

**REGULAR MEETING  
OF  
CACHUMA OPERATION AND MAINTENANCE BOARD**

**3301 Laurel Canyon Road  
Santa Barbara, CA 93105**

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**Monday, September 26, 2016**

**2:00 P.M.**

**AGENDA**

1. **CALL TO ORDER, ROLL CALL**
2. **PUBLIC COMMENT** (Public may address the Board on any subject matter not on the agenda and within the Board's jurisdiction. See "Notice to the Public" below. Please make your comments from the podium once acknowledged by the President of the Board.)
3. **CONSENT AGENDA** (All items on the Consent Agenda are considered to be routine and will be approved or rejected in a single motion. Any item placed on the Consent Agenda may be removed and placed on the Regular Agenda for discussion and possible action upon the request of any Board Member.)  
Action: Recommend approval of Consent Agenda by motion and roll call vote of the Board:
  - a. Minutes August 22, 2016 Regular Board Meeting
  - b. Investment of Funds
    - Financial Reports
    - Investment Reports
  - c. Review of Paid Claims
4. **VERBAL REPORTS FROM BOARD COMMITTEES**  
Receive verbal information regarding the following committee meetings:
  - Public Outreach Committee Meeting – August 30, 2016
  - Operations Committee Meeting – September 20, 2016
5. **HDR ENGINEERING, INC. PRESENTATION: EMERGENCY PUMPING FACILITY PROJECT (EPFP)**  
Receive an informational presentation from HDR Engineering, Inc. regarding the status of the Project
6. **MEDIA RELATIONS POLICY**  
Action: Recommend approval by motion and roll call vote of the Board
7. **WATER SYSTEMS OPTIMIZATION, INC. PROPOSAL: COMB WATER EFFICIENCY & METERING ANALYSIS PROJECT**  
Action: Recommend approval by motion and roll call vote of the Board

**8. GENERAL MANAGER REPORT**

Receive information from the General Manager on topics pertaining to COMB, including but not limited to the following:

- U.S. Bureau of Reclamation Contract Compliance Reviews
- Reclamation Meeting September 15, 2016
- Cachuma Project Member Agency Meetings
- Operations Division
- Fisheries Division

**9. OPERATIONS DIVISION REPORT**

Receive information regarding Operations Division, including but not limited to the following:

- Lake Cachuma Operations
- Operation and Maintenance Activities

**10. FISHERIES DIVISION REPORT**

Receive information regarding Fisheries Division, including but not limited to the following:

- LSYR Steelhead Monitoring Elements
- Tributary Project Updates
- Surcharge Water Accounting
- Reporting/Outreach/Training

**11. PROGRESS REPORT ON LAKE CACHUMA OAK TREE PROGRAM**

Receive information regarding the Lake Cachuma Oak Tree Program including but not limited to the following:

- Maintenance and Monitoring

**12. MONTHLY CACHUMA PROJECT REPORTS**

Receive information regarding the Cachuma Project, including but not limited to the following:

- a. Cachuma Water Reports
- b. Cachuma Reservoir Current Conditions
- c. Lake Cachuma Quagga Survey

**13. DIRECTORS' REQUESTS FOR AGENDA ITEMS FOR FUTURE MEETING**

**14. [CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: EXISTING AND POTENTIAL LITIGATION**

- a. [Government Code Section 54956.9(d)(4)]  
Name of matter: Protest of Member Agency re: Payment of Assessment for Certain Fisheries Related Activities

**15. RECONVENE INTO OPEN SESSION**

[Government Code Section 54957.7]

Disclosure of actions taken in closed session, as applicable

[Government Code Section 54957.1]

- a. Protest of Member Agency re: Payment of Assessment for Certain Fisheries Related Activities

16. **MEETING SCHEDULE**
  - **October 24, 2016 at 2:00 P.M., COMB Office**
  - **Board Packages Available on COMB Website**  
[www.cachuma-board.org](http://www.cachuma-board.org)
  
17. **COMB ADJOURNMENT**

#### NOTICE TO PUBLIC

**Posting of Agenda:** This agenda was posted at COMB's offices, located at 3301 Laurel Canyon Road, Santa Barbara, California, 93105 and on COMB's website, in accordance with Government Code Section 54954.2. The agenda contains a brief general description of each item to be considered by the Governing Board. The Board reserves the right to modify the order in which agenda items are heard. Copies of staff reports or other written documents relating to each item of business are on file at the COMB offices and are available for public inspection during normal business hours. A person with a question concerning any of the agenda items may call COMB's General Manager at (805) 687-4011.

**Written materials:** In accordance with Government Code Section 54957.5, written materials relating to an item on this agenda which are distributed to the Governing Board less than 72 hours (for a regular meeting) or 24 hours (for a special meeting) will be made available for public inspection at the COMB offices during normal business hours. The written materials may also be posted on COMB's website subject to staff's ability to post the documents before the scheduled meeting.

**Public Comment:** Any member of the public may address the Board on any subject within the jurisdiction of the Board that is not scheduled for as an agenda item before the Board. The total time for this item will be limited by the President of the Board. The Board is not responsible for the content or accuracy of statements made by members of the public. No action will be taken by the Board on any Public Comment item.

**Americans with Disabilities Act:** in compliance with the Americans with Disabilities Act, if you need special assistance to review agenda materials or participate in this meeting, please contact the Cachuma Operation and Maintenance Board office at (805) 687-4011 at least 48 hours prior to the meeting to enable the Board to make reasonable arrangements.

**Note:** If you challenge in court any of the Board's decisions related to the listed agenda items you may be limited to raising only those issues you or someone else raised at any public hearing described in this notice or in written correspondence to the Governing Board prior to the public hearing.

**MINUTES OF A REGULAR MEETING  
of the  
CACHUMA OPERATION & MAINTENANCE BOARD**

**held at  
3301 Laurel Canyon Road, Santa Barbara, CA  
Monday, August 22, 2016**

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**1. Call to Order, Roll Call**

The meeting was called to order at 2:01 p.m. by President Doug Morgan who chaired the meeting. Those in attendance were:

**Directors present:**

Doug Morgan	Montecito Water District
Harwood “Bendy” White	City of Santa Barbara
Polly Holcombe	Carpinteria Valley Water District
Lauren Hanson	Goleta Water District

**Others present:**

Janet Gingras	Tim Robinson
Dave Stewart	Kimberly Cherry
Adelle Capponi	Kelley Dyer
Dale Francisco	Joshua Haggmark
Bob McDonald	Darren Burge
Phil Walker	Amy Smith

**2. Public Comment**

Tom Fayram, Santa Barbara County Water Agency, spoke about the recent Rey Fire in Santa Barbara County’s back country and its effect on the watershed. He assured the Board that the County is working to mitigate as much as possible the impacts to Lake Cachuma. A post-fire report, known as the BAER (Burned Area Emergency Response) report will be completed following evaluation to further address potential issues. Director White reminded the Board that this fire is just one example of the need for COMB to have a watershed management plan and program in place as discussed at a previous Board meeting.

Phil Walker spoke about blue-green algae in the Bay Delta and the ensuing problems; diminished snowpack, reducing groundwater, creek and river recharge and storage.

**3. Consent Agenda**

**a. Minutes**

July 25, 2016 Regular Board Meeting

**b. Investment Funds**

Financial Reports  
Investment Reports

**c. Review of Paid Claims**

**d. Review of Pending Claims for Payment**

Director Hanson asked about withholding any future payments to SYRWCD, ID No. 1 to recoup previously billed budget assessments. Legal counsel will review and consider options for this matter.

Following review of the consent agenda, Director Hanson suggested Pending Claims for Payment is no longer needed for separate consideration and recommended that it be removed from the Consent Agenda as an item. After discussion, the Directors concurred with the suggestion. Director Holcombe moved to approve the Consent Agenda, as presented. Seconded by Director Hanson; the motion carried 6/0/1 as follows:

**Ayes:** White, Holcombe, Hanson, Morgan

**Nays:** None

**Absent/Abstain:** Walsh

#### **4. Verbal Reports from Board Committees**

- *Fisheries Committee Meeting – August 18, 2016:* Director Holcombe highlighted the Committee's discussion. Item 3 on the Committee agenda is slated for discussion later on this agenda. The bid documents are prepared and will encompass both Quiota Creek Crossings 0a and 4. The water tanks installed by the Bureau of Reclamation continue to function as planned. Lastly, once the Board approves moving forward with the fish passage projects, the final contract(s), including Counsel review, will be presented to the Board for review and approval.

#### **5. General Manager Report**

- *Administrative Policy*
- *U.S. Bureau of Reclamation Scheduled Reviews*
- *Operations Division*
- *Fisheries Division*

Ms. Gingras highlighted topics within her report, as incorporated in the board packet, and fielded questions from the Board.

#### **6. Operations Division Report**

- *Lake Cachuma Operations*
- *Operation and Maintenance Activities*

Mr. Stewart summarized his report, as presented in the board packet, and updated the Board on the various operational repairs and projects currently underway within the system. Mr. Stewart fielded questions from the Board.

#### **7. Fisheries Division Report**

- *LSYR Steelhead Monitoring Elements*
- *Tributary Project Updates*
- *Surcharge Water Accounting*
- *Reporting/Outreach/Training*

Mr. Robinson noted aspects of the report as presented in the board packet; fielded questions from the Board; and offered more detail on the Reclamation installed water tanks. In brief, the fish in Hilton Creek are being sustained with very low flows from the tanks which are operating better than originally anticipated. Water quality monitoring equipment has been installed to regularly assess conditions in the creek for the fish.

#### **8. Quiota Creek Crossing 4 Fish Passage Improvement Project**

Director Holcombe advised that the Fisheries Committee reviewed and forwards a Draft Temporary Indemnification Letter, from COMB to the County of Santa Barbara, with the recommendation to approve its execution and submittal. She expressed the indemnification letter is nearly identical to the letter approved by the Board last year on the Quiota Creek Crossing 3 Fish Passage Improvement Project. The Board discussed the temporary aspects of the agreement and Director Hanson suggested non-substantive changes to the letter agreement.

**Ayes:** White, Holcombe, Hanson, Morgan

**Nays:** None

**Absent/Abstain:** Walsh

#### **9. Progress Report on Lake Cachuma Oak Tree Program**

- *Maintenance and Monitoring*

Mr. Robinson summarized the progress report on the Lake Cachuma Oak Tree Program and fielded questions from the Board.

#### **10. Monthly Cachuma Project Reports**

The reports were included in the Board Packet for information. As the newest member of the COMB Board, Director White posed several questions regarding the downstream releases and concepts with the potential to evolve into future projects at and around Bradbury Dam.

#### **11. Directors' Requests for Agenda Items for Future Meeting**

There were no requests for agenda items for future meetings.

#### **12. Meeting Schedule**

- The next Regular Board meeting will be held September 26, 2016 at 2:00 p.m.
- The Agendas and Board Packets are available on the COMB website at [www.cachuma-board.org](http://www.cachuma-board.org)

### 13. COMB Adjournment

There being no further business, the meeting was adjourned at 4:36 p.m.

Respectfully submitted,

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Janet Gingras, Secretary of the Board

#### **APPROVED:**

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Doug Morgan, President of the Board

	<i>Approved</i>
✓	<i>Unapproved</i>

**COMB**  
**Statement of Net Assets**

As of August 31, 2016  
UNAUDITED FINANCIALS

**ASSETS**

**Current Assets**

**Checking/Savings**

**TRUST FUNDS**

1210 · WARREN ACT TRUST FUND 540,560.52

1220 · RENEWAL FUND 10,215.61

**Total TRUST FUNDS** 550,776.13

1050 · GENERAL FUND 754,297.74

1100 · REVOLVING FUND 122,499.98

**Total Checking/Savings** 1,427,573.85

**Accounts Receivable**

1320 · Qrtly Assessments Receivable 1,061,880.00

**Total Accounts Receivable** 1,061,880.00

**Other Current Assets**

1010 · PETTY CASH 500.00

1200 · LAIF 1,810,111.35

1303 · Bradbury SOD Act Assmnts Rec 83,283.00

1304 · Lauro Dam SOD Assesmnt Rec 14,447.00

1400 · PREPAID INSURANCE 24,900.72

**Total Other Current Assets** 1,933,242.07

**Total Current Assets** 4,422,695.92

**Fixed Assets**

1500 · VEHICLES 409,581.12

1505 · OFFICE FURN & EQUIPMENT 432,634.46

1510 · MOBILE OFFICES 97,803.34

1515 · FIELD EQUIPMENT 542,025.24

1525 · PAVING 38,351.00

1550 · ACCUMULATED DEPRECIATION -1,320,829.64

**Total Fixed Assets** 199,565.52

**Other Assets**

1910 · LT Bradbury SOD Act Assess Rec 5,250,759.07

1920 · LT Lauro SOD Act Assess Rec 940,342.00

1922 · Deferred Outflows of Resources (GASB 68) 136,562.00

**Total Other Assets** 6,327,663.07

**TOTAL ASSETS** 10,949,924.51



**COMB**  
**Statement of Net Assets**

As of August 31, 2016  
UNAUDITED FINANCIALS

**LIABILITIES & NET ASSETS**

**Liabilities**

**Current Liabilities**

**Accounts Payable**

2200 · ACCOUNTS PAYABLE

239,638.72

**Total Accounts Payable**

239,638.72

**Other Current Liabilities**

Payroll-DepPrm Admin

390.12

Payroll-DepPrm FD

21.24

Payroll-DepPrm Ops

451.64

2505 · ACCRUED WAGES

31,189.78

2550 · VACATION/SICK

142,912.32

2561 · BRADBURY DAM SOD ACT

83,283.66

2563 · LAURO DAM SOD ACT

14,447.00

2565 · ACCRUED INTEREST SOD ACT

87,008.00

2590 · DEFERRED REVENUE

550,776.13

**Total Other Current Liabilities**

910,479.92

**Total Current Liabilities**

1,150,118.64

**Long Term Liabilities**

2602 · LT SOD Act Liability-Bradbury

5,250,759.07

2603 · LT SOD Act Liability - Lauro

940,342.00

2604 · OPEB LT Liability

746,491.00

2605 · Loan Payable - EPFP

2,067,786.80

2610 · Net Pension Liability (GASB 68)

1,120,314.00

2611 · Deferred Inflows of Resources (GASB 68)

348,168.00

**Total Long Term Liabilities**

10,473,860.87

**Total Liabilities**

11,623,979.51

**NET POSITION**

3000 · Opening Bal Equity

-1,357,356.05

3901 · Retained Net Assets

-552,676.75

Net Income

1,235,977.80

**Total Net Assets**

-674,055.00

**TOTAL LIABILITIES & NET POSITION**

10,949,924.51

**Cachuma Operation & Maintenance Board**  
**Statement of Revenues and Expenditures**  
Budget vs. Actuals July 2015 - Jun 2016

UNAUDITED FINANCIALS

	Fisheries			Operations			TOTAL		
	Jul - Aug 16	Budget	% of Budget	Jul - Aug 16	Budget	% of Budget	Jul - Aug 16	Budget	% of Budget
<b>Income</b>									
<b>3000 REVENUE</b>									
3001 · O&M Budget (Qtrly Assessments)	293,486.00	3,297,011.00	8.9%	1,099,581.03	4,417,789.00	24.89%	1,393,067.03	7,714,800.00	18.06%
3006 · Warren Act	0.00	238,306.00	0.0%	0.00	0.00	0.0%	0.00	238,306.00	0.0%
3007 · Renewal Fund	0.00	52,872.00	0.0%	0.00	0.00	0.0%	0.00	52,872.00	0.0%
3009 · Pmts - Member Agencies - EPPF	0.00	0.00	0.0%	611,708.79	0.00	0.0%	611,708.79	0.00	100.0%
3015 · Watershed Sanitary Survey	0.00	0.00	0.0%	3,036.74	0.00	0.0%	3,036.74	0.00	100.0%
3033 · Grant-QC Crossing # 0 (a&b)	0.00	671,635.00	0.0%	0.00	0.00	0.0%	0.00	671,635.00	0.0%
3034 · Grant-QC Crossing #4	0.00	938,295.00	0.0%	0.00	0.00	0.0%	0.00	938,295.00	0.0%
3035 · Cachuma Project Betterment Fund	0.00	90,000.00	0.0%	0.00	0.00	0.0%	0.00	90,000.00	0.0%
<b>Total 3000 REVENUE</b>	<b>293,486.00</b>	<b>5,288,119.00</b>	<b>5.55%</b>	<b>1,714,326.56</b>	<b>4,417,789.00</b>	<b>38.81%</b>	<b>2,007,812.56</b>	<b>9,705,908.00</b>	<b>20.69%</b>
<b>Total Income</b>	<b>293,486.00</b>	<b>5,288,119.00</b>	<b>5.55%</b>	<b>1,714,326.56</b>	<b>4,417,789.00</b>	<b>38.81%</b>	<b>2,007,812.56</b>	<b>9,705,908.00</b>	<b>20.69%</b>
<b>Gross Profit</b>	<b>293,486.00</b>	<b>5,288,119.00</b>	<b>5.55%</b>	<b>1,714,326.56</b>	<b>4,417,789.00</b>	<b>38.81%</b>	<b>2,007,812.56</b>	<b>9,705,908.00</b>	<b>20.69%</b>
<b>Expense</b>									
<b>PAYROLL</b>									
Gross	0.00	0.00	0.0%	0.00	0.00	0.0%	0.00	0.00	0.0%
Gross-FD	0.00	0.00	0.0%	0.00	0.00	0.0%	0.00	0.00	0.0%
<b>Total PAYROLL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>
<b>3100 · LABOR - OPERATIONS</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>100,700.66</b>	<b>812,375.00</b>	<b>12.4%</b>	<b>100,700.66</b>	<b>812,375.00</b>	<b>12.4%</b>
<b>3200 VEH &amp; EQUIPMENT</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>5,157.55</b>	<b>30,000.00</b>	<b>17.19%</b>	<b>5,157.55</b>	<b>30,000.00</b>	<b>17.19%</b>
3201 · Vehicle/Equip Mtce	0.00	0.00	0.0%	3,048.74	15,000.00	20.33%	3,048.74	15,000.00	20.33%
3202 · Fixed Capital	0.00	0.00	0.0%	364.34	5,000.00	7.29%	364.34	5,000.00	7.29%
3203 · Equipment Rental	0.00	0.00	0.0%	1,039.95	5,000.00	20.8%	1,039.95	5,000.00	20.8%
3204 · Miscellaneous	0.00	0.00	0.0%	9,610.58	55,000.00	17.47%	9,610.58	55,000.00	17.47%
<b>Total 3200 VEH &amp; EQUIPMENT</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>100,700.66</b>	<b>812,375.00</b>	<b>12.4%</b>	<b>100,700.66</b>	<b>812,375.00</b>	<b>12.4%</b>
<b>3300 · CONTRACT LABOR</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>904.00</b>	<b>20,000.00</b>	<b>4.52%</b>	<b>904.00</b>	<b>20,000.00</b>	<b>4.52%</b>
3301 · Conduit, Meter, Valve & Misc	0.00	0.00	0.0%	200.10	20,000.00	1.0%	200.10	20,000.00	1.0%
3302 · Buildings & Roads	0.00	0.00	0.0%	0.00	30,000.00	0.0%	0.00	30,000.00	0.0%
3303 · Reservoirs	0.00	0.00	0.0%	2,549.75	25,000.00	10.2%	2,549.75	25,000.00	10.2%
3304 · Engineering, Misc Services	0.00	0.00	0.0%	3,653.85	95,000.00	3.85%	3,653.85	95,000.00	3.85%
<b>Total 3300 · CONTRACT LABOR</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>904.00</b>	<b>20,000.00</b>	<b>4.52%</b>	<b>904.00</b>	<b>20,000.00</b>	<b>4.52%</b>
<b>3400 · MATERIALS &amp; SUPPLIES</b>	<b>0.00</b>	<b>0.00</b>	<b>0.1%</b>	<b>64.85</b>	<b>65,000.00</b>	<b>0.1%</b>	<b>64.85</b>	<b>65,000.00</b>	<b>0.1%</b>
3401 · Conduit, Meter, Valve & Misc	0.00	0.00	0.0%	658.57	15,000.00	4.39%	658.57	15,000.00	4.39%
3402 · Buildings & Roads	0.00	0.00	0.0%	1,652.07	10,000.00	16.52%	1,652.07	10,000.00	16.52%
3403 · Reservoirs	0.00	0.00	0.0%	2,375.49	90,000.00	2.64%	2,375.49	90,000.00	2.64%
<b>Total 3400 · MATERIALS &amp; SUPPLIES</b>	<b>0.00</b>	<b>0.00</b>	<b>0.1%</b>	<b>64.85</b>	<b>65,000.00</b>	<b>0.1%</b>	<b>64.85</b>	<b>65,000.00</b>	<b>0.1%</b>
<b>3500 · OTHER EXPENSES</b>	<b>0.00</b>	<b>0.00</b>	<b>18.46%</b>	<b>1,292.08</b>	<b>7,000.00</b>	<b>18.46%</b>	<b>1,292.08</b>	<b>7,000.00</b>	<b>18.46%</b>
3501 · Utilities	0.00	0.00	0.0%	248.91	5,000.00	4.98%	248.91	5,000.00	4.98%
3502 · Uniforms	0.00	0.00	0.0%	3,006.53	18,000.00	16.7%	3,006.53	18,000.00	16.7%
3503 · Communications	0.00	0.00	0.0%	259.50	4,000.00	6.49%	259.50	4,000.00	6.49%
3504 · USA & Other Services	0.00	0.00	0.0%	0.00	0.00	0.0%	0.00	0.00	0.0%

**Cachuma Operation & Maintenance Board**  
**Statement of Revenues and Expenditures**

Budget vs. Actuals July 2015 - Jun 2016

**UNAUDITED FINANCIALS**

	Fisheries			Operations			TOTAL		
	Jul - Aug 16	Budget	% of Budget	Jul - Aug 16	Budget	% of Budget	Jul - Aug 16	Budget	% of Budget
3505 · Miscellaneous	0.00			1,208.23	8,000.00	15.1%	1,208.23	8,000.00	15.1%
3506 · Training	0.00			68.68	3,000.00	2.29%	68.68	3,000.00	2.29%
<b>Total 3500 · OTHER EXPENSES</b>	<b>0.00</b>			<b>6,083.93</b>	<b>45,000.00</b>	<b>13.52%</b>	<b>6,083.93</b>	<b>45,000.00</b>	<b>13.52%</b>
4100 · LABOR - FISHERIES	123,367.52	623,119.00	19.8%	0.00			123,367.52	623,119.00	19.8%
4200 · VEHICLES & EQUIP - FISHERIES									
4270 · Vehicle/Equip Mtce	3,311.97	13,000.00	25.48%	0.00			3,311.97	13,000.00	25.48%
4280 · Fixed Capital	0.00	15,000.00	0.0%	0.00			0.00	15,000.00	0.0%
4290 · Miscellaneous	2,065.76	2,500.00	82.63%	0.00			2,065.76	2,500.00	82.63%
<b>Total 4200 · VEHICLES &amp; EQUIP - FISHERIES</b>	<b>5,377.73</b>	<b>30,500.00</b>	<b>17.63%</b>	<b>0.00</b>			<b>5,377.73</b>	<b>30,500.00</b>	<b>17.63%</b>
4220 · CONTRACT LABOR - FISHERIES									
4221 · Meters & Valves	0.00	3,000.00	0.0%	0.00			0.00	3,000.00	0.0%
4222 · Fish Projects Maintenance	0.00	25,000.00	0.0%	0.00			0.00	25,000.00	0.0%
<b>Total 4220 · CONTRACT LABOR - FISHERIES</b>	<b>0.00</b>	<b>28,000.00</b>	<b>0.0%</b>	<b>0.00</b>			<b>0.00</b>	<b>28,000.00</b>	<b>0.0%</b>
4300 · MATERIALS/SUPPLIES - FISHERIES									
4390 · Miscellaneous	1,093.13	7,000.00	15.62%	0.00			1,093.13	7,000.00	15.62%
<b>Total 4300 · MATERIALS/SUPPLIES - FISHERIES</b>	<b>1,093.13</b>	<b>7,000.00</b>	<b>15.62%</b>	<b>0.00</b>			<b>1,093.13</b>	<b>7,000.00</b>	<b>15.62%</b>
4500 · OTHER EXPENSES - FISHERIES									
4502 · Uniforms	0.00	2,500.00	0.0%	0.00			0.00	2,500.00	0.0%
<b>Total 4500 · OTHER EXPENSES - FISHERIES</b>	<b>0.00</b>	<b>2,500.00</b>	<b>0.0%</b>	<b>0.00</b>			<b>0.00</b>	<b>2,500.00</b>	<b>0.0%</b>
4999 · GENERAL & ADMINISTRATIVE									
5000 · Director Fees									
5001 · Director Mileage	0.00			96.99	2,000.00	4.85%	96.99	2,000.00	4.85%
5000 · Director Fees - Other	0.00			1,331.20	11,000.00	12.1%	1,331.20	11,000.00	12.1%
<b>Total 5000 · Director Fees</b>	<b>0.00</b>			<b>1,428.19</b>	<b>13,000.00</b>	<b>10.99%</b>	<b>1,428.19</b>	<b>13,000.00</b>	<b>10.99%</b>
5100 · Legal	0.00			4,715.00	75,000.00	6.29%	4,715.00	75,000.00	6.29%
5101-1 · Audit	0.00			0.00	20,000.00	0.0%	0.00	20,000.00	0.0%
5150 · Unemployment Tax	0.00			0.00	5,000.00	0.0%	0.00	5,000.00	0.0%
5200 · Liability Insurance	0.00			0.00	45,955.00	0.0%	0.00	45,955.00	0.0%
5310 · Postage/Office Exp	0.00			1,116.41	5,000.00	22.33%	1,116.41	5,000.00	22.33%
5311 · Office Equip/Leases	0.00			1,441.24	8,000.00	18.02%	1,441.24	8,000.00	18.02%
5312 · Misc Admin Expenses	0.00			4,019.24	7,150.00	56.21%	4,019.24	7,150.00	56.21%
5313 · Communications	0.00			1,680.94	8,500.00	19.78%	1,680.94	8,500.00	19.78%
5314 · Utilities	0.00			1,707.64	9,737.00	17.54%	1,707.64	9,737.00	17.54%
5315 · Membership Dues	0.00			217.75	8,000.00	2.72%	217.75	8,000.00	2.72%
5316 · Admin Fixed Assets	0.00			214.81	3,000.00	7.16%	214.81	3,000.00	7.16%
5318 · Computer Consultant	0.00			1,251.90	15,000.00	8.35%	1,251.90	15,000.00	8.35%
5325 · Emp Training/Subscriptions	0.00			1,052.51	2,000.00	52.63%	1,052.51	2,000.00	52.63%
5330 · Admin Travel/Conferences	0.00			527.95	2,000.00	26.4%	527.95	2,000.00	26.4%
5331 · Public Information	0.00			0.00	1,000.00	0.0%	0.00	1,000.00	0.0%
<b>Total 4999 · GENERAL &amp; ADMINISTRATIVE</b>	<b>0.00</b>			<b>19,373.58</b>	<b>228,342.00</b>	<b>8.48%</b>	<b>19,373.58</b>	<b>228,342.00</b>	<b>8.48%</b>
5299 · ADMIN LABOR	0.00			97,338.49	525,822.00	18.51%	97,338.49	525,822.00	18.51%

**Cachuma Operation & Maintenance Board**  
**Statement of Revenues and Expenditures**  
Budget vs. Actuals July 2015 - Jun 2016

UNAUDITED FINANCIALS

	Fisheries				Operations				TOTAL			
	Jul - Aug 16	Budget	\$ Over Budget	% of Budget	Jul - Aug 16	Budget	\$ Over Budget	% of Budget	Jul - Aug 16	Budget	\$ Over Budget	% of Budget
<b>5400 - GENERAL &amp; ADMIN - FISHERIES</b>												
5407 - Legal - FD	299.00	20,000.00	-19,701.00	1.5%	0.00				299.00	20,000.00	-19,701.00	1.5%
5410 - Postage / Office Supplies	818.92	2,000.00	-1,181.08	40.95%	0.00				818.92	2,000.00	-1,181.08	40.95%
5411 - Office Equipment / Leases	776.03	5,218.00	-4,441.97	14.87%	0.00				776.03	5,218.00	-4,441.97	14.87%
5412 - Misc. Admin Expense	515.11	4,870.00	-4,354.89	10.58%	0.00				515.11	4,870.00	-4,354.89	10.58%
5413 - Communications	1,009.51	4,305.00	-3,295.49	23.45%	0.00				1,009.51	4,305.00	-3,295.49	23.45%
5414 - Utilities	919.50	5,243.00	-4,323.50	17.54%	0.00				919.50	5,243.00	-4,323.50	17.54%
5415 - Membership Dues	218.00	4,000.00	-3,782.00	5.45%	0.00				218.00	4,000.00	-3,782.00	5.45%
5416 - Admin Fixed Assets	115.67	3,000.00	-2,884.33	3.86%	0.00				115.67	3,000.00	-2,884.33	3.86%
5418 - Computer Consultant	674.10	5,000.00	-4,325.90	13.48%	0.00				674.10	5,000.00	-4,325.90	13.48%
5425 - Employee Education/Subsription	748.64	2,500.00	-1,751.36	29.95%	0.00				748.64	2,500.00	-1,751.36	29.95%
5426 - Director Fees	716.80	6,000.00	-5,283.20	11.95%	0.00				716.80	6,000.00	-5,283.20	11.95%
5427 - Director Mileage	52.22	1,000.00	-947.78	5.22%	0.00				52.22	1,000.00	-947.78	5.22%
5430 - Travel	0.00	2,500.00	-2,500.00	0.0%	0.00				0.00	2,500.00	-2,500.00	0.0%
5431 - Public Information	0.00	1,500.00	-1,500.00	0.0%	0.00				0.00	1,500.00	-1,500.00	0.0%
5441 - Audit	0.00	6,300.00	-6,300.00	0.0%	0.00				0.00	6,300.00	-6,300.00	0.0%
5443 - Liab & Property Ins	0.00	24,745.00	-24,745.00	0.0%	0.00				0.00	24,745.00	-24,745.00	0.0%
<b>Total 5400 - GENERAL &amp; ADMIN - FISHERIES</b>	<b>6,863.50</b>	<b>98,181.00</b>	<b>-91,317.50</b>	<b>6.99%</b>	<b>0.00</b>				<b>6,863.50</b>	<b>98,181.00</b>	<b>-91,317.50</b>	<b>6.99%</b>
<b>5499 - ADMIN LABOR-FISHERIES</b>	<b>38,038.92</b>	<b>224,712.00</b>	<b>-186,673.08</b>	<b>16.93%</b>	<b>0.00</b>				<b>38,038.92</b>	<b>224,712.00</b>	<b>-186,673.08</b>	<b>16.93%</b>
<b>5510 - Integrated Reg. Water Mgt Plan</b>	<b>0.00</b>				<b>1,343.00</b>	<b>5,000.00</b>	<b>-3,657.00</b>	<b>26.86%</b>	<b>1,343.00</b>	<b>5,000.00</b>	<b>-3,657.00</b>	<b>26.86%</b>
<b>6000 - SPECIAL PROJECTS</b>												
6062 - SCADA	0.00	20,000.00	-18,925.14	5.37%	1,074.86	20,000.00	-18,925.14	5.37%	1,074.86	20,000.00	-18,925.14	5.37%
6090 - COMB Office Building	0.00	150,000.00	-150,000.00	0.0%	0.00	150,000.00	-150,000.00	0.0%	0.00	150,000.00	-150,000.00	0.0%
6096 - SCC Structure Rehabilitation	0.00	240,000.00	-240,000.00	0.0%	0.00	240,000.00	-240,000.00	0.0%	0.00	240,000.00	-240,000.00	0.0%
6097 - GIS and Mapping	0.00	10,000.00	-8,075.00	19.25%	1,925.00	10,000.00	-8,075.00	19.25%	1,925.00	10,000.00	-8,075.00	19.25%
6100 - Watershed Sanitary Survey	0.00	35,481.20	-19,654.38	44.61%	15,826.82	35,481.20	-19,654.38	44.61%	15,826.82	35,481.20	-19,654.38	44.61%
6100-1a - Watershed Sanitary Survey-C/O	0.00	-35,481.20	35,481.20	0.0%	0.00	-35,481.20	35,481.20	0.0%	0.00	-35,481.20	35,481.20	0.0%
6105 - ROW Management Program	0.00	20,000.00	-18,560.00	7.2%	1,440.00	20,000.00	-18,560.00	7.2%	1,440.00	20,000.00	-18,560.00	7.2%
6109 - NP Jet Flow Control Valve	0.00	50,000.00	-50,000.00	0.0%	0.00	50,000.00	-50,000.00	0.0%	0.00	50,000.00	-50,000.00	0.0%
6111 - Mission Crk Pipe Temp Repair	0.00	50,000.00	-50,000.00	0.0%	0.00	50,000.00	-50,000.00	0.0%	0.00	50,000.00	-50,000.00	0.0%
6118 - Repair Lateral 3 Structure	0.00	100,000.00	-94,815.50	5.19%	5,184.50	100,000.00	-94,815.50	5.19%	5,184.50	100,000.00	-94,815.50	5.19%
6120 - Emergency Pumping Fac Project	0.00	1,846,250.00	-1,555,735.85	15.74%	290,514.15	1,846,250.00	-1,555,735.85	15.74%	290,514.15	1,846,250.00	-1,555,735.85	15.74%
6130 - NP Slope Stabilization	0.00	75,000.00	-75,000.00	0.0%	8,973.75	75,000.00	-75,000.00	0.0%	8,973.75	75,000.00	-75,000.00	0.0%
6131 - Lauro Diversion Valve Install	0.00	2,561,250.00	-2,236,310.92	12.69%	324,939.08	2,561,250.00	-2,236,310.92	12.69%	324,939.08	2,561,250.00	-2,236,310.92	12.69%
<b>Total 6000 - SPECIAL PROJECTS</b>	<b>0.00</b>	<b>75,000.00</b>	<b>-75,000.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>75,000.00</b>	<b>-75,000.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>75,000.00</b>	<b>-75,000.00</b>	<b>0.0%</b>
<b>6200 - FISHERIES ACTIVITIES</b>												
6201 - FMP Implementation	0.00	73,000.00	-73,000.00	0.0%	0.00	73,000.00	-73,000.00	0.0%	0.00	73,000.00	-73,000.00	0.0%
6202 - GIS and Mapping	125.00	10,000.00	-9,875.00	1.25%	0.00	10,000.00	-9,875.00	1.25%	125.00	10,000.00	-9,875.00	1.25%
6203 - Grants Technical Support	0.00	10,000.00	-10,000.00	0.0%	0.00	10,000.00	-10,000.00	0.0%	0.00	10,000.00	-10,000.00	0.0%
6204 - SVR Hydrology Technical Support	0.00	8,000.00	-8,000.00	0.0%	0.00	8,000.00	-8,000.00	0.0%	0.00	8,000.00	-8,000.00	0.0%
6205 - USGS Stream Gauge Program	19,525.00	77,000.00	-57,475.00	25.36%	0.00	77,000.00	-57,475.00	25.36%	19,525.00	77,000.00	-57,475.00	25.36%
6206 - Tri County Fish Team Funding	0.00	5,000.00	-5,000.00	0.0%	0.00	5,000.00	-5,000.00	0.0%	0.00	5,000.00	-5,000.00	0.0%
6207 - Oak Tree Restoration Program	22.73	80,000.00	-79,977.27	0.03%	0.00	80,000.00	-79,977.27	0.03%	22.73	80,000.00	-79,977.27	0.03%
<b>Total 6200 - FISHERIES ACTIVITIES</b>	<b>19,672.73</b>	<b>263,000.00</b>	<b>-243,327.27</b>	<b>7.48%</b>	<b>0.00</b>	<b>263,000.00</b>	<b>-243,327.27</b>	<b>7.48%</b>	<b>19,672.73</b>	<b>263,000.00</b>	<b>-243,327.27</b>	<b>7.48%</b>
<b>6300 - HABITAT ENHANCEMENT</b>												

Cachuma Operation & Maintenance Board  
Statement of Revenues and Expenditures

Budget vs. Actuals July 2015 - Jun 2016

	Fisheries				Operations				TOTAL			
	Jul - Aug 16	Budget	\$ Over Budget	% of Budget	Jul - Aug 16	Budget	\$ Over Budget	% of Budget	Jul - Aug 16	Budget	\$ Over Budget	% of Budget
6303 · Tributary Projects Support	0.00	20,000.00	-20,000.00	0.0%	0.00				0.00	20,000.00	-20,000.00	0.0%
6312 · Quiota Creek Crossing 0 (a&b)	1,754.33	840,000.00	-838,245.67	0.21%	0.00				1,754.33	840,000.00	-838,245.67	0.21%
6314 · Quiota Creek Crossing 4	252.12	1,120,000.00	-1,119,747.88	0.02%	0.00				252.12	1,120,000.00	-1,119,747.88	0.02%
6316 · Quiota Creek Crossing 5	0.00	30,000.00	-30,000.00	0.0%	0.00				0.00	30,000.00	-30,000.00	0.0%
6317 · Salsipuedes Fish Ladder Repair	0.00	10,000.00	-10,000.00	0.0%	0.00				0.00	10,000.00	-10,000.00	0.0%
<b>Total 6300 · HABITAT ENHANCEMENT</b>	<b>2,006.45</b>	<b>2,020,000.00</b>	<b>-2,017,993.55</b>	<b>0.1%</b>	<b>0.00</b>				<b>2,006.45</b>	<b>2,020,000.00</b>	<b>-2,017,993.55</b>	<b>0.1%</b>
7007 · INTEREST EXPENSE-EPFP	0.00				9,996.11				9,996.11	0.00	9,996.11	100.0%
<b>Total Expense</b>	<b>196,419.98</b>	<b>3,297,012.00</b>	<b>-3,100,592.02</b>	<b>5.96%</b>	<b>575,414.78</b>	<b>4,417,789.00</b>	<b>-3,842,374.22</b>	<b>13.03%</b>	<b>771,834.76</b>	<b>7,714,801.00</b>	<b>-6,942,966.24</b>	<b>10.01%</b>
<b>Net Income</b>	<b>97,066.02</b>	<b>1,991,107.00</b>	<b>-1,894,040.98</b>	<b>4.88%</b>	<b>1,138,911.78</b>	<b>0.00</b>	<b>1,138,911.78</b>	<b>100.0%</b>	<b>1,235,977.80</b>	<b>1,991,107.00</b>	<b>-755,129.20</b>	<b>62.08%</b>

Local Agency Investment Fund  
 P.O. Box 942809  
 Sacramento, CA 94209-0001  
 (916) 653-3001

[www.treasurer.ca.gov/pmia-laif/laif.asp](http://www.treasurer.ca.gov/pmia-laif/laif.asp)  
 September 06,  
 2016

CACHUMA OPERATION AND MAINTENANCE BOARD

GENERAL MANAGER  
 3301 LAUREL CANYON ROAD  
 SANTA BARBARA, CA 93105-2017

PMIA Average Monthly Yields

Tran Type Definitions

August 2016 Statement

Effective Date	Transaction Date	Tran Type	Confirm Number	Authorized Caller	Amount
8/31/2016	8/30/2016	RW	1513216	JANET GINGRAS	-200,000.00

Account Summary

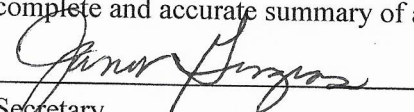
Total Deposit:	0.00	Beginning Balance:	2,010,111.35
Total Withdrawal:	-200,000.00	Ending Balance:	1,810,111.35

**MEMO TO:** Board of Directors  
 Cachuma Operation & Maintenance Board

**FROM:** Janet Gingras, Secretary

**SUBJECT: COMB INVESTMENT POLICY**

The above statement of investment activity for the month of August, 2016, complies with legal requirements for investment policy of government agencies, AB 1073. I hereby certify that it constitutes a complete and accurate summary of all LAIF investments of this agency for the period indicated.

  
 Secretary

# AMERICAN RIVIERA BANK

P.O. Box 329, Santa Barbara, California 93102  
805-965-5942 www.americanrivierabank.com

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SEP 06 2016

### CACHUMA O & M BOARD

PAGE 1

CACHUMA OPERATION AND MAINTENANCE BOARD  
RENEWAL ACCOUNT  
3301 LAUREL CANYON RD  
SANTA BARBARA CA 93105-2017

#### ACCOUNT ANALYSIS CHECKING

STATEMENT DATE 08/31/2016  
LAST STATEMENT DATE 07/29/2016

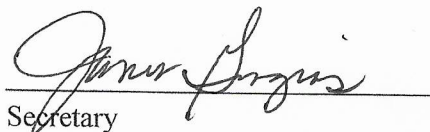
0	STATEMENT PERIOD	
PREVIOUS BALANCE	10,215.61	# OF DAYS-STMT PERIOD 33
0 DEPOSITS/CREDITS	0.00	
0 CHECKS/WITHDRAWALS	0.00	AVERAGE BALANCE 10,215.61
ENDING BALANCE	10,215.61	
TOTAL SRV CHG TODAY	0.00	YTD INTEREST 0.00

**MEMO TO:** Board of Directors  
Cachuma Operation & Maintenance Board

**FROM:** Janet Gingras, Secretary

**SUBJECT:** COMB INVESTMENT POLICY

The above statement of investment activity for the month of August, 2016, complies with legal requirements for investment policy of government agencies, AB 1073. I hereby certify that it constitutes a complete and accurate summary of all American Riviera Bank investments of this agency for the period indicated.

  
Secretary

# AMERICAN RIVIERA BANK

P.O. Box 329, Santa Barbara, California 93102  
805-965-5942 www.americanrivierabank.com

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SEP 06 2016

CACHUMA O & M BOARD PAGE 1

CACHUMA OPERATION AND MAINTENANCE BOARD  
WARREN ACCT TRUST FUND  
3301 LAUREL CANYON RD  
SANTA BARBARA CA 93105-2017

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ACCOUNT ANALYSIS CHECKING

STATEMENT DATE 08/31/2016  
LAST STATEMENT DATE 07/29/2016

0 STATEMENT PERIOD

PREVIOUS BALANCE	540,486.07	# OF DAYS-STMT PERIOD	33
1 DEPOSITS/CREDITS	74.45		
0 CHECKS/WITHDRAWALS	0.00	AVERAGE BALANCE	540,508.63
ENDING BALANCE	540,560.52		
TOTAL SRV CHG TODAY	0.00	YTD INTEREST	0.00

---

**MEMO TO:** Board of Directors  
Cachuma Operation & Maintenance Board

**FROM:** Janet Gingras, Secretary

**SUBJECT:** COMB INVESTMENT POLICY

The above statement of investment activity for the month of August, 2016, complies with legal requirements for investment policy of government agencies, AB 1073. I hereby certify that it constitutes a complete and accurate summary of all American Riviera Bank investments of this agency for the period indicated.

  
Secretary



Cachuma Operation & Maintenance Board  
**Paid Claims**  
As of August 31, 2016

Date	Num	Name	Memo	Amount
<b>1050 - GENERAL FUND</b>				
08/11/2016	24702	Fluidigm Corporation	BioMark Dynamic Array chip-Genotyping (annual) (Fish Div)	-15,057.50
08/11/2016	24703	SB County Flood Control & Water Cons Di	Plans review QC Xng 0a (Fish Div)	-142.00
08/12/2016	24704	A-OK Power Equipment-SB	Weed wacker parts; debris shield kit (Ops Div)	-121.99
08/12/2016	24705	Aqua-Flo Supply	Ortega toe drain repair pipe/pvc/couplers (Ops Div)	-1,471.16
08/12/2016	24706	Association of Ca Water Agencies/JPIA	Sep Health Benefits coverage	-25,591.61
08/12/2016	24707	AT&T	Jul charges	-407.39
08/12/2016	24708	Big Brand Tire Company	Tire replace/wheel balance (Fish Div)	-1,122.82
08/12/2016	24709	Buena Tool Co.	Chain w/grab hook/gloves (Ops Div)	-1,000.84
08/12/2016	24710	Cardenas and Associates Surveying, Inc.	Lateral 3 repair-topographic mapping (Ops Div)	-3,835.00
08/12/2016	24711	Carpinteria Valley Lumber Company	Hand tool/drill bits (Ops Div)	-30.81
08/12/2016	24712	City of Santa-Barbara	Trash/Recycle-Jul 2016	-217.82
08/12/2016	24713	Coastal Copy, LP	Copier (4550 & 3051) mtce agmts	-575.08
08/12/2016	24714	County of SB-P.W. Water Agency	Prop 84 MOU Cost share	-1,343.00
08/12/2016	24715	County of SB Planning & Development	Land Use Permit Xng 0-Jul staff labor (Fish Div)	-230.74
08/12/2016	24716	Cox Communications Santa Barbara	Business internet-Aug	-195.00
08/12/2016	24717	Culligan of Sylmar	Monthly RO system-Aug	-25.95
08/12/2016	24718	DeZurik APCO/Hilton	Butterfly valve-Lauro Stop valve project (Ops Div)	-10,716.85
08/12/2016	24719	ECHO Communications	Monthly answering service	-62.00
08/12/2016	24720	Federal Express	Mailing-Solinst (Fish Div)	-87.53
08/12/2016	24721	Frontier Communications	Main office/outlying stations	-1,127.48
08/12/2016	24722	Harrison Hardware	Fasteners/soaker-oak trees (Fish Div)	-10.25
08/12/2016	24723	Harwood White	Jul mtg fees	-264.95
08/12/2016	24724	Hayward Santa Barbara	A-frame trap parts (Fish Div)	-230.91
08/12/2016	24725	HDR Engineering, Inc.	Engineering Design-Phase I COMB Projects Apr-May-Jun srvc (Ops Div)	-21,605.45
08/12/2016	24726	Home Depot Credit Services	Conduit supplies/fish mat-supp-equip/equip supplies/paint (Ops/Fish Div)	-480.56
08/12/2016	24727	Instrument & Valve Services Company	Calibration-pressure transmitters (2) (Ops Div)	-904.00
08/12/2016	24728	J&C Services	Office cleaning services-Jul services	-600.00
08/12/2016	24729	Jason Lee Paulick	Reimb-safety steel toe boots	-165.77
08/12/2016	24730	Kimberly Cherry	Reimb-HR membership/materials	-392.19
08/12/2016	24731	Lauren W. Hanson	Jul mtg fees	-266.80
08/12/2016	24732	MapLogic Corporation	MapLogic Layout Mgr Annual Mtce-1 yr	-250.00
08/12/2016	24733	MarBorg Industries	Portable toilets-outlying stations	-433.37
08/12/2016	24734	Milpas Rental	Chipper-Lauro Res (Ops Div)	-229.37
08/12/2016	24735	Musick, Peeler & Garrett LLP	General Counsel-May/Jun services	-17,829.88
08/12/2016	24736	Nestle Pure Life Direct	Jul-5 gal disp. (PPE criteria)	-67.30
08/12/2016	24737	Northern Safety Co. Inc.	30' galvanized cable w/harness (fall protection)	-1,989.34
08/12/2016	24738	Northwest Hydraulic Consultants	Project reporting/tech support-thru Jun (Fish Div)	-3,720.80
08/12/2016	24739	Onset Computer Corporation	Waterproof shuttle (field equip) (Fish Div)	-262.00
08/12/2016	24740	Paychex, Inc.	7/15, 7/29 payrolls/taxes/deliveries	-355.95
08/12/2016	24741	Polly Holcombe	Jul mtg fees	-286.55
08/12/2016	24742	Praxair Distribution, Inc	Cylinder rental (acetylene for welder) (Ops Div)	-66.38
08/12/2016	24743	Premiere Global Services	Conf calls-Jul	-97.01
08/12/2016	24744	Prudential Overall Supply	Mats/scrapers-Jul	-100.56
08/12/2016	24745	Rauch Communication Consultants, Inc	Website mtce-Jun services	-80.25
08/12/2016	24746	Rio Vista Chevrolet	Oil change-service/rotate tires-fleet vehicle	-137.94
08/12/2016	24748	SB Home Improvement Center	Concrete mix-Ortega repair; A-frame trap parts	-101.33
08/12/2016	24749	Sherwin Williams Co.	Paint supplies (Ops Div)	-46.95
08/12/2016	24750	Southern California Edison	Main office/outlying stations	-1,563.74
08/12/2016	24751	Spatial Wave	Oct-Dec 2016 Field Mapplet Software mtce	-900.00

Cachuma Operation & Maintenance Board  
**Paid Claims**  
As of August 31, 2016

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Amount</u>
08/12/2016	24752	The Wharf	Shirts/pants (uniforms-Ops/Fish Div)	-2,192.88
08/12/2016	24753	Trenchalk Network Services, Inc.	IT services	-2,646.00
08/12/2016	24754	Underground Service Alert of So. Calif.	61 Ticket charges	-91.50
08/12/2016	24755	United States Geological Survey	Agmt#16WSCA44600 3rd Qtr 5/1-7/31/16	-19,525.00
08/12/2016	24756	Verizon Wireless	Cellular/Modem's/USB's	-569.55
08/12/2016	24757	W. Douglas Morgan	Jul mtg fees	-277.60
08/12/2016	24758	Wright Express Fleet Services	Fleet fuel	-1,833.90
08/15/2016	24759	County of SB-North County Office	Permit review fee-Xng 0a (Fish Div)	-1,081.17
08/19/2016	24760	Cushman Contracting Corp.	Emerg Pumping System: Pay Req#27-Phase II	-142,140.00
08/19/2016	24761	Southern California Edison	Outlying station	-23.32
08/19/2016	24763	Santa Barbara Electronics Supply, LLC	Terminals-Ortega PLC's/computer cables	-240.12
08/19/2016	24764	American Riviera Bank (ARB)	Payment #1 Principal/Interest-EPFP loans	-47,680.06
08/23/2016	24765	Big Brand Tire Company	Oil change/service-wheel alignment-fleet vehicle	-149.55
08/23/2016	24766	Buellton Garage Inc.	Service-Explorer-airflow meter/sensor	-475.26
08/23/2016	24767	Federal Express	Mailings-CDFW/Army Corps/HDR	-128.66
08/23/2016	24768	MGB Industrial Supply	Connector assembly-water sample station-Lauro	-25.87
08/23/2016	24769	Musick, Peeler & Garrett LLP	General Counsel-Jul	-5,083.00
08/23/2016	24770	PG&E	Tecolote Tunnel/North Portal electricity	-392.72
08/23/2016	24771	Tri-Co Reprographics	Copies-QC Xng 0 (Fish Div)	-110.63
08/23/2016	24772	Wells Fargo Vendor Fin Serv	Copier (4550 & 3051) lease agmts	-489.24
08/29/2016	24773	AECOM Technical Services, Inc.	System Isolation Protocol services (Ops Div)	-12,906.62
08/29/2016	24774	Business Card	Office supplies/Admin Asst ad/class materials-Ops/ Employee Handbook builder program/rope sling	-976.19
08/29/2016	24775	J&C Services	Office cleaning services-Aug services	-440.00
08/29/2016	24776	Kimberly Cherry	Reimb-Hotel/mileage-Employment Seminars	-807.61
08/29/2016	24777	Orchard Business/SYNCB	Nuts/bolts-water trailer/brush/brooms/tape/misc	-292.03
08/29/2016	24778	Summers Engineering, Inc.	Watershed Sanitary Survey 2016-3rd progress billing	-1,302.24
08/30/2016	24779	Nestle Pure Life Direct	Aug-5 gal disp. (PPE criteria)	-74.68
08/31/2016	24780	County of SB-Clerk of the Board	Environmental Doc fee-EIR/EIS 2004 (Fish Div)	-3,070.00
08/31/2016	24781	ECHO Communications	Monthly answering service	-62.00
08/31/2016	24782	MarBorg Industries	Portable toilets-outlying stations	-328.37
08/31/2016	24783	Prudential Overall Supply	Mats/scrapers-Aug	-100.56
Total 1050 · GENERAL FUND				<u>-362,318.50</u>
<b>TOTAL</b>				<b><u>-362,318.50</u></b>

**APPROVED FOR PAYMENT**

\_\_\_\_\_  
Director  
\_\_\_\_\_  
Director  
\_\_\_\_\_  
Director

FINANCE COMMITTEE

# **CACHUMA OPERATION & MAINTENANCE BOARD**

## **Public Outreach Committee Meeting**

3301 Laurel Canyon Road  
Santa Barbara, CA 93105

**Tuesday, August 30, 2016**  
**2:00 p.m.**

### **AGENDA**

1. Call to Order
2. Public Comment (Public may address the Committee on any subject matter not on the agenda and within the Committee's jurisdiction)
3. Draft Media Relations Policy (*for information and possible recommendation*)
4. Adjournment

[This Agenda was Posted at 3301 Laurel Canyon Road,  
Santa Barbara, CA. and Notices and Delivered in  
Accordance with Section 54954.1 and .2 of the  
Government Code]

# CACHUMA OPERATION & MAINTENANCE BOARD

## Operations Committee Meeting

3301 Laurel Canyon Road  
Santa Barbara, CA 93105

**Tuesday, September 20, 2016**  
**9:00 a.m.**

### AGENDA

1. Call to Order
2. Public Comment (Public may address the Committee on any subject matter not on the agenda and within the Committee's jurisdiction)
3. HDR, Inc. Presentation – Alternatives for Long-Term Pump Station Operations (*for information*)
4. Water Systems Optimization, Inc. (WSO) Proposal: COMB Water Efficiency & Metering Analysis Project (*for information and possible recommendation*)
5. Adjournment

[This Agenda was Posted at 3301 Laurel Canyon Road,  
Santa Barbara, CA. and Notices and Delivered in  
Accordance with Section 54954.1 and .2 of the  
Government Code.]

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2016
Approved by:	Janet Gingras

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**SUBJECT:**     **Draft Media Relations Policy**

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**SUMMARY:**

The purpose of a media relations policy is to provide an established guideline for the COMB Board of Directors, executive management and staff related to communication protocols with the media. COMB is committed to effective communications with the media which shall be accomplished both responsively and pro-actively in an honest, professional and transparent manner. The development and implementation of this policy is to ensure responses to media questions/inquiries are accurate, timely, comprehensive, and relative to all aspects of COMB's mission. The attached media relations policy is presented to the Board of Directors for review and approval.

**FISCAL IMPACTS:**

N/A

**LEGAL CONCURRENCE:**

N/A

**ENVIRONMENTAL:**

N/A

**COMMITTEE STATUS:**

The Public Outreach Committee reviewed the Media Relations Policy and forwards to the Board with a recommendation to approve.

**RECOMMENDATION:**

Board of Directors approve the Media Relations Policy as presented.

**LIST OF EXHIBITS:**

1. Media Relations Policy



**POLICY AND PROCEDURE  
CACHUMA OPERATION & MAINTENANCE BOARD**

<b>Approval Date:</b>	<b>POLICY TITLE</b>	<b>Policy No.: X.X</b>
September 26, 2016	MEDIA RELATIONS POLICY	Page 1 of X

**X.X MEDIA RELATIONS POLICY**

**PURPOSE**

The purpose of a media relations policy is to provide communication guidance to the COMB Board of Directors, executive management, and staff. COMB is committed to effective communications with the media which shall be accomplished both responsively and pro-actively in an honest, professional and transparent manner. This policy is to ensure responses to media questions/inquiries are accurate, timely, comprehensive, and relative to all aspects of COMB's mission. All media inquiries outside of COMB's authority will result in a referral to the appropriate jurisdictional agency. Adherence to this policy is intended to provide an effective and efficient framework to facilitate the timely and accurate dissemination of information.

**SCOPE**

This media policy applies to all Board Members, executive management and staff and pertains to all external news media outlets including, but not limited to, broadcast, telephonic, electronic and print.

**MEDIA CONTACT**

The General Manager is designated as COMB's principal media contact and agency spokesperson. Depending on the nature of the media request, the Board President or designee may also serve as the agency spokesperson. It is imperative that all media responses are coordinated between the Board President and the General Manager. All spokespersons should refer to this policy before releasing verbal or written statements, as official COMB communication, to news media outlets.

In most cases, the General Manager will facilitate media requests and develop appropriate responses. When necessary, issues will be researched and talking points will be developed in consultation with legal counsel and/or technical staff. Official responses will be provided by the General Manager or the Board President.

**EXTERNAL MEDIA INQUIRIES**

External media inquiries include any media source seeking information from a Director, executive staff or line personnel either through, but not limited to, telephonic, electronic or in person communication means. In accordance with this policy, Directors will refer all media inquiries to the appropriate media contact as stated above. Staff will refer all media inquiries directly to the General Manager.

## **AGENCY GENERATED MEDIA RELEASES**

### **PRESS RELEASES**

Press releases are used as official statements issued by COMB to provide specific information on a subject matter of public interest. Agency press releases will be developed, written and distributed by the General Manager and made available to the Board. Published and posted content will be approved by the General Manager prior to posting to the agency website in accordance with this policy.

Joint press releases will be developed and written in collaboration with the outside agency.

### **PRESS CONFERENCES**

Press conferences are media events in which the agency invites the media for the purpose of disseminating information of public interest. The General Manager, in consultation with Board officers or the full Board as the situation warrants, will be responsible for originating all press conferences presented by COMB. The Board President or designee will be the chief spokesperson at all press conferences.

External press conferences are media events in which the agency is invited to attend. The Board President or his/her designee will be COMB's representative spokesperson. If necessary (quorum of Board), meeting notification will be posted in a timely manner in compliance with the Brown Act.

### **Release of Information Regarding Litigation, Personnel and Public Records**

All media requests pertaining to pending litigation, personnel related information, and public records requests will be referred to the General Manager and if necessary, coordinated through General Counsel.

### **EMERGENCIES**

For purposes of this policy, an emergency is defined as an unexpected event or series of events insolated within COMB's area of responsibility or a situation involving multi-agency crisis response units within a larger jurisdictional area. In the event of an emergency, all media communications disseminated by COMB will be coordinated by the General Manager and distributed according to this policy or, in the event of a multi-agency crisis, channeled through the public information officer designated by the lead agency.

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2016
Approved by:	Janet Gingras

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**SUBJECT:**     **Water Efficiency & Metering Analysis Project**  
                  **Water Systems Optimization, Inc. Proposal**

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### **SUMMARY**

Cachuma Operation & Maintenance Board (COMB) is responsible for the accurate reporting of water accounting on behalf of the Cachuma Project Member Units to the U.S. Bureau of Reclamation on a monthly basis. The process of water accounting entails recording data from twenty-five meters and three balancing reservoirs which are located within a twenty-six mile conveyance system starting at the North Portal of Lake Cachuma extending to the Carpinteria Reservoir.

Historically, system losses inherent in the conveyance of water through the South Coast Conduit (SCC) have not been charged to each of the Member Agencies water accounting balances. The “unaccounted for” water, or system loss, has traditionally been within plus or minus six percent. An in-depth review of water deliveries through the SCC, including a water audit and robust metering analysis, is necessary and must be completed to better assist COMB in identifying its sources of unaccounted for water within each reach of the system. The results of this project will guide COMB to appropriately and equitably allocate losses to each of the Member Agencies and in addition, identify infrastructure changes needed to accurately record conveyed water through the system.

A scope of work and a corresponding request for proposal was discussed with three firms in early August to obtain proposals for professional consulting services on a water efficiency study and metering analysis project. The attached proposal from Water Systems Optimization, Inc. (WSO) details the scope of work, expected outcomes, and costs for this study. Central Coast Water Authority (CCWA) recommended WSO as they are an industry leader in specialized water loss management and reduction strategies.

### **FISCAL IMPACTS:**

Proposed expenditure is included in the FY 2016-17 adopted budget.

### **COMMITTEE STATUS:**

The Operations Committee reviewed the WSO proposal for the water efficiency and metering analysis project and forwards to the Board with a recommendation to approve.

### **RECOMMENDATION:**

The Board authorize the General Manager to enter into a professional services agreement with Water Systems Optimization, Inc. for a water efficiency and metering analysis project in an amount not to exceed \$29,752.

### **LIST OF EXHIBITS:**

1. Water Systems Optimization, Inc. Proposal



**Water Systems Optimization, Inc.**

131 Kissling Street  
San Francisco, CA 94103  
(415) 538 8641



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**TO:** Janet Gingras, General Manager  
*Cachuma Operation and Maintenance Board*

**FROM:** Reinhard Sturm  
*Water Systems Optimization*

**DATE:** August 26, 2016

**RE:** **Proposal for COMB Water Efficiency & Metering Analysis  
Project Services**

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**PROJECT BACKGROUND:**

This proposal follows a discussion between Water Systems Optimization, Inc. (WSO) and Cachuma Operation and Maintenance Board (COMB) regarding an RFP for a Water Efficiency & Metering Analysis Project. It details the scope of work and outcomes of a Water Balance Validation and Development of Recommendations for System Meter Testing.

**ABOUT WATER SYSTEMS OPTIMIZATION:**

WSO is highly specialized in water loss management and reduction strategies. Our services range from water loss assessment to reduction program implementation, including American Water Works Association (“AWWA”) water audits, leakage modeling, economic level of leakage analyses, design of water loss control programs, comparative meter testing, leak detection and repair, apparent loss assessment and reduction, and pressure management. WSO is a water loss industry leader, responsible for the largest water loss management programs and research efforts in North America.

WSO brings unmatched experience in working with California water utilities on their water audit and loss control programs. So far we provided water audit and loss control services to over 30 water utilities throughout California. Additionally, we have taught more than 30 water audit and loss control workshops throughout California.

WSO’s status as the most qualified and experienced firm in North America for conducting detailed water audits, component analyses and designing economically optimized water and revenue loss reduction strategies was solidified by the Water Research Foundation (WaterRF)’s selection of our team to complete the WaterRF project #4372, “Real Loss Component Analysis: A Tool for Economic Water Loss Control”. Under this project WSO developed an accessible component analysis tool that is now available to all North American water utilities.

August 26, 2016

Page 2 of 9

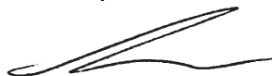
WSO's unmatched experience in this field is best demonstrated by the following achievements:

- **Lead research firm** on all four WaterRF (formerly American Water Works Research Foundation) water loss related research studies
- Instrumental in introducing and promoting current water loss assessment and management best practices in the United States
- Selected by the CUWCC, AWWA CA/NV, and DWR to **provide statewide water audit and component analysis training**
- **Selected by DWR** to prepare a **water audit manual** for utilities to be used when submitting their Urban Water Management Plan under SB1420
- Successfully provided water and revenue loss management professional services to some of the largest water utilities in the country e.g. Metropolitan Water District, Metropolitan Water District of Orange County, Los Angeles Department of Power and Water, San Francisco Public Utilities Commission, City of Sacramento, City of San Diego, San Antonio Water System, Nashville Metro Water, Orlando Utilities Commission, Philadelphia Water Department, City of Phoenix, etc.
- Successfully provided water and revenue loss management professional services to more than **30 water utilities in California**
- WSO successfully implemented water loss reduction and revenue recovery projects for utilities nationally and internationally.
- WSO developed innovative water loss management software, adoption and implementation of which is currently underway.
- Each of WSO's water loss experts are acknowledged specialist in water loss management, nationally and internationally, through publications, leadership within professional associations, long track record of highly successful water loss reduction projects, and development of new software and water loss calculation models.

Our project team strongly believes that we are uniquely positioned to provide the best service and advice to COMB and its member agencies.

Please find in the following sections our proposal for the requested work. If you have any questions, feel free to contact me at (415) 538-8641 or by e-mail at [reinhard.sturm@wso.us](mailto:reinhard.sturm@wso.us).

Sincerely,



Reinhard Sturm

President / CEO – WSO

## **WORK PLAN**

WSO is uniquely equipped to develop a reliable and detailed Water Audit for COMB and to provide guidance on COMBs Non Revenue Water management strategy.

Throughout the project, WSO will lead the adoption and full incorporation of industry best practices in water loss management and accounting for COMB. WSO will emphasize training and will support the COMB's staff in developing the understanding and skills around robust water loss auditing, planning and management. The following sections outline the work involved in each of these steps.

### **TASK 1: WATER AUDIT**

#### ***TASK 1A: System Input Volume Validation***

The first step in assessing water loss will involve full accounting and validation of all inputs into COMB's transmission system. Metering error and/or data handling error from the system input or wholesale export meters can significantly impact the water balance calculation. Fully assessing and validating the accuracy of the system input meters, the data transfer systems, and protocols around meter testing is essential to any water loss determination.

##### **1A.1: Review of Raw Production Data & Determination of Total System Input Volume**

WSO will review all of the production data for the year of water audit review (the "audit period"). This will involve assessing the data integrity of each system input meter's raw production data. COMB's data collection and data management protocols will be reviewed and validated.

##### **1A.2: Assessment of Installation Conditions**

The reliability of system input data is directly related to the operating conditions of each system input and export meter. WSO will determine if the existing system input and export meters can accurately measure flow based on their installation location, setup and existing technology. WSO will gather and review existing reports, drawings, and documentation on these selected meters (manufacture, type, size, installation requirements, and piping configuration) and will field assess their installation conditions. This will directly inform the analysis of the system input volume accuracy and the assignment of confidence intervals to each system input or export volume.

##### **1A.3: Assessment of Data Transfer Accuracy**

Beyond the accuracy of the meter itself, it's important to validate the accuracy of the system input and export meter data transfer. WSO will conduct spot checks on a select number of system input and export meters. This validation step is achieved by testing the accuracy of data transfer from flow meter to the SCADA system using portable data loggers, which will be connected to selected system input meters recording the raw 4-20mA signal. The recorded raw 4-20mA signal will then be converted into flow values according to the meter's calibration flow

range and compared against the flow data recorded by the SCADA system. Figure 1 shows the results of a 4-20mA signal data transfer analysis for a reservoir raw water meter of a Californian water utility. Here a significant difference between the flow rate recorded by SCADA and the actual flow rate recorded by the raw water meter was detected. Identifying these types of data integrity issues is crucial in understanding the reliability of the System Input Volume used for the water balance.

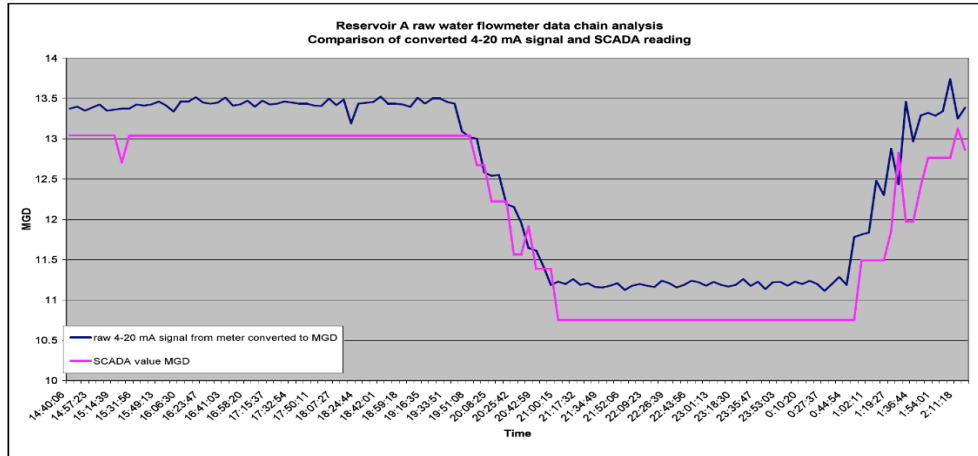


Figure 1: Example of a 4-20mA Signal Data Transfer Analysis

#### 1A.4: Assessment of System Input Meter Testing Procedures & Accuracy Determination

WSO will review the testing procedures currently in place to inform the findings on system input and export meter accuracy. The review of this existing test data will directly inform the level of confidence related to each of system input meters and the volume recorded by each system input meter.

WSO will develop recommendations for comparative meter tests on the system's production meters, where feasible, to inform Phase 2 of this project.

##### Task 1A Outcomes:

- Full examination and assessment of system input meter accuracy
- Validated production data (organized by system input meter) for the audit period
- Validated export data (organized by export meter) for the audit period
- Validation of meter installation conditions – are meters installed according to best industry practices?
- Validation of system input meter data collection, data management and computation process
- Recommendations on modifications for accuracy improvement (in testing protocol and/or meter installation and technology, internal QA/QC procedures for system input volume data)

***TASK 1B: Consumption Volume Validation***

The next step in establishing a validated water balance for COMB involves a thorough examination of all consumption volumes.

**1B.1 Validation of Reported Metered Consumption**

Meter reading data will be gathered from the COMB records to determine the metered consumption delivered to each of its member agencies. WSO will request the export of the raw meter read data for the audit period plus two months on each side of the audit period. Lag-Time Analysis: this review reveals whether or not the delay between actual consumption and the meter read process affects the water balance. Allocation of consumption by month can resolve any problematic lag.

**1B.2 Validation of all Other Consumption Volumes:**

Though the meter read data will provide a majority of the consumption volume for the water balance, it is important to establish a thorough accounting of all withdrawals from the system (whether metered, unmetered, accounted for or not). This involves review of all tracking mechanisms and estimations procedures for the following types of consumption:

- Authorized Un-metered Consumption
- Unaccounted for Metered Consumption
- Unaccounted for Un-Metered Consumption

**Task1B Outcomes:**

- *Full examination and assessment of meter read data integrity*
- *Validated consumption data for the audit period*
- *Meter reading Lag-time analysis and apportioning of monthly consumption, if needed*
- *Evaluation of COMB's procedures for determining un-metered authorized consumption components*

### ***TASK 1C: Apparent Loss Volume Determination***

Apparent losses can result from meter malfunctions, meter reading errors, data transcription errors, agency accountability problems, inaccurate consumption estimates, and theft. In most utilities, the majority of the apparent loss volumes are created by meter malfunctions. The amount of under-registration for any given delivery point (i.e. turnout) is a function of both the meter accuracy and the consumption profile for that delivery point. This task will allow for a thorough understanding of the accuracy of COMB's delivery meter stock. With important insight from the metered consumption data analysis outlined in Task 1B, the total apparent loss volume for the audit period will be determined.

#### **1C.1 Identify and Analyze Pertinent Existing Meter Test Data**

Based on the detailed consumption data analysis, WSO will identify and analyze pertinent existing test data for COMB's delivery meters.

#### **1C.2 Review of Current Delivery Meter Testing**

This stage of the apparent loss analysis involves assessing the appropriate testing and/or overhaul procedures for COMB's delivery meter stock, and examining the opportunities for comparative meter testing versus electronic calibration.

WSO will develop recommendations for comparative meter tests on system delivery meters, where feasible, to inform Phase 2 of this project.

#### **1C.3 Total Apparent Loss Determination**

Given the meter test and/or calibration results, the consumption analysis, WSO will determine the volume attributed to meter under-registration for audit period broken down by export meter. In parallel, WSO will determine the apparent loss volumes attributed to data handling errors and unauthorized consumption (this will involve a review of any documentation and/or assessment of appropriate estimations to apply, and a review of the meter reading and accounting procedures currently in place).

#### **Task 1C Outcomes:**

- *Validation of all apparent loss volumes; export meter under-registration, unauthorized consumption, and data handling errors.*
- *Evaluation of current delivery meter replacement strategy and recommendations for improvement if applicable*
- Recommendations for comparative meter tests on system delivery meters, where feasible, to inform Phase 2 of this project.

### ***TASK 1D: Water Balance Compilation & 95% Confidence Limit Assignment***

#### **1D.1 Establish a Validated AWWA Water Balance**

Equipped with the findings from each previous task, WSO will finalize the validated AWWA Water Balance and determine the water loss performance indicators for the audit period. Alongside the free AWWA Free Water Audit Software, WSO will provide a version of its in house designed water balance software “Audit Solve”. This software also features the results of the component analysis of real losses, 95% confidence limits, ranking of water balance components by level of variance, full set of performance indicators, and graphic comparison of performance indicators against a North American data set and a California data set.

The results of the validated water balance will provide an **independently validated baseline** for water loss volumes for the audit period. In conjunction with subsequent tasks, the results of the validated water balance allow for the design of economically optimized water loss intervention strategies.

#### **1D.2 Determine the 95% Confidence Limits for Each Water Balance Component**

The use of 95% confidence intervals to validate the degree of uncertainty in individual components of the water balance is currently the best practice among qualified water loss management professionals.

Using 95% confidence intervals allows generating a lower and upper limit for each water balance component. The interval estimate (or lower and upper limit) gives an indication of how much uncertainty there is in the volume used for each water balance component. The narrower the interval, the more precise is the value used. This sub-task will involve reviewing the findings on each water balance input and quantifying the error range as a 95% confidence limit.

#### **Task 1D Outcomes:**

- *Independently validated water loss audit and baseline*
- *Copy of the AuditSolve software with water audit results, including 95% confidence limits & performance indicator graphs*
- *Copy of the AWWA Water Audit software with water audit results*
- *Recommendations for future water audits*

#### ***Task 1E – Report Preparation***

WSO will prepare a summary report for documenting the entire project and its outcome. The report will also contain recommendations, review of overall program implementation, lessons learned, suggested action items and tasks for subsequent years, and recommendations for

Phase 2 of the project, including the comparative tests of system meters, where feasible.



**PROPOSED BUDGET:**

	<b>Water Balance Validation &amp; Component Analysis Feasibility Study</b>			
WSO Staff	Reinhard Sturm	Kris Williams	Time Total	Cost Total
Position	Project Director	Project Manager		
Hourly Rate	\$250/hr	\$120/hr		
<b>Project Kick Off and Data Collection</b>	2	8	10	\$1,460.00
<b>TASK 1: Water Audit Validation</b>				
<b>Task 1A:</b> System Input Volume Validation	6	60	66	\$8,700.00
<b>Task 1B:</b> Consumption Volume Validation	6	24	30	\$4,380.00
<b>Task 1C:</b> Apparent Loss Volume Determination	8	20	28	\$4,400.00
<b>Task 1D:</b> Water Balance Compilation & 95% Confidence Limit Assignment	6	16	22	\$3,420.00
<b>Task 1e:</b> Report Preparation	8	30	38	\$5,600.00
Expense Budget				\$1,792.00
<b>TOTALS:</b>	<b>36</b>	<b>158</b>	<b>194</b>	<b>\$29,752.00</b>



Mission Statement:

*“To provide a reliable source of water to our member agencies in an efficient and cost effective manner for the betterment of life in our communities.”*

September 26, 2016

## **General Manager Report**

The following summary provides the Board with information and an overview of progress on current COMB activities.

### *U.S. Bureau of Reclamation Contract Compliance Reviews*

The Bureau of Reclamation (Reclamation) conducted the 2016 Contract Compliance Reviews on Tuesday and Wednesday, August 23<sup>rd</sup> and 24<sup>th</sup> to ensure that Contractors' water use, deliveries, and payments are consistent with contract terms. During these periodic reviews, Reclamation examines annual water delivery records and supporting information and documentation. Each of the Cachuma Project Member Agencies and the County of Santa Barbara Water Agency sent representatives to meet with Reclamation for individually scheduled reviews and discussion on compliance documentation. A comprehensive report will be provided by Reclamation once completed.

### *Reclamation Meeting September 15, 2016*

Michael Jackson, South-Central California Area Manager for Reclamation arranged a Cachuma Project stakeholder meeting for Thursday, September 15<sup>th</sup> which was conducted at the Recreation Hall at Lake Cachuma. Mr. Jackson invited the Mid-Pacific Regional Director, Mr. David Murillo and Deputy Director, Mr. Pablo Arroyave to discuss matters of importance with the Cachuma Project Member Agencies. The meeting was well attended and included representative from the Santa Barbara County Water Agency, Santa Ynez River Water Conservation District (Parent District) and ID No. 1, Goleta Water District, the City of Santa Barbara, Montecito Water District, Carpinteria Valley Water District and COMB. The discussion was centered on state-wide conditions and challenges with particular focus on the Cachuma Project current conditions and challenges moving forward. Director Murrillo indicated Reclamation may have available discretionary funding for shovel ready projects in the upcoming 2017 federal fiscal year through their drought emergency appropriation of funds. Mr. Murillo advocated continued and enhanced communication between Reclamation and all stakeholders to further promote ideas to meet the needs of the Cachuma Project constituency during these difficult and challenging times.

### *Cachuma Project Member Agency Meetings*

The Cachuma Member Unit Managers meeting is hosted monthly by the Santa Barbara County Water Agency and was held on Wednesday, September 7, 2016. The agenda topics included discussions on the remaining supply in the lake, the importance of Member Agencies submitting accurate supply and demand projections for planning purposes, effect of downstream releases on minimum pool, available capacity in state water pipeline and projected Member Agency deliveries, evaporation scenarios and carryover, and the County's cloud seeding program. Mr. Fayram mentioned the County will become informed on an approach to watershed management once the BAER report from the Rey fire was completed and issued.

A separate meeting of the Member Agency General Managers and technical staff was conducted by COMB on September 14<sup>th</sup> to discuss long term alternatives for the Emergency Pumping Facilities Project (EPFP). A separate item on this agenda is a presentation by Dan Ellison, HDR Project Engineer, who will provide the Board with additional information related to long term alternatives for the project.

Operations Division Activities

- Drought Emergency Pumping Facility Project (EPFP)

The EPFP is currently operating in approximately 32' of lake depth with average flows of 15 mgd for the month of September and two to three pumps performing at approximately 90% capacity. As of September 22<sup>nd</sup>, lake storage was 14,429 AF with a corresponding elevation of 647'. Cushman Contracting completed the installation of the second air vent along the pipeline during a brief shutdown. The air vents have been installed to allow any potential air pockets to be released which could be formed during an unpredictable power failure. The pumping station is performing as designed.

See Attachment (A) for Emergency Pumping Facility Project expenditure detail.

- Lauro Stop Valve Installation Project

The Lauro Stop Valve installation project Request for Proposal was submitted to five contractors on Thursday, September 15, 2016. A site job walk was conducted on Thursday, September 22<sup>nd</sup> with proposals due October 18, 2016. A twenty-four hour shutdown will be required for removal of the existing valve and installation of the new valve. Coordination with the City of Santa Barbara has been ongoing.

Fisheries Division Activities

The downstream releases were terminated by Reclamation on August 29, 2016. Prior to the termination of the releases, Reclamation installed a submersible pump (with additional piping) in the stilling basin to provide continual low water flows to Hilton Creek for sustaining habitat in the lower pools. The four Reclamation installed tanks remain in place. Reclamation has requested water quality monitoring which has been conducted weekly by COMB Fisheries Division personnel.

Respectfully Submitted,

*Janet Gingras*

General Manager

# EMERGENCY PUMPING FACILITY PROJECT FY 2016/2017

Attachment A

AS OF: 8/31/2016

**FY 16/17 APPROVED BUDGET**

Emergency Pumping Facility Project

ACCT #6120

**\$ 1,846,250.00 Total Budget Approved FY 16/17**

FY 16/17 EMERGENCY PUMPING FACILITY PROJECT				
CONSULTANTS	BUDGET	EXPENDED	BALANCE	Description
Cushman Contracting	1,746,250.00	276,183.90	1,470,066.10	Construction - Phase II/Operations
HDR Engineering	100,000.00	7,216.02	92,783.98	Contract Management tasks
Musick, Peeler & Garrett	-	69.00	(69.00)	Legal costs
American Riviera Bank	-	7,045.23	(7,045.23)	Loan fees/Interest (CVWD/GWD/MWD)
Misc	-	-	-	Materials, supplies, Permits, etc.
<b>Totals</b>	<b>\$ 1,846,250.00</b>	<b>\$ 290,514.15</b>	<b>\$ 1,555,735.85</b>	

FY 15/16 EMERGENCY PUMPING FACILITY PROJECT				
CONSULTANTS	BUDGET	EXPENDED	BALANCE	Description
Cushman Contracting	2,219,250.00	1,954,734.86	264,515.14	Construction - Phase II/Operations
HDR Engineering	100,000.00	80,942.54	19,057.46	Contract Management tasks
PGE (Site 2)	150,000.00	107,880.35	42,119.65	PGE reconducting costs (6 mo's) (Eng)
PGE	240,000.00	-	240,000.00	PGE electrical costs (6 mo's)
Musick, Peeler & Garrett	-	13,662.00	(13,662.00)	Legal costs
American Riviera Bank	-	82,144.46	(82,144.46)	Loan fees/Interest (CVWD/GWD/MWD)
Misc	-	1,518.75	(1,518.75)	Materials, supplies, Permits, etc.
<b>Totals</b>	<b>\$ 2,709,250.00</b>	<b>\$ 2,240,882.96</b>	<b>\$ 468,367.04</b>	

FY 14/15 EMERGENCY PUMPING FACILITY PROJECT				
CONSULTANTS	BUDGET	EXPENDED*	BALANCE	Description
Cushman Contracting	3,818,000.00	3,842,509.46	(24,509.46)	Construction - Phase II/Operations
HDR Engineering	150,000.00	71,618.52	78,381.48	Contract Management tasks
Musick, Peeler & Garrett	-	22,609.00	(22,609.00)	Legal costs
PGE Construction	125,000.00	111,907.00	13,093.00	
PGE Monthly Costs	32,565.00	9,631.02	22,933.98	Electricity charges
PGE Monthly Costs	-	2,500.00	(2,500.00)	Deposit-pump station location #2 eng.
RMC Water & Environment	-	999.81	(999.81)	Prop 84, Grant Application support
Rodney Hunt-Fontaine	-	540.00	(540.00)	Stems/guides-cast/engineering
SY Band of Chumash	-	1,914.30	(1,914.30)	Field monitoring
Bank of Santa Barbara	-	60,120.92	(60,120.92)	Loan fees/Interest (CVWD/GWD/MWD)
Misc	-	1,214.97	(1,214.97)	Materials, supplies, Permits, etc.
<b>Totals</b>	<b>\$ 4,125,565.00</b>	<b>\$ 4,125,565.00</b>	<b>\$ 0.00</b>	

\*Participating Member Units were assessed Actual Expenditures only.

FY 13/14 DROUGHT CONTINGENCY-EMERGENCY PUMPING FACILITY PROJECT				
CONSULTANTS	BUDGET	EXPENDED	BALANCE	Description
Environ Strategy	60,000.00	9,191.50	50,808.50	Project Management Services
HDR Engineering	198,748.00	178,645.48	20,102.52	Develop proj def; assist w/RFO-RFP, etc
MPG - Environmental/Legal	50,000.00	80,622.32	(30,622.32)	Environmental / Legal fees
Permits	8,045.25	8,045.25	-	CDFW-\$4,912.25 / RWQCB-\$3,133
PG&E	7,000.00	7,000.00	-	On-going project electrical charges
Smith, Watts & Martinez	20,000.00	20,000.00	-	Lobbyist-drought relief funding
SYRWCD ID#1 (Stetson)	5,000.00	4,025.17	974.83	Work authorized by RW/TR
Miscellaneous	33,206.75	119.72	33,087.03	Non-Contract Incidental charges
Cushman Contracting	350,000.00	350,000.00	-	Phase I designs/mobilization/site prep
HDR Engineering	50,000.00	-	50,000.00	Project Management fees
Contractor	54,000.00	-	54,000.00	Evaluation of NP gates, stems, guides
Rodney Hunt-Fontaine	150,000.00	152,272.44	(2,272.44)	Stems for gates 1-5
PG&E	-	107,370.37	(107,370.37)	Electrical Installation contract
<b>Totals</b>	<b>\$ 986,000.00</b>	<b>\$ 917,292.25</b>	<b>\$ 68,707.75</b>	

COMBINED FY 13/14; 14/15; 15/16 & 16/17 Totals			
	BUDGET	EXPENDED	BALANCE
	<b>\$ 9,667,065.00</b>	<b>\$ 7,574,254.36</b>	<b>\$ 2,092,810.64</b>

## CACHUMA OPERATION AND MAINTENANCE BOARD

### MEMORANDUM

**DATE:** September 26, 2016  
**TO:** Janet Gingras, General Manager  
**FROM:** Dave Stewart, Operations Division Manager  
**RE: MONTHLY OPERATIONS DIVISION REPORT**

#### **Operations**

The Annual Work Plan sets forth all activities necessary to ensure system reliability. Consistent with the Plan, Operation and Maintenance staff performs routine maintenance on the distribution and storage system. Staff continually endeavors to improve the system, address deficiencies and identify items to be included in the Infrastructure Improvement Program (IIP).

#### **Lake Cachuma Operations**

The total flow from Lake Cachuma into the Tecolote Tunnel for July was 1,755.2 acre-feet, for an average daily flow of 56.61 acre-feet. Lake elevation was 655.05 feet at the beginning of the month and 647.31 feet at the end. Storage change decreased 5,638 acre-feet. CCWA wheeled 1,371.7 acre-feet of water to Cachuma Project facilities.

#### **Operation and Maintenance Activities**

COMB Staff regularly performs the following duties:

- Weekly Safety meetings
- Weekly Rodent Bait (all reservoirs)
- Weekly Toe Drain and Piezometer reads at Ortega (L23)
- Dam inspection and reports (all reservoirs)
- Structure maintenance per Work Plan
- USA Dig Alert – Responded as necessary to alerts
- Pesticide report to County of Santa Barbara
- Operational tests of generators at the North Portal and at Lauro Yard
- Inspection of fire extinguishers
- Read anodes and rectifier data
- Water samples taken at Lake Cachuma
- Clean up, inspection, and tool inventory of all vehicles
- Clean up and organize service yard and all buildings

#### *Weekly Safety Meetings:*

The primary purpose of the weekly safety meetings is to continue educating staff on safe practices in the field and on-site. In the safety meetings, staff is urged to ask questions regarding the topic being discussed and to think of related examples. The discussion also includes how the incident could have been prevented. Regular safety meetings help staff to

constantly be aware of safety practices while on the job. The following topics were reviewed this past month:

- ✓ Hot Work Procedures
- ✓ Excavation Safety
- ✓ Team Work
- ✓ Fire Extinguisher Training

COMB Operations Staff performed the following activities:

- September 1<sup>st</sup> the EPFP Barge was shut down for maintenance for 7 hours.
- During an inspection it was found that the existing nipples and ball valves on the North Portal Venturi meter were in need of replacement. Operations staff utilized the above mentioned shutdown time to take the meter out of service and remove and replace all necessary components with new hardware.
- Replaced nonfunctioning 8" meter in a lateral in the Montecito reach.
- Held a mandatory pre-bid job walk for the Lauro Stop Valve replacement project.
- Excavated in the Lauro valve area to locate a 3" discharge valve that will be used to drain the pipe during the stop valve replacement.
- Operations crew built a new water quality sampling station at the Lauro Yard.
- Representatives from the USBR were on sight to perform the Periodic Review of all Dams.
- MCR Technologies was on sight to replace the Ortega South Flow meter display that had stopped working.
- CAL FIRE was on site six days performing brush clearing and weed abatement at Lauro reservoir and yard.
- August 25<sup>th</sup>, Operations staff led technical staff from the Division of Drinking Water and Goleta Water District on a tour of the EPFP Barge, Intake Tower and North Portal Valve Chamber as requested by Goleta Water District in conjunction with compliance review.
- Operations department continually inspects all sites, reservoirs, and the South Coast Conduit for items to add to the IIP for future projects.

Additionally, Operations staff has been involved in activities related to the EPFP, IIP, and investigation of the Lower Reach AVAR conditions.

Current IIP projects include:

- Air Vacuum Air Release (AVAR) Valve and Blow-off Structure Rehabilitation & Replacement
- Lauro Stop Valve Replacement
- Lateral 3A Rehabilitation Project
- 2016 Watershed Sanitary Survey Update
- Meter Analysis and Water Efficiency Proposed Project
- North Portal Access Road Rehabilitation
- North Portal Jet Flow Control Valve
- Lauro Tunnel Pipe Supports

**North Portal Venturi Meter Hardware Replacement**



## Fire Extinguisher Training



## EPFP Barge Tour





## Lauro Sample Station



**CACHUMA OPERATION AND MAINTENANCE BOARD**  
**BOARD MEMORANDUM**

**DATE:** September 26, 2016  
**TO:** Janet Gingras, General Manager  
**FROM:** Tim Robinson, Fisheries Division Manager  
**RE: MONTHLY FISHERIES DIVISION REPORT**

**HIGHLIGHTS:**

- Water delivery to Hilton Creek is being conducted by USBR through a submersible pump in the Stilling Basin that is pumping water to the Lower Release Point of Hilton Creek through the Hilton Creek Watering System. The operation has been successful with no known interruptions of flow and has been recording acceptable water quality conditions for the Hilton Creek *O. mykiss* population.

In compliance with the 2000 Cachuma Project Biological Opinion (BiOp) (NMFS, 2000) and as described in the 2004 Lower Santa Ynez River Fish Management Plan (SYRTAC, 2000) and the Monitoring Program in the 2000 Revised Biological Assessment (BA), the Cachuma Project Biology Staff (CPBS) conducts routine monitoring of steelhead/rainbow trout and their habitat on the Lower Santa Ynez River (LSYR) below Bradbury Dam. The following is a list of activities carried out by CPBS since the last COMB Board Fisheries Division Report that has been broken out by categories.

**LSYR Steelhead Monitoring Elements:**

**Lake Profiles:** Lake Cachuma water quality measurements (temperature, dissolved oxygen concentration solids and turbidity) at one meter intervals from the surface to the bottom of the lake (Lake Profile) are taken once a month, normally from April through December at the Hilton Creek Watering System (HCWS) intake barge. This is considered to be near the deepest point in the lake and allows for monitoring of lake stratification, water quality conditions at the intake level for the HCWS and lake-turnover. Due to the drought and the need to carefully monitor Lake Cachuma, lake profiles are being taken monthly throughout the year.

**Cachuma Lake Oak Tree Restoration Program:** COMB staff, with guidance from a hired professional arborist, continues to implement the Program and has successfully conducted all management actions as required. An update of the project is provided in a separate Board memo.

**Transfer of Hilton Creek Releases from Truck and Tank flow to a Submersible Pump from the Stilling Basin to the Lower Release Point:** Upon ending the WR 89-18 release on 8/29/16, U. S Bureau of Reclamation (USBR) conducted four days of Truck and Tank deliveries to Hilton Creek where the water was extracted from Lake Cachuma due to the Bradbury Dam Penstock being dewatered. Over the weekend prior to the end of WR 89-18 releases, USBR installed a small submersible pump on the south side of the Stilling Basin that connects to the Chute Release Point of the Hilton Creek Watering System that allows

USBR to pump water directly to the Lower Release Point of Hilton Creek. On 9/1/16, USBR ended their contract for water deliveries to Hilton Creek by truck and has been maintaining submersible pump delivery to the creek only since then. Flow rates from the submersible pump are low (approximately 0.03 cfs) but are sustainable for the remaining population of *Oncorhynchus mykiss* (*O. mykiss*) in Hilton Creek. Water quality conditions in Hilton Creek are being monitored at several locations and reported weekly to the Adaptive Management Committee.

**WR 89-18 Release Monitoring:** BiOp required monitoring for the WR 89-18 releases started at the beginning of July as requested by USBR and will continue until after the releases are stopped. WR 89-18 releases began on 7/12/16 after 8 AM and are conducted by the Santa Ynez River Water Conservation District in collaboration with USBR. WR 89-18 releases ended on 8/29/16 in the morning. Approximately 11,620 acre-feet were released.

### **Tributary Project Updates:**

**Quiota Creek Crossing 0A:** COMB received a 2014 CDFW-FRGP Grant for \$671,635 with a landowner construction match of \$50,000. The project and funding was discussed at the 3/1/16 Fisheries Committee and the COMB Board accepted the grant on 3/23/15. Staff and HDR have met several times with the two landowners associated with the project. The downstream landowner at Crossing 0A is in full agreement with the project and designs whereas the upstream landowner at Crossing 0B has declined the project. All resources have now been shifted to Crossing 0A which we plan to construct this fall 2016 pending design approval and acquiring permits. The COMB Board approved the project through Resolution 612 on 5/23/16. The project should break ground early next month.

**Quiota Creek Crossing 4:** COMB was awarded a 2015 CDFW-FRGP Grant on 3/30/15 for \$938,295 with a COMB construction match of \$50,000. The project and funding was discussed at the 3/1/16 Fisheries Committee and accepted by the COMB Board on 3/28/16. The COMB Board approved the project through Resolution 613 on 6/27/16. Designs have been submitted to the County and CDFW-NMFS for final approval. The project should break ground by the end of this month.

**Quiota Creek Crossing 5:** As discussed and recommended by the COMB Board on 3/7/16, staff submitted a 2016 CDFW-FRGP Grant on 3/11/16 for \$893,287 with a COMB construction match of \$50,000. If funded, the project would most likely be built in the fall of 2017 pending design approval and permit acquisition.

**Quiota Creek Crossing 8:** This project and the required Cooperative Agreement with the County was discussed at the 5/4/16 Fisheries Committee meeting with approval by the Board on 5/23/16 to move forward with the project and the Cooperative Agreement. The County Board of Supervisors approved the Cooperative Agreement on 7/12/16. With a fully executed Cooperative Agreement, the County can then submit a CalTrans grant application to fund the project which should go out within a month. The announcement of grant awards will be expected within a few months after the grant is submitted.

**Salsipuedes Creek – Jalama Road Fish Ladder:** This project was reviewed by CDFW during a site visit on 6/3/16. CDFW is discussing the recommendations and is looking for funding for the project.

**El Jaro Creek – Cross Creek Ranch Fish Passage Facility:** This project was reviewed by CDFW during a site visit on 6/3/16. CDFW is discussing the recommendations and is looking for funding for the project.

**Hilton Creek Watering System (HCWS) Repairs and Upgrades plus the Hilton Creek Emergency Backup System (HCEBS)**

The HCWS and HCEBS are owned, operated and maintained by USBR. The HCEBS was completed at the end of January 2016. An additional contract modification (Mod-005) is in process to have the contractor install security fencing and lighting for the HCEBS. With this system fully operational, USBR can now work on identified repairs to the HCWS which will be scheduled at some point.

**Surcharge Water Accounting**

The following table summarizes the amount of Surcharge water used to date from each of the three accounts at the end of last month (Table 1). All numbers come from USBR’s Daily Operations Report. The start time for the use of the Surcharge Water Accounts was 5/27/11, or the last day of full surcharge. As of May 2012, all of the Fish Rearing Account waters have been used and USBR is now using Project Yield to meet BiOp target flows. A WR 89-18 release began on 7/15/13 and ended on 12/2/13, another began on 8/18/14 and ended on 11/11/14, another began on 8/3/15 and ended on 9/26/15, and the 2016 WR 89-18 release started on 7/12/16. During these releases, no Fish Rearing releases are debited as WR 89-18 releases are used conjunctively with fish flows under the Cachuma Project Settlement Agreement. The Adaptive Management Committee (AMC) called for two releases from the Adaptive Management Account (AMA), 35 acre-feet in October 2012 and 114 acre-feet in June 2013. What remains of the AMA is 351 acre-feet. There have been no releases from the Fish Passage Supplementation Account (FPSA). Determination of critical drought and the associated accounting and possible usage of the AMA and FPSA have not been finalized and approved by NMFS hence is not reflected in Table 1.

**Table 1:** Summary of the surcharge water accounting and use of Project Yield.

<b>Accounts*</b>	<b>Allocation</b>	<b>Amount Used**</b>	<b>Amount Remaining</b>
<b>Units:</b>	<b>(acre-feet)</b>	<b>(acre-feet)</b>	<b>(acre-feet)</b>
<b>Fish Passage Supplementation</b>	3,200	0	3,200
<b>Adaptive Management</b>	500	149	351
<b>Fish Rearing***</b>	5,484	5,484	0
<b>Project Yield</b>		15,022	
<b>Total:</b>	<b>9,184</b>	<b>20,655</b>	<b>3,551</b>
* Originally was 9,200 af, 8,942 af in 2008 and 9,184 af in 2013.			
** Values as of 8/31/16.			
*** This water is for meeting required target flows. This is not an official account and is what remains after subtracting the other two accounts.			

**Reporting / Outreach / Training**

**Reporting:** Staff continues to work on the Annual Monitoring Reports. Staff has been providing information to USBR as requested in support of the recent Adaptive Management Committee meetings and operations requests.

**Outreach and Training:** Staff continues to work with Quiota Creek and Salsipuedes Creek watershed landowners, interested parties within the Santa Ynez Valley and the County on a variety of fisheries related issues.

**Consultant Activity Summary:**

***HDR Fisheries Design Center*** (Mike Garelo) – Design and reporting work for the Quiota Creek Crossings 0, 4, 5 and 8 projects.

***ICF*** (Jean Baldrige) – BO compliance tasks and support.

***COM3 Consulting*** (Gerald Comati) – Quiota Creek Crossing 8 CalTrans grant application.

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2016
Submitted by:	Tim Robinson and Scott Volan
Approved by:	Janet Gingras

**SUBJECT:**                    **Lake Cachuma Oak Tree Restoration Program**

**SUMMARY:**

***Maintenance***

This memorandum on the Lake Cachuma Oak Tree Restoration Program reflects maintenance completed since January, 2016 to the present (1/1/16 – 9/21/16, Table 1). Labor and expenses for the entire fiscal year (July 2016 - June 2017) as well as water usage will be tracked separately but not reported as recommended by the COMB Board Lake Cachuma Oak Tree Committee. COMB staff continues to rely on the Fisheries Division seasonal employees to conduct the majority of oak tree work in the field. The inventory of all trees planted has been presented to the Lake Cachuma Oak Tree Committee at its 2/25/16 meeting as well as the 2015 Lakeshore Survey, which sets the mitigation number for 2015. Both the 2014 Annual Report and 2015 Lakeshore Survey have been completed and distributed to the COMB Board.

**Table 1:** Cachuma Oak Tree Program completed tasks since January, 2016.

	Jan 2016	Feb 2016**	March 2016	April 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016
<b>Year 8 Oaks (2015-2016)</b>	New Trees	New Trees	Irrigated	Irrigated	Irrigated	Irrigated	Irrigated	Irrigated	Irrigated
	Gopher Baskets	Gopher Baskets	Weeded		Weeded	Weeded	Weeded	Weeded	Weeded
	Fert/Comp	Fert/Comp							
	Deer Cages	Deer Cages							
	Mulch/Irrigated	Mulch/Irrigated							
<b>Year 7 Oaks (2014-2015)</b>		Weeded	Irrigated	Irrigated		Irrigated	Irrigated	Irrigated	Irrigated
		Mulched	Mulched	Weeded		Weeded	Weeded	Weeded	Weeded
			Weeded			Mulched	Mulched		
<b>Year 6 Oaks (2010-2011)</b>					Irrigated				
					Weeded				
<b>Year 5 Oaks (2009-2010)</b>								Irrigated	
								Weeded	
<b>Year 4 Oaks (2008-2009)</b>			Cage maint.		Irrigated				
<b>Year 3 Oaks (2007-2008)</b>			Cage maint.		Irrigated				
<b>Year 2 Oaks (2006-2007)</b>					Irrigated				
<b>Year 1 Oaks (2005-2006)</b>						Irrigated	Irrigated		

\*\*February work included Year 8 oak tree inventory.

The Fisheries Division continues to focus on irrigating the newer Year 7 and Year 8 trees at Bradbury Dam and Storke Flat. Two separate watering crews are being used to facilitate quick turnaround times between watering. Once the current Year 7 and Year 8 watering round is completed, crews will begin a fall watering regime on the older age classes of oak trees. Staff continues to hand weed and apply supplemental mulch to trees during watering activities.

**RECOMMENDATION:**

For Board information only.

**LIST OF EXHIBITS:**

N/A





## 15-16 ENTITLEMENT

**CACHUMA OPERATION AND MAINTENANCE BOARD  
WATER PRODUCTION AND WATER USE REPORT  
FOR THE MONTH OF AUGUST 2016 AND THE WATER YEAR TO DATE**

(All in rounded Acre Feet)

	MONTH					YTD
	TOTAL					TOTAL
<b>WATER PRODUCTION:</b>						
Cachuma Lake (Tec. Diversion)*				1,669		13,933
Tecolote Tunnel Infiltration				42		811
Cachuma Lake (County Park)				3		20
State Water Diversion Credit				624		6,755
Bishop Ranch Diversion				0		100
Meter Reads				1,079		7,205
So. Coast Storage gain/(loss)				(40)		8
<b>Total Production</b>				<b>1,714</b>		<b>14,765</b>
<b>Total Deliveries</b>				<b>1,663</b>		<b>14,068</b>
Unaccounted-for				50		697
% Unaccounted-for				2.94%		4.72%
	<b>GWD</b>	<b>SB CITY</b>	<b>MWD</b>	<b>CVWD</b>	<b>SYRWCD</b>	<b>TOTAL</b>
					<b>I.D. #1</b>	
<b>WATER USE:</b>						
M&I	0	565	311	73	4	952
Agricultural	0	0	29	98	0	127
	<b>0</b>	<b>565</b>	<b>340</b>	<b>171</b>	<b>4</b>	<b>1,079</b>
Unaccounted Reconciliation~						
M&I	0	18	19	0	0	37
Agriculture	4	0	0	10	0	14
Total Unaccounted	4	18	19	10	0	51
<b>Total for Month</b>	<b>4</b>	<b>583</b>	<b>359</b>	<b>181</b>	<b>4</b>	<b>1,130</b>
Same Mo/prev. yr	673	687	156	165	3	1,684
M&I Yr to date	1,034	2,552	2,214	442	21	6,262
Ag. Yr to date	438	0	234	614	0	1,286
<b>TOTAL YTD</b>	<b>1,472</b>	<b>2,552</b>	<b>2,448</b>	<b>1,056</b>	<b>21</b>	<b>7,548</b>
USAGE % YTD	72.4%	65.7%	75.8%	94.2%	47.3%	73.0%
<b>Previous Year/YTD</b>	<b>3,943</b>	<b>2,764</b>	<b>156</b>	<b>736</b>	<b>24</b>	<b>7,623</b>
Evaporation #	84	294	161	33	5	577
Evaporation, YTD	97	340	193	42	6	678
Entitlement ***	0	0	0	0	0	0
Carryover	2,168	4,399	3,486	1,165	56	11,274
Carryover Balances Spilled YTD	0	0	0	0	0	0
Surplus^^	0	0	0	0	0	0
State Water Exchange^	0	0	0	0	0	0
Unaccounted Credit (SWP report)	30	102	0	0	0	132
Transfers/Adjustment #	0	0	0	0	0	0
Transfers/Adjustment	0	0	0	0	0	0
Passthrough H2O**	0	0	0	0	0	0
<b>TOTAL AVAILABLE</b>	<b>2,168</b>	<b>4,399</b>	<b>3,486</b>	<b>1,165</b>	<b>56</b>	<b>11,274</b>
<b>REMAINING BALANCE</b>	<b>629</b>	<b>1,609</b>	<b>845</b>	<b>67</b>	<b>30</b>	<b>3,180</b>
Percentage Remaining	29%	37%	24%	6%	53%	28%

\*\*\* Per USBR advisory letter dated 7/2/2015 to SB County, zero (0) of entitlement allocated.

\*\* City is operating under pass through mode declared November 2008.

State Water Deliveries to Lake Cachuma for August were: MWD 0 AF; CVWD 135 AF  
GWD 600 AF (Morehart 5 AF); City of S.B. 549 AF; and LaCumbre 80 AF; (Ratheon 3 AF).

^ Per SWP Exchange Agrmt GWD received 0 AF; MWD received 0 AF;  
City of SB received 0 AF; and CVWD received 0 AF from ID#1 in August 2016.

# Per USBR email dated 12/23/2015, evap charged to unallocated water until unallocated water is exhausted.  
Unallocated water was exhausted during the month of July 2016. Prorated evaporation was applied.

~ Reconciliation of unaccounted water - (July 84 AF) See Unaccounted Allocation Worksheet

Unaccounted-for Water Allocations  
AUGUST 2016

Acre-feet (AF)
Total Unaccounted-for Water: 50

Lauro Reservoir Evaporation (LE): 11.1
Cater Treatment Plant Loss (CTPL): 1.1
Ortega Toe Drain Loss (OTD): 1.0
Total Identified Loss: 13.2

Pipeline Loss (PL) Remaining (AF): 36.8
---

Pipeline Loss (PL) by Use Area:		
Use Area	% System Capacity	Pipeline Loss (AF)
Use Area 1	9%	3.3
Use Area 2	64%	23.5
Use Area 3	5%	1.8
Use Area 4	22%	8.1
<b>Total</b>	<b>100%</b>	<b>36.8</b>

Delivery & Use Amounts (AF)
GWD Metered Deliveries 549.38
Overlap Amount 81.28
City Metered Deliveries 565.18
Sheffield Pump Stn Production 178.24
MWD Metered Deliveries 339.76
CVWD Metered Deliveries 170.69

Total Lauro/Cater Use (AF): 1075.63
-------------------------------------

Lauro & Cater Loss (LE + CTPL) = 12.2 AF		
Agency	% of Loss	Loss (AF)
GWD	8%	0.9
City	45%	5.5
MWD	32%	3.9
CVWD	16%	1.9

Use Area 1			
Agency	Deliveries (AF)	DEL %	Loss (AF)
GWD	630.66	39%	1.3
City	483.9	30%	1.0
MWD	339.76	21%	0.7
CVWD	170.69	11%	0.3
Total	1625.01	100%	3.3

Use Area 2			
Agency	Deliveries (AF)	DEL %	Loss (AF)
GWD	81.28	8%	1.8
City	483.9	45%	10.6
MWD	339.76	32%	7.4
CVWD	170.69	16%	3.7
Total	1075.63	100%	23.5

Use Area 3			
Agency	Deliveries (AF)	DEL %	Loss (AF)
City	178.24	26%	0.5
MWD	339.76	49%	0.9
CVWD	170.69	25%	0.5
Total	688.69	100%	1.8

Use Area 4			
Agency	Deliveries (AF)	DEL %	Loss (AF)
MWD	339.76	67%	5.4
CVWD	170.69	33%	2.7
Total	510.45	100%	8.1

SUMMARY: UNACCOUNTED-FOR WATER ALLOCATIONS

Item	Lauro & Cater Loss (LE + CTPL)	Use Area 1	Use Area 2	Use Area 3	Use Area 4	Total (AF)	Rounded Total (AF)
GWD	0.9	1.3	1.8	0.0	0.0	4.0	4
City	5.5	1.0	10.6	0.5	0.0	17.5	18
MWD	3.9	0.7	7.4	0.9	5.4	18.8	19
CVWD	1.9	0.3	3.7	0.5	2.7	9.7	10
Total	12.2	3.3	23.5	1.8	8.1	50.0	50



**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #175R-1802**

Contract Year: 10/1/15 to: 9/30/16

Contract Entity: Carpinteria Valley Water District  
 Last updated by C.O.M.B. 8/31/16

Month	Approved Schedule Current Year		Carryover Previous Year	TOTAL WATER USED				WATER USED CHARGED TO CARRYOVER BALANCES				WATER USED CHARGED TO CURRENT ENTITLEMENT	
	M & I	Agr		Total	Evap	Div	Total	M & I	Allocation	Agr	Total	M & I	Agr
Oct	56	84	140	0	140	140	56	84	0	0	0	0	0
Nov	20	32	52	0	52	52	20	32	0	0	0	0	0
Dec	47	60	107	0	107	107	47	60	0	0	0	0	0
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar	1	0	1	0	1	1	0	0	0	0	0	0	0
Apr	13	16	29	0	29	29	13	16	0	0	0	0	0
May	52	62	114	0	114	114	52	62	0	0	0	0	0
Jun	109	138	247	0	247	247	109	138	0	0	0	0	0
Jul	71	113	184	9	184	193	74	119	0	0	0	0	0
Aug	73	108	181	33	181	214	86	128	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>442</b>	<b>613</b>	<b>1,055</b>										

Approved Schedule Current Year: 0  
 Carryover Previous Year: 1165

**CONVERSIONS**

Month	STORAGE WATER		CURRENT SCHEDULE		SCHEDULE AND REVISIONS	
	M & I	Agr	M & I	Agr	M & I	AG
Oct	0	0	0	0	0	0
Nov	0	0	0	0	0	0
Dec	0	0	0	0	0	0
Jan	0	0	0	0	0	0
Feb	0	0	0	0	0	0
Mar	0	0	0	0	0	0
Apr	0	0	0	0	0	0
May	0	0	0	0	0	0
Jun	0	0	0	0	0	0
Jul	0	0	0	0	0	0
Aug	0	0	0	0	0	0
Sep	-74	74	0	0	0	0
<b>Total</b>			<b>1,165</b>	<b>600</b>	<b>565</b>	<b>0</b>

**REMAINING BALANCES**

Month	Total		AG	
	M&I	AG	M&I	AG
Oct	544	481	0	0
Nov	524	449	0	0
Dec	477	389	0	0
Jan	477	389	0	0
Feb	477	389	0	0
Mar	477	389	0	0
Apr	464	373	0	0
May	412	311	0	0
Jun	303	173	0	0
Jul	282	54	0	0
Aug	69	0	0	0
Sep	0	0	0	0
<b>Total</b>	<b>1,025</b>	<b>481</b>	<b>0</b>	<b>0</b>

TOTAL 68





**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #75R-1802**

Contract Year: 10/1/15 to: 9/30/16

Contract Entity: **City of Santa Barbara**  
 Last updated by **C.O.M.B. 8/31/16**

Month	Approved Schedule Current Year		Carryover Previous Year	TOTAL WATER USED				WATER USE CHARGED TO CARRYOVER BALANCES				WATER USE CHARGED TO CURRENT ENTITLEMENT			
	M & I	Agr		total	M & I	Agr	Total	Evap	Div	M & I	Agr	M & I	Agr	Total	
Oct	667	0	667	667	0	667	0	667	667	0	667	0	0	0	
Nov	487	0	487	487	0	487	0	487	487	0	487	0	0	0	
Dec	447	0	447	447	0	447	0	447	447	0	447	0	0	0	
Jan	34	0	34	34	0	34	0	34	34	0	34	0	0	0	
Feb	85	0	85	85	0	85	0	85	85	0	85	0	0	0	
Mar	147	0	147	147	0	147	0	147	147	0	147	0	0	0	
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jul	0	0	0	0	0	0	46	0	46	0	46	0	0	0	
Aug	583	0	583	583	0	583	294	583	877	0	877	0	0	0	
Sep	0	0	0	103	0	103	103	583	877	0	877	0	0	0	
Total	2,450	0	2,450	443	0	443	443	443	443	0	443	0	0	0	

Month	STORAGE WATER		CONVERSIONS		CURRENT SCHEDULE		SCHEDULE AND REVISIONS	
	M & I	Agr	M & I	Agr	M & I	Agr	M & I	Agr
Oct	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0
Jan	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0
Total	0	0	0	0	4,399	0	4,399	0

Month	REMAINING BALANCES	
	M & I	Agr
Oct	3,732	0
Nov	3,245	0
Dec	2,798	0
Jan	2,764	0
Feb	2,679	0
Mar	2,532	0
Apr	2,532	0
May	2,532	0
Jun	2,532	0
Jul	2,486	0
Aug	1,609	0
Sep	1,609	0
Total	3,732	0

TOTAL 1,609

**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #175R-1802**

Contract Year: 10/1/15 to: 9/30/16

Contract Entity: Santa Ynez River Water Conservation District, ID#1  
 Last updated by C.O.M.B. 8/31/16

Month	TOTAL WATER USED		WATER USE CHARGED TO CARRYOVER BALANCES				WATER USE CHARGED TO CURRENT ENTITLEMENT		
	M & I	Agr	Evap	Div	Total	M & I	Agr	M & I	Agr
Oct	2	0	0	2	2	0	0	0	0
Nov	1	0	0	1	1	1	0	0	0
Dec	1	0	0	1	1	1	0	0	0
Jan	1	0	0	1	1	1	0	0	0
Feb	1	0	0	1	1	1	0	0	0
Mar	1	0	0	1	1	1	0	0	0
Apr	2	0	0	2	2	2	0	0	0
May	2	0	0	2	2	2	0	0	0
Jun	3	0	0	3	3	3	0	0	0
Jul	3	0	0	3	3	4	0	0	0
Aug	4	0	5	4	9	9	0	0	0
Sep	0	0	0	0	0	0	0	0	0
Total	21	0	56	21	21	56	0	0	0

**CONVERSIONS**

STORAGE WATER	MONTH	CONVERSIONS
M & I	2	0
Agr	-2	0
M & I	1	0
Agr	-1	0
M & I	1	0
Agr	-1	0
M & I	1	0
Agr	-1	0
M & I	1	0
Agr	-1	0
M & I	2	0
Agr	-2	0
M & I	2	0
Agr	-2	0
M & I	3	0
Agr	-3	0
M & I	4	0
Agr	-4	0
M & I	9	0
Agr	-9	0

**SCHEDULE AND REVISIONS**

Month	M & I	Agr	Total
Begin Bal	0	56	56
Oct	0	0	0
Nov	0	0	0
Dec	0	0	0
Jan	0	0	0
Feb	0	0	0
Mar	0	0	0
Apr	0	0	0
May	0	0	0
Jun	0	0	0
Jul	0	0	0
Aug	0	0	0
Sep	0	0	0

**COUNTY PARKS**

Month	A.F. Used	M & I	Agr	Total
Oct	1.61	0	54	54
Nov	1.38	0	53	53
Dec	1.38	0	52	52
Jan	0.97	0	51	51
Feb	1.26	0	50	50
Mar	1.41	0	49	49
Apr	2.21	0	47	47
May	2.32	0	45	45
Jun	2.66	0	42	42
Jul	2.80	0	38	38
Aug	3.5	0	29	29
Sep		0	0	0

\*NOTE:

TOTAL 29



**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #175R-1802**

Contract Entity: **Santa Barbara Co. Water Agency**  
 Last updated by **C.O.M.B. 8/31/16**

Contract Year: 10/1/15 to: 9/30/16

Month	Approved Schedule			Carryover Previous Year	TOTAL WATER USED				WATER USED CHARGED TO CARRYOVER BALANCES				WATER USED CHARGED TO CURRENT ENTITLEMENT			
	Current Year	M & I	Agr		Total	Use %	Acre-feet		Total	Allocation		M & I	Agr	Acre-feet		Total
							M & I	Agr		Evap	Div			M & I	Agr	
Oct	0	1,385	288	1,673	14.84%	0	1,673	1,673	1,385	288	0	288	0	0	0	
Nov		1,001	194	1,195	10.60%	0	1,195	1,195	1,001	194	0	194	0	0	0	
Dec		990	181	1,171	10.39%	0	1,171	1,171	990	181	0	181	0	0	0	
Jan		115	6	121	1.07%	0	121	121	115	6	0	6	0	0	0	
Feb		102	1	103	0.92%	0	103	103	102	1	0	1	0	0	0	
Mar		282	9	291	2.58%	0	291	291	281	9	0	9	0	0	0	
Apr		207	39	246	2.18%	0	246	246	207	39	0	39	0	0	0	
May		303	89	392	3.48%	0	392	392	303	89	0	89	0	0	0	
Jun		371	170	541	4.80%	0	541	541	371	170	0	170	0	0	0	
Jul		415	146	561	5.87%	101	561	662	494	168	101	168	0	0	0	
Aug		990	133	1,123	15.07%	577	1,700	1,700	1,450	250	577	250	0	0	0	
Sep																
Total	0	11,274	0	11,274												

**CONVERSIONS**

STORAGE WATER		CURRENT SCHEDULE		CURRENT SCHEDULE		SCHEDULE AND REVISIONS	
M & I	Agr	M & I	Agr	M & I	Agr	M & I	Agr
2	-2	0	0	9,668	1,606	0	0
1	-1	0	0	0	0	0	0
1	-1	0	0	0	0	0	0
1	-1	0	0	0	0	0	0
1	-1	0	0	0	0	0	0
2	-2	0	0	0	0	0	0
2	-2	0	0	0	0	0	0
3	-3	0	0	0	0	0	0
4	-4	0	0	0	0	0	0
-65	65	0	0	0	0	0	0
Total		11,274	0	9,668	1,606	0	0

**COUNTY PARKS**

A.F. Used	M & I	Agr	Total	M & I	Agr	Total
1.61	8,285	1,400	9,601	0	0	0
1.38	7,285	1,205	8,406	0	0	0
1.38	6,296	1,023	7,235	0	0	0
0.97	6,182	1,016	7,114	0	0	0
1.26	6,081	1,014	7,011	0	0	0
1.41	5,801	1,004	6,719	0	0	0
2.21	5,596	963	6,473	0	0	0
2.32	5,295	872	6,081	0	0	0
2.66	4,927	699	5,540	0	0	0
2.80	4,437	527	4,878	0	0	0
3.50	2,922	342	3,179	0	0	0
Total	9,601	1,400	11,274	0	0	0

**TOTAL 3,179**

**COMB STATE WATER PROJECT ACCOUNTING - SOUTH COAST ONLY (Does not include SYRWCD, ID#1 or exchange water)**

MONTH	DELVRD TO LAKE		CWD		Delvd to SC		MWD		Evap/Spill		S.B.		GWD		Evap/Spill		Delvd to SC		LCMWC		RSYS		Delvd to Lake		MLC			
	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC		
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bal. Frwd	833	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
January	789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
February	1284	170	52	118	0	282	725	11	195.9	363	366	423	492	2	130.1	0	269	0	0	0	0	0	0	0	0	0	0	
March	1152	192	130	111	3	331	807	18	231.4	428	363	462	444	9	501	0	510	0	0	0	0	0	0	0	0	0	0	
April	658	108	139	95	4	237	762	23	258.7	305	428	193	0	11	626	0	0	0	0	0	0	0	0	0	0	0	0	
May	371	0	50	84	6	0	507	30	224.7	366	366	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
June	306	0	0	48	2	0	186	21	299.6	306	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
July	40	0	0	0	0	0	0	0	174	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
August	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	60	20	0	20	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	5542	490	0	475.7	14	870	0	128	1616	2552	0	0	0	0	21	1526	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>8878</b>	<b>289</b>	<b>0</b>	<b>145</b>	<b>9</b>	<b>125</b>	<b>0</b>	<b>102</b>	<b>74</b>	<b>3065</b>	<b>4279</b>	<b>923</b>	<b>23</b>	<b>565</b>	<b>2822</b>	<b>286</b>	<b>52</b>	<b>323</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>29</b>	<b>0</b>		

**COMB STATE WATER PROJECT ACCOUNTING - SOUTH COAST ONLY (Does not include SYRWCD, ID#1 or exchange water)**

MONTH	DELVRD TO LAKE		CWD		Delvd to SC		MWD		Evap/Spill		S.B.		GWD		Evap/Spill		Delvd to SC		LCMWC		RSYS		Delvd to Lake		MLC	
	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC	Delvd to Lake	Delvd to SC
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bal. Frwd	653	54	38	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January	693	0	36	0	2	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	965	0	33	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	1283	0	0	29	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	1309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	1261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	1342	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	1372	135	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8878</b>	<b>289</b>	<b>0</b>	<b>145</b>	<b>9</b>	<b>125</b>	<b>0</b>	<b>102</b>	<b>74</b>	<b>3065</b>	<b>4279</b>	<b>923</b>	<b>23</b>	<b>565</b>	<b>2822</b>	<b>286</b>	<b>52</b>	<b>323</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>29</b>	<b>0</b>



**Santa Barbara County Parks Division,  
Cachuma Lake Recreation Area**



**Summary of Aquatic Invasive Species Vessel Inspection Program  
and Early Detection Monitoring Program: August 2016**

**AIS INSPECTION PROGRAM LAUNCH DATA:**

<b>Cachuma Lake Recreation Area Launch Data -- August 2016</b>		
<b>Inspection Data</b>		
Total Vessels entering Park	10	
Total Vessels launched	10	
Total Vessels Quarantined	0	0%
Returning with Boat Launch Tag	0	0%
New: Removed from Quarantine	*	
Kayak/Canoe: Inspected, launched	10	100%
4-stroke Engines	*	
2-strokes, w/CARB star ratings	*	
2-strokes, NO emissions ratings	*	
<b>Quarantine Data</b>		
Total Vessels Quarantined	0	
Quarantined 7 days	*	
Quarantined 14 days	*	
Quarantined 30 days	0	
<b>Quarantine Cause</b>		
Water on vessel*	*	
Debris on hull*	*	
Plug installed*	*	
From infected county	0	
Ballast tanks*	*	
Boat longer than 24 feet*	*	
Out-of-state	0	
Unspecified*	*	
Mandatory Quarantine All Untagged Boats	0	
<b>Demographic Data</b>		
Quarantined from infected county	0	
Quarantined from SB County	0	
Quarantined from uninfected co	0	

Boat Launch Tags: Boats with Cachuma Lake Boat Launch Tags attach boat to trailer.

No mussel species have been located on any vessel entering Cachuma Lake as of the last day of this month.

\* These conditions are no longer being tracked.

**EARLY DETECTION MONITORING PROGRAM SUMMARY**

**Summary:** No Dreissenid mussels were detected

Inspection Site: Cachuma Lake Marina, Santa Barbara County, California

Inspection Date and Time: 2016.08.26; 10:00 – 13:00 PDT

Method: 5 PVC/Cement Sampling Stations; 62 linear feet of line

Surveyors: Rosey Bishop, John Viggianelli & Kristin Loft (SBCO)

Lake elevation: Max feet: 753.00, current: 648.11; Max acre-feet: 193,305, current: 15,159;

Current capacity: 7.80%