	09/11/08	4,454		\$753.04
09/11/08	10/14/08	3,834		\$618.44
10/14/08	10/28/08	1,455		\$190.97
10/28/08	11/26/08	4,751		\$2,728.46
11/26/08	12/29/08	3,983		\$503.22
		<b>Total</b>		<b>\$6,359.24</b>
<b>Earl Schmidt Filtration Plant</b>				
07/11/08	08/12/08	136,823	110,510	\$14,746.76
08/12/08	09/11/08	129,977	102,321	\$14,382.87
09/11/08	10/14/08	137,516	107,640	\$13,724.32
10/14/08	10/29/08	62,472	47,936	\$5,501.16
10/29/08	11/26/08	103,946	81,955	\$9,636.70
11/26/08	12/29/08	124,022	103,940	\$10,654.45
		<b>Total</b>		<b>\$68,646.26</b>
<b>Honby Pump Station</b>				
06/19/08	07/21/08	0		\$83.73
07/21/08	08/19/08	0		\$83.73
08/19/08	09/19/08	0		\$83.73
09/19/08	10/21/08	0		\$83.73
10/21/08	11/19/08	0		\$83.73
11/19/08	12/22/08	0		\$83.73
		<b>Total</b>		<b>\$502.38</b>
<b>Recycled Water Meter</b>				
06/09/08	07/09/08	11,040		\$2,587.37
07/09/08	08/07/08	24,160		\$3,814.37
08/07/08	09/08/08	46,000		\$5,851.05
09/08/08	10/07/08	27,920		\$4,169.97
10/07/08	11/08/08	26,480		\$3,959.78
10/07/08	11/08/08	26,480		-\$3,959.78
10/07/08	11/08/08	9,680		\$2,427.92
11/08/08	12/10/08	9,760		\$2,520.75
		<b>Total</b>		<b>\$21,371.43</b>
<b>Rio Vista Intake Pump Station</b>				
06/18/08	07/18/08	640,213	122,746	\$79,548.28
07/18/08	08/18/08	680,617	150,914	\$82,448.07
08/18/08	09/17/08	532,487	118,121	\$71,636.20
09/17/08	09/25/08	126,584	27,013	\$16,102.19
09/25/08	10/28/08	546,470	118,001	\$54,721.28
10/28/08	11/26/08	255,874	54,398	\$29,549.77
11/26/08	12/29/08	5,924	7,122	\$881.54
		<b>Total</b>		<b>\$334,887.33</b>

**Rio Vista Water Treatment Plant**

06/19/08	07/21/08	221,019		\$18,019.05
07/21/08	08/19/08	200,313		\$17,129.62
08/19/08	09/18/08	206,439		\$17,488.92
09/18/08	09/25/08	48,048		\$4,106.16
09/25/08	10/28/08	227,565		\$18,691.25
10/28/08	11/26/08	174,636		\$15,112.04
11/26/08	12/29/08	137,256		\$12,260.74
		<b>Total</b>		<b>\$102,807.78</b>

**Sand Canyon Pump Station**

06/20/08	07/22/08	426,840	148,930	\$48,229.39
07/22/08	08/20/08	393,365	151,507	\$52,520.98
08/20/08	09/19/08	444,019	186,835	\$50,547.26
09/19/08	10/28/08	692,698	247,661	\$77,820.02
10/28/08	11/26/08	245,918	86,592	\$31,314.92
11/26/08	12/29/08	170,290	58,699	\$25,274.66
				<b>\$285,707.23</b>

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<b>TOTAL</b>	<b>7,280,621</b>	<b>\$820,281.65</b>
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