REGULAR MEETING OF CACHUMA OPERATION AND MAINTENANCE BOARD

3301 Laurel Canyon Road Santa Barbara, CA 93105

Monday, February 25, 2008

Approximate Start Time 3:15 p.m.

AGENDA

- 1. **COMB CALL TO ORDER, ROLL CALL** (COMB Board of Directors.) (1 minute).
- 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.) (5 minutes)
- 3. **CONSENT AGENDA** (For Board action by vote on one motion unless member requests separate consideration.) (2 minutes)
 - a. Minutes
 - January 28, 2008 Regular Board Meeting and January 14, 2008 Special Board Meeting
 - b. Investment of Funds
 - Financial Reports
 - Investment Reports
 - c. Payment of Claims
- 4. REPORTS FROM THE MANAGER. (10 minutes)
 - a. Water Storage, Water Production & Use, SWP Accounting
 - b. Operations Report
 - c. Post-Zaca Fire Report
 - d. 2008 Spill/Surcharge Issues
 - e. Verbal Report Cachuma Reservoir Current Conditions
- 5. CAPITAL IMPROVEMENT PROGRAM / BOND ISSUANCE PRESENTATION. (20 minutes)
- 6. PROPOSED DRAFT LICENSE FOR OCEAN VIEW HOMEOWNERS' ASSOCIATION AT ORTEGA RESERVOIR TO USE U.S. BUREAU OF RECLAMATION RIGHT-OF-WAY (10 minutes)

7. QUAGGA MUSSEL ISSUES REGARDING LAKE CACHUMA (5 minutes)

8. **CONFERENCE REPORTS** (5 minutes)

 Reclamation's Mid-Pacific Region Water Users Conference, Reno, January 23-25, 2008

9. DIRECTORS' REQUEST FOR AGENDA ITEMS FOR NEXT MEETING (2 minutes)

10. MEETING SCHEDULE

- March 24, 2008 Regular Board Meeting
- Availability of Board Packages on CCRB-COMB Website www.ccrb-comb.org

11. COMB ADJOURNMENT

NOTICE TO PUBLIC

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 a public hearing before the Board. The total time for this item will be limited by the President of the Board. If you wish to address the Board under this item, please complete and deliver to the Secretary of the Board before the meeting is convened, a "Request to Speak" forms including a description of the subject you wish to address.

Americans with Disabilities Act: In compliance with the Americans with Disabilities Act, if you need special assistance to 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.

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

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

Cachuma Operation & Maintenance Board Office 3301 Laurel Canyon Road, Santa Barbara, CA Monday, January 28, 2008

1. Call to Order, Roll Call

The meeting was called to order at 4:17 p.m. by President Chuck Evans, who chaired the meeting. Those in attendance were:

Directors present:

Chuck Evans Goleta Water District
Das Williams City of Santa Barbara
Jan Abel Montecito Water District

June Van Wingerden Carpinteria Valley Water District

Others present:

Kate Rees William Hair
Brett Gray Tom Mosby
Kevin Walsh Gary Kvistad
Chip Wullbrandt Chris Dahlstrom
Rebecca Bjork Janet Gingras
David McDermott

2. [CLOSED SESSION: CONFERENCE WITH LEGAL COUNSEL TO DISCUSS PENDING LITIGATION PURSUANT TO GOVERNMENT CODE SECTION 54956.9 (a). ONE CASE: CRAWFORD-HALL V COMB, SUPERIOR COURT OF CALIFORNIA, COUNTY OF SANTA BARBARA, CASE NO. 1171135.] (10 minutes)

The Board went in to closed session at 4:19 p.m. The Board came out of closed session at 4:23 p.m. There was nothing to report out of closed session.

3. Public Comment

There were no comments from the public.

4. Consent Agenda

| ITEM | # <u> </u> | <u>م</u> |
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a. Minutes:

November 19, 2007 Regular Board Meeting

b. Investment Funds

Financial Report Investment Report

c. Payment of Claims

Director Abel moved to approve the Consent Agenda, seconded by Director Williams, motion carried, 6/0/1, Director Loudon was absent; 4 (a) minutes, 5/0/2 Director Loudon absent and Director Van Wingerden abstained.

5. Reports from the Manager

a. Water Storage, Water Production Use, SWP Accounting

The monthly reports from Janet Gingras were included in the board packet.

b. Operations Report

The December report on operations from Brett Gray was included in the board packet.

c. Lauro Dam SOD Project Update

Included in the board packet was information on the SOD repayment schedule prepared by Janet Gingras. The reasonable maximum cost as of December 2006, which amounts to \$5,974,933 is significantly less than previous projections of \$17,314,125. When the final costs have been determined, anticipated to be in 2010, USBR would then issue a revised repayment schedule that would include any adjustments that had occurred since December 2006.

d. 2006 Surcharge Accounting

Ms. Rees had included the 2006 surcharge accounting table in the board packet. When the reservoir spills the account will be reset to zero AF. If the spill is sufficient to capture surcharge water, a new 2008 surcharge account will be established for approximately 9200 AF to be used for the downstream steelhead fishery.

e. Cachuma Reservoir Current Conditions

Date 01/28/2008

Lake elevation Storage 747.00

179,086 acre feet

| ITEM | # <u> </u> |
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| PAGE | 2 |

Rain (for the month to date) 16.47 inches Rain YTD (for the season to date) 19.23 inches Fish Release-Hilton Creek

Month to Date Fish Release 298.9 acre feet

Month to Date Spill 0.00 acre feet

Ms. Rees reported that when Lake Cachuma spills, Reclamation will declare surplus water and notify the Member Units.

11.9 - 2.0 acre feet per day

6. Post-Zaca Fire Report

Included in the board packet was a report prepared by Balance Hydrologics on post-fire sedimentation rates and projected vegetation regrowth and stabilization. Ms. Rees reported that the sedimentation rates projected by Balance Hydrologics are less than those predicted in the U.S. Forest Service's Baer report. The report also indicated that a return to pre-fire vegetation might occur faster than originally predicted.

Ms. Rees also reported that there is very little debris in Lake Cachuma following the recent storms, and that the log booms installed by the County Flood Control District have been holding back the debris that is entering the Lake from the burn areas.

7. Prevention of Quagga Mussels at Lake Cachuma

Letters to County Board of Supervisors, Reclamation, and ACWA

Included in the board packet were the letters sent to the County Board of Supervisors and Reclamation regarding the prevention of Quagga mussels at Lake Cachuma. The COMB Board directed Ms. Rees to send these letters at the Special Board meeting held on January 14, 2008. Ms. Rees reported that she had also had the opportunity to speak with a Michael Finnegan, Acting Regional Director of the Bureau of Reclamation, at the Water Users Conference in late January, but was unsure of the position that Reclamation would be taking.

Also provided for the Directors was a letter from Elton Gallegly, Member of Congress. written to Robert W. Johnson, Commissioner, Bureau of Reclamation. Although Mr. Gallegly acknowledged the seriousness of a Quagga mussel infestation, he does not support a ban on private boats. The Directors were of the opinion that it was important to contact Elton Gallegly's office in order to explain COMB's position regarding a temporary ban on private boats at Lake Cachuma. At the request of the Directors, a letter will be sent to Mr. Gallegly, as well as contacting his office directly with the aid of ID#1.

Bill Hair also suggested that a letter be sent to Congresswoman Lois Capps and include a copy of the letters sent to the County and to Reclamation.

Brett Gray briefly reported on a DFG "Watercraft Decontamination Training "class that one of his staff, Dave Nageotte, had attended January 24, 2008.

ITEM # 3a

8. Application for Extension of Glen Annie Creek Diversion Permit

Ms. Rees reported that Reclamation's water right permit for diverting water from Glen Annie Creek into Glen Annie Reservoir had expired in the year 2000. Beneficial use of this water had diminished over the years due to Reclamation's seismic restriction that allows only 25% of full capacity of Glen Annie Reservoir to be impounded. To extend the permit, Reclamation needed to apply for an extension and provide to the State Water Board ample justification that there had been and/or would be full beneficial use of this diverted water. The deadline for the request was January 28, 2008. If the State Board denies the permit extension, the permit will go to license, and the State Water Board will assign a permanent diversion amount permissible under the license. COMB supports an extension to the permit in order to establish full beneficial use of the water.

9. Proposed Draft License for Ocean View Homeowners' Association at Ortega Reservoir to Use U.S. Bureau of Reclamation right-of-Way

The proposed license was deferred to the February 25, 2008 Board meeting pending additional review and changes.

10. Santa Barbara County's Integrated Regional Water Management Plan

- a. Final Funding Distribution for Grant Application
- b. Prop 50 Round 2 Step 2 Grant Application

Ms Rees reported that the Prop 50 Round 2 Step 2 Grant Application had been completed and the submittal deadline was January 28, 2008. The amount requested for COMB's 2nd Pipeline project was \$3.2 million. The total amount for the grant application was \$25 million. Ms. Rees complimented Brett Gray and Janet Gingras for the amount of work they had contributed to the success of the grant application process.

11. Conference Report

 Reclamation's Mid-Pacific Region Water Users Conference, Reno, January 23-25, 2008

The conference report was deferred to the February 25, 2008 meeting.

12. Directors' Request for Agenda Items for Next Meeting

There were no requests from the Directors.

13. Meeting Schedule

• The next regular Board meeting will be held February 25, 2008 following the 2:15 P.M. CCRB regular Board meeting, at the COMB office.

The Board Packets are available on the CCRB-COMB Website, www.ccrb-comb.org

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14. COMB Adjournment

| There being no furth | er business, the | meeting was | adjourned at 5:11 | p.m. |
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| | | Respectfully submitted, |
|------------------------|------------|-----------------------------------|
| | | Kate Rees, Secretary of the Board |
| APPROVED: | | |
| Chuck Evans, President | | |
| | | comb/01.28.08COMB Mit |
| | | |
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| | | |
| | | |
| | Approved _ | |

Unapproved_

MINUTES OF A SPECIAL MEETING of the CACHUMA OPERATION & MAINTENANCE BOARD held at the

Cachuma Operation & Maintenance Board Office 3301 Laurel Canyon Road, Santa Barbara, CA Monday, January 14, 2008

1. Call to Order, Roll Call

The meeting was called to order at 4:08 p.m. by President Chuck Evans, who chaired the meeting. Those in attendance were:

Directors present:

Chuck Evans

Goleta Water District

Matt Loudon

SYR Water Conservation Dist., ID#1

Das Williams

City of Santa Barbara

Jan Abel

Montecito Water District

Robert Lieberknecht

Carpinteria Valley Water District

Others present:

Kate Rees

William Hair (via phone)

Kevin Walsh

Chris Dahlstrom

Janet Gingras

Gary Kvistad

Charles Hamilton

Brett Gray

Tom Mosby

Tim Robinson

2. Public Comment

There were no comments from the public.

3. Quagga Mussel Issues

Ms. Rees reported that at the November regular Board meeting, the Directors had agreed that letters should be drafted to the County of Santa Barbara and to the Bureau of Reclamation concerning the prevention of Quagga mussels in Lake Cachuma. After receiving the draft letters, President Evans was concerned that the Directors should have further discussion about this issue before sending the two letters. Included for the Directors was information about the Quagga mussel and also a copy of the draft letters were made available for their review.

Ms. Rees highlighted the meeting she had attended with the County of Santa Barbara regarding steps to be taken to prevent the infestation of Quagga mussels in Lake Cachuma. She reported that the County is being proactive with their efforts to prevent an infestation; a copy of their mussel management tactics was included in the board packet.

After discussion on the best procedure for the COMB Board to follow, Director Williams moved that one letter be sent to the Bureau of Reclamation and one letter to the Santa Barbara County Board of Supervisors. The letter to Reclamation is to be strongly worded so as to convey the seriousness of an infestation and that they need to take strong preventative measures by requiring the county to declare a moratorium on boats until precautionary procedures could be put into action. The letter to the County should state that the County should immediately impose a moratorium on allowing private boats access to the Lake until they have implemented several preventative measures, including decontamination stations. The letter to the county should also state that COMB will hold the County of Santa Barbara financially responsible for removal of any Quagga mussel infestation, all resulting damages to Cachuma Project facilities, Cater Treatment Plant, Corona del Mar Treatment Plant, or State Water conveyance facilities, and all ensuing maintenance to those facilities that might result if the Quagga mussel infests Lake Cachuma. The letters will be sent upon approval by the COMB Board President, seconded by Director Evans, passed, 7/0/0.

4. COMB Adjournment

There being no further business, the meeting was adjourned at 5:20 p.m.

| | Respectfully submitted, |
|------------------------|-----------------------------------|
| | Kate Rees, Secretary of the Board |
| APPROVED: | |
| Chuck Evans, President | ApprovedUnapproved |

sec.comb/boardminutes/01.14.08COMB Minutes.doc

| ITEM | #3a |
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| PAGE | 7 |

comb2 Balance Sheet

As of January 31, 2008

| | Jan 31, 08 |
|---|---|
| ASSETS | *************************************** |
| Current Assets Checking/Savings | |
| 1050 · GENERAL FUND | 61,477.54 |
| 1100 · REVOLVING FUND TRUST FUNDS | 5,358.42 |
| 1220 · RENEWAL FUND 1210 · WARREN ACT TRUST FUND | 5,530.07 278,404.94 |
| Total TRUST FUNDS | 283,935.01 |
| Total Checking/Savings | 350,770.97 |
| Other Current Assets 1010 · PETTY CASH | 400.00 |
| 1200 · LAIF | 1,120,734.68 |
| 1300 · DUE FROM CCRB | 52,960.09 |
| 1302 · ASSESSMENTS RECEIVABLE-CARP | 29,125.02 |
| 1303 · SOD Act Assessments Receivable 1400 · PREPAID INSURANCE | 52,824.00 |
| 1400 • PREFAID INSURANCE | 11,600.72 3,906,00 |
| Total Other Current Assets | 1,271,550.51 |
| Total Current Assets | 1,622,321.48 |
| Fixed Assets | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 1500 · VEHICLES | 291,882.50 |
| 1505 · OFFICE FURN & EQUIPMENT | 169,593.40 |
| 1510 · TRAILERS | 97,803.34 |
| 1515 · FIELD EQUIPMENT 1525 · PAVING | 315,952.43 |
| 1550 - ACCUMULATED DEPRECIATION | 22,350.00 -633,192.50 |
| Total Fixed Assets | 264,389.17 |
| Other Assets . 1910 · LT SOD Act Assess Receivable | 6,770,319.07 |
| Total Other Assets | 6,770,319.07 |
| TOTAL ASSETS | 8,657,029.72 |
| LIABILITIES & EQUITY Liabilities | |
| Current Liabilities | |
| Accounts Payable | |
| 2200 · ACCOUNTS PAYABLE | 95,003.52 |
| Total Accounts Payable Other Current Liabilities | 95,003.52 |
| 2550 · VACATION/SICK | 71,006.19 |
| 2560 · CACHUMA ENTITLEMENT | -0.01 |
| 2561 · BRADBURY DAM SOD ACT | 52,824.00 |
| 2562 · SWRCB-WATER RIGHTS FEE | 1.52 |
| 2590 · DEFERRED REVENUE | 283,935.01 |
| Payroll-DepPrm Admin | 20.00 |
| Payroll-CCRB DepPrm Payroll-DepPrm Ops | 2.31 |
| • | 4.62 |
| Total Other Current Liabilities | 407,793.64 |
| Total Current Liabilities | 502,797.16 |
| Long Term Liabilities | |
| 2603 · LT SOD Act Liability - Lauro | 1,060,000.00 |
| 2600 · Lease Obligation Payable 2601 · Note Payable SBB&T | 15,203.50 |
| 2602 · SOD Act Liability-Long Term | 29,125.02 5,710,319.07 |
| · · | |
| Total Long Term Liabilities | 6,814,647.59 |

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2:20 PM 02/19/08 Accrual Basis

comb2 Balance Sheet As of January 31, 2008

| | Jan 31, 08 |
|--|------------------------------------|
| Total Liabilities | 7,317,444.75 |
| Equity 3000 · Opening Bal Equity 3901 · Retained Earnings Net Income | 0.95 1,178,470.25 161,113.77 |
| Total Equity | 1,339,584.97 |
| TOTAL LIABILITIES & EQUITY | 8,657,029.72 |

| | | " |
|---------|----------|---------------|
| 2:15 PM | 02/19/08 | Accrual Basis |

Profit & Loss Budget vs. Actual July 2007 through January 2008

comb2

| | | July 2007 till Dugil Jallualy 2006 | alidaly 2000 TOTAL | ٦٢ | |
|---|---|------------------------------------|--------------------|------------------------|---------------|
| | | Jui '07 - Jan 08 | Budget | \$ Over Budget | % of Budget |
| | Income | | | | |
| | 3000 REVENUE | | | | |
| | 3001 · O&M Budget | 2,243,925.48 | | | |
| | 3003 · Assessment Revenue-Carp | 1,032.66 | | | |
| | 3010 · Interest income | 34,210.23 | | | |
| | 3020 · Misc Income | 482.16 | | | |
| | 3070 · OES 2005 Storm 1577 Reimb | 700.00 | | | |
| | Total 3000 REVENUE | 2,280,350.53 | | | |
| | Total Income | 2,280,350.53 | | | |
| Ċ | Gross Drofft | 00000 | | | |
|) | | ב, בטט, טטט, ט | | | |
| | Expense | | | | |
| | 4000 · Reconciliation Discrepancies | -0.24 | | | |
| | 3100 LABOR | | | | |
| | 3150 · Health & Workers Comp | 78,923.63 | 157,010.00 | -78,086.37 | 50.27% |
| | 3155 · PERS | 40,378.84 | 83,745.00 | -43,366.16 | 48.22% |
| | 3160 · Payroll Comp FICA Ops | 17,436.34 | 35,755.00 | -18,318.66 | 48.77% |
| | 3165 · Payroll Comp MCARE Ops | 4,162.22 | 8,362.00 | -4,199.78 | 49.78% |
| | 3100 LABOR - Other | 0.00 | 541,693.00 | -541,693.00 | 0.0% |
| | Total 3100 LABOR | 397,577.02 | 826,565.00 | -428,987.98 | 48.1% |
| | 3200 VEH & EQUIPMENT | | | | |
| | 3201 · Vehicle/Equip Mtce | 17,299.25 | 38,000.00 | -20.700.75 | 45 59% |
| | 3202 · Fixed Capital | 5,913.23 | 47,000.00 | 41.086.77 | 12.58% |
| | 3203 · Equipment Rental | 12,723.25 | 25,000,00 | -12.276.75 | %0 20 20 80 % |
| | 3204 · Miscellaneous | 11,532,93 | 16,000.00 | 4.467.07 | 72.08% |
| | Total 3200 VEH & EQUIPMENT | 47,468.66 | 126,000.00 | -78,531.34 | 37.67% |
| | 3300 · CONTRACT LABOR 3301 · Conduit Meter. Valve & Misc | PC 197 F | 000 | ļ | |
| 1 | 3302 · Buildings & Roads | 14,673.85 | 15,000.00 | -4,215,72 -1,326,15 | 64.87% |
| | | | • | 1 |) |

ITEM # 3 b
PAGE _____3

Page 1 of 4

2:15 PM 02/19/08 Accrual Basis

Profit & Loss Budget vs. Actual July 2007 through January 2008 comb2

| Budget \$ Over Budget 52,000.00 22,000.00 4,292.75 102,000.00 10,000.00 27.74 22,000.00 10,000.00 4,001.88 6,500.00 4,000.00 4,000.00 1,000.00 | | | IOIAL | 4L | |
|--|-------------------------------------|------------------|------------|----------------|-------------|
| \$c 45,746.95 52,000.00 -5,7 \$c 22,027.74 22,000.00 -5,2 \$c 22,027.74 22,000.00 -17,6 \$c 6,185.07 10,000.00 -18,6 \$c 1,217.50 4,000.00 -1,16 \$c 3,148.79 5,000.00 -3,3 \$c 3,148.79 6,500.00 -4,2 \$c 3,148.79 6,500.00 -4,2 \$c 3,148.79 6,500.00 -4,2 \$c 4,882.94 6,000.00 -1,1 \$c 4,882.94 6,000.00 -3,4 \$c 5,885.00 -1,1 -2,7 \$c 6,376.22 1,000.00 -5,6 \$c 6,376.22 1,000.00 -5,6 \$c 6,376.22 1,000.00 -5,6 \$c 6,376.22 10,000.00 -5,6 \$c 6,376.02 -5,000.00 -5,6 \$c 6,376.02 -5,000.00 -5,1 | | Jul '07 - Jan 08 | Budget | \$ Over Budget | % of Budget |
| 5 16,707.25 22,000.00 -5,2 84,912.33 102,000.00 -17,6 6,385.98 22,000.00 -3,6 6,135.07 10,000.00 -3,6 31,69.48 54,000.00 -4,2 3,169.48 6,500.00 -4,2 4,897.94 6,500.00 -1,1 4,897.94 6,000.00 -2,7 4,88.25 7,000.00 -3,9 5,888.00 11,000.00 -5,1 6,376.22 11,000.00 -5,1 6,376.22 11,000.00 -5,1 6,376.22 11,000.00 -5,1 6,376.22 11,000.00 -5,1 7,7487.40 44,000.00 -5,1 17,187.40 44,000.00 -6,5 17,733.53 30,675.00 -12,903.00 1,235.67 2,203.00 -12,903.00 | 3303 · Reservoirs | 45,746.95 | 52,000.00 | -6,253.05 | 87.98% |
| Sc 22,027.74 22,000.00 -17,0 6,985.98 22,000.00 -15,0 6,985.98 22,000.00 -15,0 35,148.79 54,000.00 -4,2 3,169.48 6,500.00 -4,2 8,173.01 20,000.00 -11,1 4,897.94 6,000.00 -2,7 22,808.59 50,000.00 -5,1 22,808.59 11,000.00 -5,1 6,376.22 12,000.00 -5,1 10,000.00 6,500.00 -5,1 20,099.72 57,000.00 -6,5 10,000.00 6,500.00 -6,5 17,187.40 4,000.00 -6,5 17,733.53 30,675.00 -6,5 17,733.53 30,675.00 -6,5 1,200.00 -6,5 -6,5 20,099.72 57,000.00 -6,5 20,098.52 54,970.00 -6,5 37,986.52 54,970.00 -12,0 4,6,000.00 12,400.00 -12,0 20,099.72 | 3304 · Engineering, Misc Services | 16,707.25 | 22,000.00 | -5,292.75 | 75.94% |
| \$50 | Total 3300 · CONTRACT LABOR | . 84,912.33 | 102,000.00 | -17,087.67 | 83,25% |
| SC 22,027.74 22,000.00 -15,0 6,985.98 22,000.00 -3,6 6,135.07 10,000.00 -4,2 2,188.12 6,500.00 -4,2 3,169.48 6,500.00 -11,1 1,173.01 20,000.00 -1,1 4,897.94 6,000.00 -2,7 4,888.00 11,000.00 -3,9 5,888.00 11,000.00 -5,1 6,376.22 12,000.00 -5,1 6,376.22 12,000.00 -5,1 10,000.00 6,376.22 57,000.00 -6,5 10,000.00 6,500.00 -6,5 17,187.40 44,000.00 -6,5 17,733.53 30,675.00 -12,0 17,237.67 12,416.00 -12,0 18,567 2,203.00 -12,0 | 3400 · MATERIALS & SUPPLIES | | | | |
| 6,985.98 22,000.00 35,148.79 10,000.00 3,169.46 6,500.00 1,217.50 4,000.00 1,217.50 4,000.00 22,808.59 50,000.00 22,808.59 50,000.00 6,376.22 1,000.00 6,376.22 1,000.00 10,000.00 6,500.00 17,187.40 44,000.00 17,733.53 30,675.00 1,655.67 2,903.00 1,655.67 2,903.00 | 3401 · Conduit, Meter, Valve & Misc | 22,027.74 | 22,000.00 | 27.74 | 100.13% |
| 6,135.07 10,000.00 3,148.79 54,000.00 3,169.48 6,500.00 8,173.01 20,000.00 1,217.50 4,000.00 4,897.94 6,000.00 22,808.59 6,000.00 5,888.00 11,000.00 6,376.22 12,000.00 20,099.72 57,000.00 10,000.00 10,000.00 17,187.40 44,000.00 17,733.53 30,675.00 1,655.67 2,903.00 | 3402 · Buildings & Roads | 6,985.98 | 22,000.00 | -15,014.02 | 31.75% |
| 2,288.12 6,500.00 3,169.48 6,500.00 4,897.94 6,000.00 3,062.54 7,000.00 22,808.59 50,000.00 5,888.00 6,376.22 1,000.00 6,376.22 1,000.00 17,187.40 44,000.00 17,733.53 30,675.00 1,655.67 2,903.00 12,288.19 54,000.00 17,733.53 30,675.00 12,288.10 6,203.00 17,733.53 30,675.00 17,733.53 30,675.00 17,655.67 2,903.00 | 3403 · Reservoirs | 6,135.07 | 10,000.00 | -3,864.93 | 61.35% |
| 2,288.12 6,500.00 3,169.48 6,500.00 4,897.94 6,000.00 4,897.94 6,000.00 22,808.59 50,000.00 5,888.00 6,376.22 11,000.00 6,376.22 12,000.00 0.00 1,1000.00 1,000.00 1,1000.00 1,2 | Total 3400 · MATERIALS & SUPPLIES | 35,148.79 | 54,000.00 | -18,851.21 | 65.09% |
| 2,288.12 6,500.00 3,169.48 6,500.00 4,897.94 6,000.00 4,897.94 7,000.00 22,808.59 50,000.00 5,888.00 6,376.22 1,,000.00 6,376.22 12,000.00 10,000.00 6,500.00 17,187.40 44,000.00 17,733.53 30,675.00 1,655.67 2,903.00 | 3500 · OTHER EXPENSES | | | | |
| 3,169.48 6,500.00 1,217.50 4,000.00 4,897.94 6,000.00 3,062.54 7,000.00 22,808.59 50,000.00 5,888.00 11,000.00 6,376.22 12,000.00 10,000.00 10,000.00 17,187.40 44,000.00 37,086.52 30,675.00 6,327.80 12,416.00 1,655.67 2,903.00 | 3501 · Utilities | 2,288.12 | 6,500.00 | -4,211.88 | 35.2% |
| 8,173.01 1,217.50 4,897.94 6,000.00 3,062.54 7,000.00 22,808.59 50,000.00 5,888.00 6,376.22 11,000.00 6,376.22 12,000.00 10,000.00 17,187.40 37,086.52 12,000.00 17,733.53 6,327.80 1,650.00 12,416.00 1,655.67 2,2903.00 | 3502 · Uniforms | 3,169.48 | 6,500.00 | -3,330.52 | 48.76% |
| 4,897.94 4,000.00 4,897.94 6,000.00 3,062.54 7,000.00 22,808.59 50,000.00 5,888.00 11,000.00 6,376.22 12,000.00 20,089.72 57,000.00 10,000.00 10,000.00 17,187.40 44,000.00 37,086.52 54,970.00 17,733.53 30,675.00 6,327.80 12,416.00 1,655.67 2,903.00 | 3503 · Communications | 8,173.01 | 20,000.00 | -11,826.99 | 40.87% |
| 4,897.94 6,000.00 3,062.54 7,000.00 22,808.59 50,000.00 488.22 1,000.00 5,888.00 11,000.00 6,376.22 12,000.00 10,000.00 10,000.00 0.00 6,500.00 17,187.40 44,000.00 37,086.52 54,970.00 17,733.53 30,675.00 6,327.80 12,416.00 1,655.67 2,903.00 | 3504 · USA & Other Services | 1,217.50 | 4,000.00 | -2,782.50 | 30.44% |
| 3,062.54 22,808.59 488.22 5,888.00 5,888.00 6,376.22 20,099.72 20,099.72 20,099.72 10,000.00 10,000.00 17,187.40 37,086.52 12,416.00 16,55.70 2,903.00 12,416.00 1,655.67 2,903.00 | 3505 · Miscellaneous | 4,897.94 | 00.000,9 | -1,102.06 | 81.63% |
| 22,808.59 50,000.00 488.22 1,000.00 5,888.00 11,000.00 6,376.22 12,000.00 10,000.00 6,500.00 0.00 6,500.00 17,187.40 44,000.00 37,086.52 54,970.00 17,733.53 30,675.00 6,327.80 12,416.00 1,655.67 2,903.00 | 3506 · Training | 3,062.54 | 7,000.00 | -3,937.46 | 43.75% |
| 488.22 1,000.00 5,888.00 11,000.00 6,376.22 12,000.00 10,000.00 57,000.00 0.00 6,500.00 17,187.40 44,000.00 37,086.52 54,970.00 17,733.53 30,675.00 6,327.80 12,416.00 1,655.67 2,903.00 | Total 3500 · OTHER EXPENSES | 22,808,59 | 50,000.00 | -27,191.41 | 45.62% |
| 488.22 1,000.00 5,888.00 11,000.00 6,376.22 12,000.00 20,099.72 57,000.00 0.00 6,500.00 17,187.40 44,000.00 37,086.52 54,970.00 17,733.53 30,675.00 1,655.67 2,903.00 | 4999 · GENERAL & ADMINISTRATIVE | | | | |
| 488.22 1,000.00 6,376.22 11,000.00 20,099.72 57,000.00 0.00 6,500.00 17,187.40 44,000.00 17,733.53 30,675.00 1,655.67 2,503.00 1,655.67 2,503.00 | 5000 · Director Fees | | | | |
| 17 5,888.00 11,000.00 -5,17 6,376.22 12,000.00 -36,90 20,099.72 57,000.00 -36,90 10,000.00 6,500.00 -6,50 17,187.40 44,000.00 -26,81 37,086.52 54,970.00 -17,89 6,327.80 12,416.00 -6,06 1,655.67 2,903.00 -1,24 | 5001 · Director Mileage | 488.22 | 1,000.00 | -511.78 | 48.82% |
| 6,376.22 12,000.00 -5,65 20,099,72 57,000.00 -36,90 10,000.00 6,500.00 -6,50 17,187.40 44,000.00 -26,81 37,086.52 54,970.00 -17,86 6,327.80 12,416.00 -6,06 1,655.67 2.903.00 -1,24 | 5000 · Director Fees · Other | 5,888.00 | 11,000.00 | -5,112.00 | 53.53% |
| 20,099.72 57,000.00 -36,90 10,000.00 6,500.00 -6,50 17,187.40 44,000.00 -26,81 37,086.52 54,970.00 -17,89 17,733.53 30,675.00 -12,94 1,655.67 2,903.00 -1.24 | Total 5000 · Director Fees | 6,376.22 | 12,000.00 | -5,623.78 | 53.14% |
| 10,000.00 10,000.00 -6,50 | 5100 · Legal | 20,099.72 | 57,000.00 | -36,900.28 | 35.26% |
| 0.00 6,500.00 -6,50 17,187.40 44,000.00 -26,81 37,086.52 54,970.00 -17,81 17,733.53 30,675.00 -12,94 6,327.80 12,416.00 -6,06 | 5101-1 · Audit | 10,000.00 | 10,000.00 | 0.00 | 100.0% |
| 17,187.40 44,000.00 37,086.52 54,970.00 17,733.53 30,675.00 6,327.80 12,416.00 1,655.67 2.903.00 | 5150 · Unemployement Tax | 0.00 | 6,500.00 | -6,500.00 | 0.0% |
| 37,086.52 54,970.00 17,733.53 30,675.00 - 6,327.80 12,416.00 1,655.67 2.903.00 | 5200 · Liability Insurance | 17,187.40 | 44,000.00 | -26,812.60 | 39.06% |
| - 17,733.53 30,675.00 - 6,327.80 12,416.00 1in 2,903.00 | 5201 · Health & Workers Comp | 37,086.52 | 54,970.00 | -17,883.48 | 67.47% |
| in 6,327.80 12,416.00 11,655.67 2.903.00 | 5250 · PERS | 17,733.53 | 30,675.00 | -12,941.47 | 57.81% |
| 1,655.67 2.903.00 | 5260 · Comp FICA Admin | 6,327.80 | 12,416.00 | -6,088.20 | 20.97% |
| | 5265 · Comp MCARE Admin | 1,655.67 | 2,903.00 | -1,247,33 | 57.03% |

ITEM # 3 6 PAGE ____

comb2 Profit & Loss Budget vs. Actual July 2007 through January 2008

| | | TOTAL | T | |
|---------------------------------------|------------------|--------------|----------------|-------------|
| | Jul '07 - Jan 08 | Budget | \$ Over Budget | % of Budget |
| 5300 · Manager Salary | 25,018,13 | 43,365.00 | -18,346.87 | 27.69% |
| 5301 · Administrative Manager | 49,116.00 | 85,417.00 | -36,301.00 | 57.5% |
| 5306 · Administrative Assistant | 30,686.41 | 53,190.00 | -22,503.59 | 27.69% |
| 5310 · Postage/Office Exp | 3,274.95 | 9,000.00 | -5,725.05 | 36.39% |
| 5311 · Office Equip/Leases | 2,649.69 | 6,200.00 | -3,550.31 | 42.74% |
| 5312 · Misc Admin Expenses | 12,751.45 | 8,000.00 | 4,751.45 | 159.39% |
| 5313 · Communications | 1,389.55 | 12,000.00 | -10,610.45 | 11.58% |
| 5314 · Utilities | 4,169.84 | 5,300.00 | -1,130.16 | 78.68% |
| 5315 · Membership Dues | 4,729.50 | 6,850.00 | -2,120.50 | 69.04% |
| 5316 • Admin Fixed Assets | 0.00 | 7,000.00 | -7,000.00 | %0.0 |
| 5325 ⋅ Emp Training/Subscriptions | 721.45 | 4,500.00 | -3,778.55 | 16.03% |
| 5330 · Admin Travel/Conferences | 1,952.28 | 00'000'9 | -4,047.72 | 32.54% |
| 5331 · Public Information | . 6,440.94 | 8,000.00 | -1,559.06 | 80.51% |
| 5332 · Transportation | 132.93 | 1,200,00 | -1,067.07 | 11.08% |
| Total 4999 · GENERAL & ADMINISTRATIVE | 259,499.98 | 486,486.00 | -226,986.02 | 53.34% |
| 5510 · Integrated Reg. Water Mgt Plan | 59,134.80 | 00.000,09 | -865.20 | 98.56% |
| 6000 · SPECIAL PROJECTS | | | | |
| 6062 · SCADA | 15,098.11 | 30,000.00 | -14,901.89 | 50.33% |
| 6090-1 · COMB Bldg/Grounds Repair | 1,425.60 | 50,000.00 | -48,574.40 | 2.85% |
| 6092 · SCC Improv Plan & Design | 287,978.95 | 250,000.00 | 37,978.95 | 115.19% |
| 6095 · SCC Valve & Cntri Sta Rehab | 333,946.10 | 450,000,00 | -116,053.90 | 74.21% |
| 6095-1 · Lauro Debris Basin Rehab | 39,027.40 | 1,144,050.23 | -1,105,022.83 | 3.41% |
| 6095-2 · Lauro Debris Basin CR | 0.00 | -544,050.23 | 544,050.23 | 0.0% |
| 6096 · SCC Structure Rehabilitation | 433,782.77 | 450,000.00 | -16,217,23 | 96.4% |
| 6097 · GIS and Mapping | 8,889.66 | 40,000.00 | -31,110.34 | 22.22% |
| Total 6000 · SPECIAL PROJECTS | 1,120,148.59 | 1,870,000.00 | -749,851.41 | %6.65 |
| 6400 · STORM DAMAGE | | | | |
| 6401 · Storm Damage 2005 | 0.00 | 100,000.00 | ~100,000.00 | 0.0% |
| 6402 · Zaca Fire Damage | 42,537.89 | 225,000.00 | -182,462.11 | 18.91% |
| 6402-1 · Zaca Fire Damage - CR | 0.00 | -225,000.00 | 225,000.00 | 0.0% |
| Total 6400 · STORM DAMAGE | 42,537.89 | 100,000.00 | -57,462.11 | 42.54% |

3 b 5 ITEM #.

2:15 PM 02/19/08 Accrual Basis

Profit & Loss Budget vs. Actual comb2

July 2007 through January 2008

% of Budget

\$ Over Budget

Budget

Jul '07 - Jan 08

TOTAL

7002 · Spec Counsel-FMP-BO EIS/R Total 7000 · LEGAL & LITIGATION 7000 · LEGAL & LITIGATION 7006 · INTEREST EXPENSE Gross-CCRB Gross PAYROLL

Total PAYROLL

Total Expense

Net Income

| 48.97% 48.97% | | | | 56.14% | 4.27% |
|------------------|----------|------|------|---------------|---------------|
| -51,032.69 | | | | -1,655,814,24 | 3,936,164,77 |
| 100,000.00 | | | | 3,775,051.00 | -3,775,051.00 |
| 48,967.31 | 1,032.66 | 0.80 | 0.38 | 2,119,236.76 | 161,113.77 |
| | | | | | |

ITEM #_ PAGE

P.O. BOX 1098 NORTHRIDGE, CA 91328-1098

This Statement Covers

From: 01/01/08 Through: 01/31/08

Need assistance?

To reach us anytime, call 1-800-788-7000 or visit us at wamu.com

CACHUMA OPERATION AND MAINTENANCE BOARD 3301 LAUREL CANYON RD 266642 SANTA BARBARA CA 93105-2017

Please see the message specific to your account, if any, and the Notice of Change in Terms towards the end of this statement for important information about your deposit accounts and services.

Your Guaranteed Great Rate Money Market Detail Information

CACHUMA OPERATION AND MAINTENANCE BOARD

Account Number: 871-849343-4 Washington Mutual Bank, FA

| | | Your Accou | nt at a Glance | • |
|---|---------|---|---|-------------------------------------|
| Beginning Balance Checks Paid Other Withdrawals Deposits Ending Balance | Koralle | \$5,525.39 \$0.00 \$0.00 +\$4.68 \$5,530.07 | Interest Earned Annual Percentage Yield Earned YTD Interest Paid YTD Interest Withheld | \$4.68 1.00% \$4.68 \$0.00 |

| Date | Description | Withdrawals (-) | Deposits (+) |
|-------|------------------|-----------------|--------------|
| 01/31 | Interest Payment | | \$4.68 |

MEMO TO: Board of Directors

Cachuma Operation & Maintenance Board

FROM: Kathleen Rees, Secretary

SUBJECT: COMB INVESTMENT POLICY

The above statement of investment activity for the month of January, 2008, 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 Washington Mutual Bank investments of this agency for the period indicated.

Secretary

NORTHRIDGE, CA 91328-1098

This Statement Covers

From: 01/01/08 Through: 01/31/08

Need assistance?

To reach us anytime, call 1-800-788-7000

or visit us at wamu.com

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

Please see the message specific to your account, if any, and the Notice of Change in Terms towards the end of this statement for important information about your deposit accounts and services.

Your Guaranteed Great Rate Money Market Detail Information

CACHUMA OPERATION AND MAINTENANCE BOARD

Account Number: 871-849358-3 Washington Mutual Bank, FA

TRUST FUND

| | Your Account at a Glance | | | | | | | | | |
|---|--|---|---|--|--|--|--|--|--|--|
| Beginning Balance Checks Paid Other Withdrawals Deposits Ending Balance | \$220,562.05 \$0.00 \$0.00 +\$57,842.89 \$278,404.94 | Interest Earned Annual Percentage Yield Earned YTD Interest Paid YTD Interest Withheld | \$351.89 1.60% \$351.89 \$0.00 | | | | | | | |

| Date | Description | Withdrawals (-) | Deposits (+) |
|-------|------------------|-----------------|--------------|
| 01/09 | Customer Deposit | | \$57,491,00 |
| 01/31 | Interest Payment | | \$351.89 |

MEMO TO: Board of Directors

Cachuma Operation & Maintenance Board

FROM:

Kathleen Rees, Secretary

SUBJECT:

COMB INVESTMENT POLICY

The above statement of investment activity for the month of January , 2008, 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 Washington Mutual Bank investments of this agency for the period indicated.

Secretary

comb2 Payment of Claims

As of January 31, 2008

| Date | Num | Name | Memo | Split | Amount |
|------------------------|----------------|--|---|--------------------------|----------------------|
| 1050 · GENERA | AL FUND | | | | |
| 1/8/2008 | 16710 | COMB-Petty Cash | Replenish petty cash | 2200 · ACC | -103.00 |
| 1/8/2008 | 16711 | COMB - Revolving Fund | Jan payrolls/taxes | 2200 · ACC | -101,241.16 |
| 1/8/2008 | 16712 | Acorn Landscape Manage | Scheduled mtce | 2200 · ACC | -253.80 |
| 1/8/2008 | 16713 | ACWA Services Corporati | Jan EAP | 2200 · ACC | -44.07 |
| 1/8/2008 | 16714 | Baron Erik Spafford | Directors Portrait session w/DVD f | 2200 · ACC | <i>-</i> 271.00 |
| 1/8/2008 | 16715 | Boyle Engineering Corp. | | 2200 · ACC | -32,735.30 |
| 1/8/2008 | 16716 | Cedant Web Hosting | 000014 | 2200 · ACC | -19.94 |
| 1/8/2008 | 16717 | Central Valley Project Wat | 2008 Member Dues | 2200 · ACC | -750.00 |
| 1/8/2008 1/8/2008 | 16718 16719 | CIO Solutions, Inc. | Monthly when ICME005 4414 4010107 | 2200 · ACC | -1,381.27 |
| 1/8/2008 | 16720 | Coastal Copy Draganchuk Alarm Systems | Monthly mtce KM5035 11/4-12/3/07 | 2200 · ACC | -22.49 |
| 1/8/2008 | 16721 | ECHO Communications | Alarm monitoring Jan-Mar 08 Answering service | 2200 · ACC 2200 · ACC | -82.50 -74.32 |
| 1/8/2008 | 16722 | Federal Express | CCRB Mailings | 2200 · ACC | -74.32 -31.75 |
| 1/8/2008 | 16723 | Flowers & Associates, Inc. | OO NO Wallings | 2200 ACC | -21,069.82 |
| 1/8/2008 | 16724 | Hydrex Pest Control Co. | Ant/pest control | 2200 · ACC | -65.00 |
| 1/8/2008 | 16725 | Nextel Communications | Cellular 11/19-12/18/07 | 2200 ACC | -410.13 |
| 1/8/2008 | 16726 | PG&E | | 2200 · ACC | -189.47 |
| 1/8/2008 | 16727 | Pitney Bowes Global Fina | Equip. tax | 2200 · ACC | -20.71 |
| 1/8/2008 | 16728 | Powell Garage | Service-Chevy 4WD | 2200 · ACC | -14.12 |
| 1/8/2008 | 16729 | Praxair Distribution | Cylinder rental | 2200 · ACC | -43.69 |
| 1/8/2008 | 16730 | Prudential Overall Supply | | 2200 · ACC | -342.00 |
| 1/8/2008 | 16731 | Sound Billing LLC | 2000b Chevy service | 2200 · ACC | -43.00 |
| 1/8/2008 | 16732 | Specialty Tool, LTD | Various materials/supplies | 2200 · ACC | -291.07 |
| 1/8/2008 | 16733 | State Compensation Insur | Payroll Report Dec 07 | 2200 · ACC | -3,123.22 |
| 1/8/2008 | 16734 | Underground Service Alert | 60 new tickets | 2200 · ACC | -96.00 |
| 1/8/2008 1/8/2008 | 16735 16736 | Verizon Wireless | Cellular | 2200 · ACC | -191.22 |
| 1/8/2008 | 16737 | MarBorg Industries Orchard Supply Hardware | • | 2200 · ACC | -171.66 |
| 1/8/2008 | 16738 | Republic Elevator | Schedule mtce | 2200 · ACC 2200 · ACC | -77.48 -232.17 |
| 1/14/2008 | 16739 | AT&T | Dec statement | 2200 · ACC | -250.96 |
| 1/14/2008 | 16740 | Boone Printing & Graphics | Business cards-COMB GM | 2200 ACC | -307.53 |
| 1/14/2008 | 16741 | CIO Solutions, Inc. | | 2200 · ACC | -1,870.00 |
| 1/14/2008 | 16742 | City of Santa Barbara-Rec | Recycle 11/30-12/31/07 | 2200 · ACC | -7.35 |
| 1/14/2008 | 16743 | City of SB-Refuse | Refuse 11/30-12/31/07 | 2200 · ACC | -153.19 |
| 1/14/2008 | 16744 | Culligan Water | RO system Jan | 2200 · ACC | -24.95 |
| 1/14/2008 | 16745 | GE Capital | Copier lease Billing ID#90133603 | 2200 · ACC | -427.77 |
| 1/14/2008 | 16746 | J&C Services | 12/7,17,21,28 ofc cleaning | 2200 · ACC | -500.00 |
| 1/14/2008 | 16747 | Paychex, Inc. | 12/14,28 payrolls/taxes | 2200 · ACC | -225.20 |
| 1/14/2008 1/14/2008 | 16748 16749 | Power Maintenance Corp. | Mtce contract UPS system-Lake | 2200 · ACC | -650.00 |
| 1/14/2008 | 16749 | SB Home Improvement C Shawn O'Callahan | Gloves Reimb-water treatment books | 2200 · ACC | -105.23 |
| 1/14/2008 | 16751 | Southern California Edison | Main ofc/outlying stations | 2200 · ACC 2200 · ACC | -102.55 |
| 1/14/2008 | 16752 | Staples Credit Plan | Office supplies | 2200 · ACC | -1,103.52 -209.98 |
| 1/14/2008 | 16753 | ACWA Services Corp. (AS | 2/1-3/1/08 coverage | 2200 · ACC | -9,673.34 |
| 1/14/2008 | 16754 | Best, Best & Krieger, LLP | Crawford-Hall CEQA Dec services | 2200 · ACC | -4,077.83 |
| 1/14/2008 | 16755 | Caterpillar Financial Servi | Backhoe lease Contract #001-025 | 2200 · ACC | -1,294.06 |
| 1/14/2008 | 16756 | Charlene's Transportation, | Material moving | 2200 · ACC | -208.00 |
| 1/14/2008 | 16757 | Fleet Services | Fuel | 2200 · ACC | -1,499.60 |
| 1/14/2008 | 16758 | McMaster-Carr Supply Co. | Lay-flat polyester fire/water hose | 2200 · ACC | -898.06 |
| 1/14/2008 | 16759 | Nordman, Cormany, Hair | | 2200 · ACC | -1,215.00 |
| 1/14/2008 | 16760 | Southern California Edison | Glen Anne gate | 2200 · ACC | -16.57 |
| 1/14/2008 | 16761 | Verizon California | W 1 " 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 2200 · ACC | -398.50 |
| 1/15/2008 | 16762 | Cachuma Cons. Release | Website work done through 11/30 | 2200 · ACC | -680.00 |
| 1/15/2008 | 16763 16764 | McMaster-Carr Supply Co. | Low pressure pvc hose PO#8787 | -SPLIT- | -316.22 |
| 1/15/2008 1/21/2008 | 16764 16765 | Verizon California Cox Communications | SCADA Business internet 1/18 3/17/09 | 2200 · ACC | -514.16 |
| 1/21/2008 | 16766 | Labor Ready Southwest, I | Business internet 1/18-2/17/08 Labor help Ortega | 2200 · ACC 2200 · ACC | -199.00 |
| 1/21/2008 | 16767 | The Gas Company | Main ofc | 2200 · ACC | -1,102.20 -73.25 |
| 1/28/2008 | 16768 | Cedant Web Hosting | | 2200 · ACC | -73.25 -19.94 |
| Total 1050 · GE | | _ | | | -191,515.32 |
| | | | | | |

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3:15 PM 02/14/08 Accrual Basis

comb2 **Payment of Claims**

As of January 31, 2008

Date Num Name Split Memo Amount TOTAL -191,515.32

> ITEM #___3c___ Page 2 PAGE ___

CACHUMA OPERATION AND MAINTENANCE BOARD WATER STORAGE REPORT

| GLEN ANNIE RESERVOIR | MONTH: | January 2008 |
|--|----------------|---------------------------------------|
| Capacity at 385' elevation: Capacity at sill of intake at 334' elevation: | | 518 Acre Feet 21 Acre Feet |
| Stage of Reservoir Elevation Water in Storage | | 362.00 Feet 216.93 Acre Feet |
| LAURO RESERVOIR Capacity at 549' elevation: Capacity at sill of intake at 512' elevation: Stage of Reservoir Elevation | | 600 Acre Feet 84.39 Acre Feet |
| Water in Storage | | 545.10 Feet 507.95 Acre Feet |
| ORTEGA RESERVOIR Capacity at 460' elevation: | Out of Service | 65 Acre Feet |
| Capacity at outlet at elevation 440': | | 0 Acre Feet |
| Stage of Reservoir Elevation Water in Storage | | 0.00 Feet 0.00 Acre Feet |
| CARPINTERIA RESERVOIR | | |
| Capacity at 384' elevation: Capacity at outlet elevation 362': | | 45 Acre Feet 0 Acre Feet |
| Stage of Reservoir Elevation Water in Storage | | 377.90 Feet 28.18 Acre Feet |
| TOTAL STORAGE IN RESERVOIRS Change in Storage | | 536.13 Acre Feet -1.45 Acre Feet |
| CACHUMA RESERVOIR Capacity at 750' elevation: Capacity at sill of tunnel 660' elevation: | | 188,030 Acre Feet 26,109 Acre Feet |
| Stage of Reservoir Elevation | | 750.45 Feet |
| Water in Storage | | 189,407 AF |
| Area | | 3,057 |
| Evaporation | | 353.6 AF |
| Inflow | | 68,644.3 AF |
| Downstream Release WR8918 | | 0 AF |
| Fish Release | | 305.9 AF |
| Spill/Seismic Release | | 1,864 AF |
| State Project Water | | 39.2 AF |
| Change in Storage | | 67,902 AF |
| Tecolote Diversion | | 1,618.2 AF |

16.57 **Season:**

19.53

Rainfall:

Month:

Percent of Normal W191% 4a
PAGE _____

07-08 ENTITLEMENT

CACHUMA OPERATION AND MAINTENANCE BOARD

WATER PRODUCTION AND WATER USE REPORT

FOR THE MONTH OF JANUARY 2008 AND THE WATER YEAR TO DATE

(All in rounded Acre Feet)

| <u> </u> | | · · · · · · · · · · · · · · · · · · · | | | | |
|--|--------------|---------------------------------------|---------|-------------------------|---------|-------------|
| | | | | MONTH | | YTD |
| WATER PRODUCTION: | | | | TOTAL | | TOTAL |
| Cachuma Lake (Tec. Diversion) | | | | | | |
| Tecolote Tunnel Infiltration | | | | 1,618 | | 10,348 |
| Glen Anne Reservoir | | | | 188 | | 689 |
| | | | | 0 | | C |
| Cachuma Lake (County Park) | | | | 2 | | 14 |
| State Water Diversion Credit | | | | 125 | | 1,328 |
| Gibraltar Diversion Credit | | | | 0 | | O |
| Bishop Ranch Diversion | | | | 0 | | 0 |
| Meter Reads | | | | 1,457 | | 8,584 |
| So. Coast Storage gain/(loss) | | | | (1) | | (51 |
| Total Production | | | | 1,808 | | 11,051 |
| Total Deliveries | | | | 1,581 | | 9,860 |
| Unaccounted-for | | | | | | |
| % Unaccounted-for | | | | 227 | | 1,191 |
| 78 Onaccounteu-tor | CMID | CD CITIE | 7 (T) | 12.56% | | 10.78% |
| WATER USE: | GWD | SB CITY | MWD | CVWD | SYRWCD | TOTAI |
| M&I | 561 | 746 | - | | I.D. #1 | |
| Agricultural | 62 | 746 | 0 | 56 | 2 | 1,365 |
| MOHAMITEORINGATHER BUT AND | 02 0238 | 0 | 0 | 30 | () | 92 |
| | KRADINA OSOM | 145 July 1997 | | 19.5% The 19.5% (19.5%) | | 19 10 16 17 |
| Same Mo/prev. yr | 1,288 | 804 | 343 | 234 | 3 | 2,672 |
| M&I Yr to date | 2,955 | 2.055 | 20.5 | | | |
| Ag. Yr to date | | 3,955 | 205 | 329 | 14 | 7,458 |
| TOTAL YTD | 724 3,679 | 0 | 102 | 300 | 0 | 1,126 |
| USAGE % YTD | | 3,955 | 307 | 629 | 14 | 8,584 |
| Previous Year/YTD | 28.7% | 29.8% | 8.3% | 13.3% | 0.7% | 23.0% |
| Previous Year/YID | 4,599 | 2,557 | 1,272 | 917 | 14 | 9,359 |
| Evaporation | 1 | 6 | 3 | £ | • | |
| Evaporation, YTD | 32 | 60 | 19 | 5 | 1 | 15 |
| Entitlement | 9,322 | 8,277 | 2,651 | 32 | 2 651 | 146 |
| Carryover | 3,516 | 5,171 | 1,202 | 2,813 | 2,651 | 25,714 |
| Carryover Balances Spilled YTD | 0,7,5 | | | 2,112 | 204 | 12,205 |
| Surplus^^ | 0 | 0 | 0 | 0 | 0 | 0 |
| State Water Exchange^ | 84 | 57 | 0 57 | 0 | 0 | 0 |
| Transfers*/Adjustment*** | 0 | 0 | | 37 | (235) | 0 |
| Passthrough H20** | 0 | (24) | 0 | 0 | 0 | 0 |
| TOTAL AVAILABLE | 12,921 | 13,481 | 2.010 | 0 | 0 0 | (24) |
| REMAINING BALANCE | | 9,466 | 3,910 | 4,962 | 2,620 | 37,894 |
| AND THE PROPERTY OF THE PARTY O | 9,210 | ላ.4ስስ | 3,584 | 4,302 | 2,603 | 29,164 |

^{**} City relinquished 6 AF per "Passthrough" agrmt for January 2008 (No Passthrough during spill conditions).

State Water Deliveries for January to Lake Cachuma were MWD 39 AF; CVWD 0 AF

City of SB received 10 AF; and CVWD received 6 AF from ID#1 in January 2008.

PERCENT OF WATER YEAR ELAPSED:

33.3%

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GWD 0 AF(Morehart 0 AF); City of S.B. 0 AF; and LaCumbre 0 AF: (Ratheon 0 AF).

[^] Per SWP Exchange Agrmt GWD received 14 AF; MWD received 10;

COMB STATE WATER PROJECT ACCOUNTING - SOLITH COAST ONLY IN

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| OME | | MONTH | 2008 | Bal. Frwd | January | February | March | 를 | ay. | June | <u>~</u> | August | September | October | November | December | Total | ΞΜ | #. | | 4a | |
| ပ | | _[_ | | B | -13 | 프 | <u>z</u> | April | May | <u> </u> | July | Ϋ́ | <u></u> | <u>ŏ</u> | 2 | <u>리</u> | 븼 | GE | | | 3 | |
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Operations Report - January 2008

Cachuma Project water usage for the month of January 2008 was 1,457 acrefeet, compared with 2,672 acrefeet for the same period in 2007. Cachuma Project water use for the 12 months ending January 31, 2008 was 26,580 acrefeet, compared with 26,228 acrefeet for the 12 months ending January 31, 2007.

The average flow from Lake Cachuma into the Tecolote Tunnel was 52 acre-feet per day. Lake elevation was 724.30 feet at the beginning of the month and 750.45 feet at the end. Recorded rainfall at Bradbury Dam was 16.57 inches for the month and 19.53 inches for the rainfall season, which commenced on July 1, 2007.

Santa Barbara wheeled 79 acre-feet of Gibraltar water through Lauro Reservoir during the month. 39 acre-feet of State Water Project water was wheeled through Cachuma Project facilities and delivered to South Coast Member Units during the month.

Lake Cachuma started to spill on January 30th. The spill is expected to continue through March.

Hurray, the first report of 2008; a new and better year.

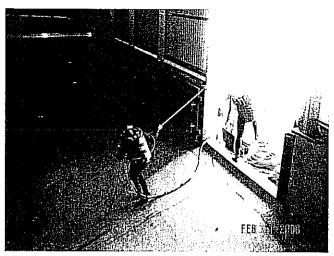
Activities continued this month at Ortega Reservoir. The cleaning was completed in mid January. Continued inspection of the retrofit waterstop continued. COMB staff had found several leaks in the sealant above the water-stop in December. Further inspection of the sealant revealed many locations where failure had occurred. The failure of the sealant seemed to be caused by a material failure. The project engineer, project contractor, and COMB staff inspected all the new sealant and determined areas where replacement was needed. The sealant was then replaced by the contractor and the reservoir was returned to service. COMB staff continued to check the under-drain flows before and after the reservoir was returned to service. The under-drain flows remained similar to the before cleaning and repair flows. The flows to date can be seen in the table below. Divers were then sent into the reservoir on February 11th to check the new and old sealant to see if any apparent issued could be found. Three small leaks were found but were not sufficient to be

| After Repair | | | | | | | |
|--------------|---------------|------------------------|--|--|--|--|--|
| Date | Flow (gpm) | Water Level (ft) | | | | | |
| 2/4/2008 | 3.3 | 0.0 | | | | | |
| 2/5/2008 | 4.7 | 0.3 | | | | | |
| 2/6/2008 | 9 | 4.0 | | | | | |
| 2/7/2008 | 15 | 6.6 | | | | | |
| 2/7/2008 | 15.4 | 7.8 | | | | | |
| 2/8/2008 | 21.0 | 9.5 | | | | | |
| 2/9/2008 | 19.75 | 9.6 | | | | | |
| 2/11/2008 | 18.1 | 9.1 | | | | | |
| 2/14/2008 | 16.9 | 8.1 | | | | | |
| 2/15/2008 | 16.5 | 8.4 | | | | | |
| 2/17/2008 | 12.75 | 6.6 | | | | | |
| 2/19/2008 | 12 | 4.6 | | | | | |

| · · · · · · · · · · · · · · · · · · · | | | | | |
|---------------------------------------|-------------------|------------------------|--|--|--|
| Before Repair | | | | | |
| Date | Flow (gpm) | Water Level (ft) | | | |
| 19-Nov | 11.8 | 10.8 | | | |
| 20-Nov | 10.7 | 11.5 | | | |
| 21-Nov | 12 | 11.8 | | | |
| 22-Nov | 10 | 8.1 | | | |
| 23-Nov | 9.6 | 6.7 | | | |
| 24-Nov | 9.1 | 6.1 | | | |
| 25-Nov | 9.2 | 6.3 | | | |
| 26-Nov | 9.7 | 7.5 | | | |
| 29-Nov | 14.2 | 10.9 | | | |
| 30-Nov | 14.7 | 11.7 | | | |
| 1-Dec | 12.5 | 9.5 | | | |
| 2-Dec | 14.6 | 13 | | | |
| 3-Dec | 14.7 | 12.9 | | | |
| 4-Dec | 22.5 | 11.9 | | | |
| 13-Dec | Out of Service | | | | |

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significant contributors to the increased under-drain flows. Continued testing will occur in February by taking each half of the reservoir out of service and continue the testing for leaks. It is looking like the leaks are not occurring in obvious locations of the retrofit water-stop. If significant leaks are not found we will put divers back in the reservoir under higher head and continue the search for leaks. This schedule will also give us a chance



to see if the drain flows stabilize at the current level. More information can also be found in a memo in the board packet on this item.

Miscellaneous work conducted this month includes:

- Preparation and cleanup after January rains
- Preparation for new meter installation at East Valley Pump Station
- Updates to SCADA screens for new information
- Periodic USBR Dam Tender training.
- Preparation of Ortega Vent cap.
- Quagga Mussel removal and disinfection class.

Routine operation and maintenance activities conducted during the month included:

- Sample water at North Portal Intake Tower
- Complete Maintenance Management Program work orders
- Read anode rectifiers and monitor cathodic protection systems
- Monitor conduit right-of-way and respond to Dig Alert reports
- Read piezometers and underdrains at Glen Anne, Lauro and Ortega Dams
- Read meters, conduct monthly dam inspections, and flush venture meters

Brett Gray

Operations Supervisor

CACHUMA OPERATION AND MAINTENANCE BOARD MEMORANDUM

Date:

February 25, 2008

To:

Members of the Board of Directors

From:

Brett Gray, Operations Supervisor

RE:

Ortega Reservoir Under-Drain Flows

Discussion:

In last month's Operations Report, the earthquake of November 16, 2007 and the subsequent increase in the Ortega Reservoir under-drain flow were reported. Investigation of the cause of the increased flow occurred in December and January by searching for the leaks through testing the joints for leakage with dye, and visually inspecting the joints for damage. As discussed, leaks were found with the dye testing and damage to the sealant above the water-stop was found through the visual inspection. No other causes were found. The leaks and damaged sealant were repaired and the reservoir was returned to service. The under-drain flows were monitored after the reservoir was returned to service, but the flows remained the same as before the repair. This indicates that the leaks and the damaged sealant were not significant contributors to the increase in under-drain flows.

| Before Repair | | | | | |
|---------------|-------------------|------------------------|--|--|--|
| Date | Flow (gpm) | Water Level (ft) | | | |
| 19-Nov | 11.8 | 10.8 | | | |
| 20-Nov | 10.7 | 11.5 | | | |
| 21-Nov | 12 | 11.8 | | | |
| 22-Nov | 10 | 8.1 | | | |
| 23-Nov | 9.6 | 6.7 | | | |
| 24-Nov | 9.1 | 6.1 | | | |
| 25-Nov | 9.2 | 6.3 | | | |
| 26-Nov | 9.7 | 7.5 | | | |
| 29-Nov | 14.2 | 10.9 | | | |
| 30-Nov | 14.7 | 11.7 | | | |
| 1-Dec | 12.5 | 9.5 | | | |
| 2-Dec | 14.6 | 13 | | | |
| 3-Dec | 14.7 | 12.9 | | | |
| 4-Dec | 22.5 | 11.9 | | | |
| 13-Dec | Out of Service | , | | | |

| After Repair | | | | | | |
|--------------|---------------|------------------------|--|--|--|--|
| Date | Flow (gpm) | Water Level (ft) | | | | |
| 2/4/2008 | 3.3 | 0.0 | | | | |
| 2/5/2008 | 4.7 | 0.3 | | | | |
| 2/6/2008 | 9 | 4.0 | | | | |
| 2/7/2008 | 15 | 6.6 | | | | |
| 2/7/2008 | 15.4 | 7.8 | | | | |
| 2/8/2008 | 21.0 | 9.5 | | | | |
| 2/9/2008 | 19.75 | 9.6 | | | | |
| 2/11/2008 | 18.1 | 9.1 | | | | |
| 2/14/2008 | 16.9 | 8.1 | | | | |
| 2/15/2008 | 16.5 | 8.4 | | | | |
| 2/17/2008 | 12.75 | 6.6 | | | | |
| 2/19/2008 | 12 | 4.6 | | | | |

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Divers were then sent into the reservoir on February 11, 2008 to check the new and old sealant to determine if any apparent leaks could be found under higher pressure conditions. Three small leaks were found but were not of sufficient size to be significant contributors to the increased under-drain flows. Continued testing will occur in February by taking each half of the reservoir out of service and continuing the testing for leaks. If significant leaks are not found we will put divers back into the reservoir under higher head and continue the search for leaks. COMB staff will continue to work with Montecito Water District (MWD) staff to try to determine the cause of the increased under-drain flows.

Montecito staff and contractors have been very proactive in trying to determine the cause of the increased under-drain flows. Not knowing where the reservoir is leaking is making it difficult to determine the cause. The only recent changes to the site are the Cover Project and the earthquake. The site has seen many earthquakes over the years with little change to the underdrain flows. There is nothing about the recent earthquake to indicate that it would have caused the increased flows. Currently we are under the assumption that the cause of the increased under-drain flow is associated to the Cover Project and the retrofit water-stops. COMB staff sent a letter to MWD on February 14th discussing the issue and indicating that MWD should be responsible for all costs incurred to correct the leakage problem. This was done to allow MWD to put the reservoir contractor and engineer on notice of the issue and potential ramifications.



CACHUMA OPERATION AND MAINTENANCE BOARD

3301 LAUREL CANYON ROAD
5ANTA BARBARA, CALIFORNIA 93105-2017
TELEPHONE (805) 687-4011 FAX (805)569-5825
www.ccrb-comb.org
contactus@cachuma-board.org

February 14, 2008

Tom Mosby General Manager Montecito Water District 583 San Ysidro Road Santa Barbara, CA 93108

RE: Ortega Reservoir - Increased Under Drain Flows, Summerland, CA.

Dear Tom:

As you are aware the under-drain flows at Ortega Reservoir have substantially increased since the earthquake on November 16, 2007. Through our investigation we have not found any cause for the increased under-drain flow except for the new water stops installed during the recently completed Ortega Reservoir Cover Project. We have not noted any other changes to the site that would have caused the flow increases except for the Cover Project.

At the current time we are measuring flows that are 3 to 4 times higher than pre-construction project flows (about 22 gpm). The flows have not yet reached critical levels and are not causing safety concerns about the site and dam integrity. However, we are concerned about the increased flows and any future maintenance costs associated with the leaks. We will continue to work with Montecito Water District (MWD) to try and identify the cause of the leaks that appear to have been caused by construction of the Reservoir Cover Project. However, it is COMB's opinion that MWD should be responsible for all costs incurred to correct the leakage problem.

Sincerely,

Brett Gray

Operations Supervisor

cc: Kate Rees, General Manager, COMB

Ortega Drain Flows 2-7-08_kr rev clean (2).doc

Carpinteria Valley Water District
City of Santa Barbara
Goleta Water District
Montecito Water District
Santa Ynez River Water Conservation District, Improvement District #I
General Manager/Secretary of the Board, Kathleen A. Rees

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CACHUMA OPERATION AND MAINTENANCE BOARD

5501 LAUREL CANYON ROAD

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www.ccrb-comb.org

contactus@cachuma-board.org

February 20, 2008

Tom Fayram
Deputy Public Works Director
Santa Barbara County Flood Control District
123 W. Anapamu Street
Santa Barbara, CA 93101

Subject: Financial Assistance for Bathymetric Survey for Lake Cachuma

Dear Tom:

As you know, as a result of the Zaca Fire, higher than normal sedimentation will occur at Lake Cachuma this rain season. In November, 2007 we requested a cost estimate from MNS to carry out a bathymetric survey of Lake Cachuma using the same bathymetric sampling and methodology that they used in 2000. We received a base proposal for that work for \$74,500. COMB will contract for the bathymetric survey in summer 2008 to determine the effect of sedimentation on the capacity of the reservoir. MNS has suggested that we consider two additional options. Option 1 would include a large area in the upstream portion of the lake and in the arms leading into the lake that cannot be mapped by the bathymetric survey. Adding it to the scope of work would result in a much more accurate survey in the areas not mapable using bathymetric methods. Option 2 would utilize a newer technology that could be used for the bathymetric portion of the data collection called Shallow Water Bathymetry. The benefit would be a more accurate topographic map of the lake bottom.

The cost estimates are:

Base proposal \$74,500 Add Option 1 \$36,000 Add Option 2 \$14,200

I would greatly appreciate your financial assistance with these additional options which total about \$50,000, and request that it be included in your FY 2008-09 Budget for post Zaca Fire activities. I think this work would be very beneficial for both COMB and the Flood Control District.

Thank you for your consideration.

Sincerely.

Kate Rees

General Manager

kr COMB/ZF_bath survey financial assist TFayram_022008

Carpinteria Valley Water District City of Santa Barbara Goleta Water District Montecito Water District

Santa Ynez River Water Conservation District, Improvement District #1 General Manager/Secretary of the Board, Kathleen A. Rees

BALANCE HYDROLOGICS, Inc.

Confidential Initial Client Review Draft

To:

Cathy Taylor, Santa Barbara Public Works Department

Kate Rees, Cachuma Conservation Release Board

From:

Mark Strudley and Barry Hecht

Date:

January 23, 2008

Subject:

Interim Phase I Progress Report: Delta instability and seiche/tsunami-generation

hazard

Statement of Problem

The 2007 Zaca Fire burned 60% of the 216-mi2 watershed tributary to Gibraltar Reservoir and 44% of the 417-mi2 watershed tributary to Lake Cachuma, posing a significant threat to much of coastal Santa Barbara County's local water supply. Anticipated elevated erosion rates in the Gibraltar and Lake Cachuma watersheds threaten to inundate a portion of the reservoirs' storage capacity, mostly in the form of deltaic deposits at and near tributary inflows. Rapid and sustained sedimentation has been known to cause delta collapse in the form of underwater (subaqueous) landslides, which then have the opportunity to create potentially dangerous reservoir tsunamis¹ and subsequent seiches². Aside from hazards to human safety, both tsunamis and seiches pose hazards to human health and infrastructure by potentially elevating turbidity and damaging outlet works via shock pressure (water hammer, or fluid hammer)³ and wave action.

The City of Santa Barbara Public Works Department and the Cachuma Operations and Maintenance Board (COMB) have asked Balance Hydrologics, Inc. to assess the potential for the deltas in Gibraltar Reservoir and in the Santa Cruz Creek arm of Lake Cachuma, respectively, to destabilize under the influence of storm-generated, post-fire sedimentation, and the extent to which this may cause tsunami and seiche. In a separate draft memo to you, dated November 20, 2007, we described sediment supply and delta configuration estimates that provide the foundation for estimates of delta collapse and tsunami and/or seiche magnitude in this memo.

We emphasize that these are interim estimates, and that they will continue to evolve as we collect information, learn from our field work and the findings of others, and make adjustments as the post-

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¹ We use the term 'tsunami' in its narrow physical sense, as the initial wave generated by landslide or other delta slope failure. We recognize that this differs from common use which restricts tsunamis to coastal hazards, and 'seiche' for the wave effects in impoundments. This is done to distinguish the effects of the initial wave from those of subsequent waves and oscillations (sloshing), a distinction that COMB and City engineers are likely to seek as they evaluate protection or response options.

² A seiche is a standing wave in an enclosed or partially enclosed body of water. The effect is caused by resonances in a body of water that have been disturbed by one or more of a number of factors, such as large slope failures and the tsunamis they generate, seismic activity, or wind.

³ Water hammer, or fluid hammer or shock pressure, is a pressure surge or wave caused by the kinetic energy of a fluid in motion when it is forced to stop or change direction suddenly. For example, if a valve is closed suddenly at an end of a pipeline system or tunnel, a water hammer wave propagates in the pipe or the tunnel, potentially damaging the structure or its controls.

fire sediment pulse evolves. Similarly, engineers for the City or COMB may find that existing facilities need more or less attention to these issues. We also recognize that some of these issues may be addressed in part as components of recent safety of dams or seismic retrofit investigations, which may not have considered the specific issues of rapid sediment accumulation in post-fire deltas. We look to your staffs to direct us further with their questions. Our estimates are not scaled to storm intensity, frequency, or duration, which will add another dimension to the predictions made in this memo. Furthermore, as stated in sections and footnotes below, our estimates are inherently uncertain: both the occurrence and timing of delta collapse depend on local conditions (which will change as the system evolves during storm events). Nevertheless, we believe that providing such information now can help you plan, even if it is based on incomplete data.

Anatomy of a Subaqueous Landslide

Underwater (subaqueous) landslides consist of a continuous spectrum of mass failures ranging from slides to slumps. *Slides* represent one 'end-member' where a slab of accumulated deltaic sediment fails rapidly into deeper water, generating a wave⁴. The failed sediment travels along the lake bottom as a deformable mass that tends to elongate and thin as it travels. *Slumps*, on the other hand, are rotational failures that generally have a much more limited range of travel down slope. Failure occurs along sub-circular or sub-elliptical arcs cut through the sediment mass. Slumps are generally smaller and slower, although they have a tendency to generate secondary slumps over time⁵. Both types of failures are known to occur in California reservoirs.

Modes of Generation and Probability

Subaqueous landslides are most often created by excess pore-water pressure in the saturated deltaic sediments. In other words, some mechanism increases the pressure exerted by interstitial water between grain faces in the sediment mass, causing reduced strength of the sediment mass and resulting in collapse. In the case of an advancing ('prograding') delta receiving sediment from a river channel, pore-water pressure is high following burial of successive layers of sediment in delta deposits. Usually pore-water pressure declines over time as it diffuses through the grain spaces in the sediment mass (like air diffusing out of a rising cake as it is removed from the oven). In the case of a rapidly growing delta under the influence of accelerated sedimentation (a likely condition for the deltas in Lake Cachuma and Gibraltar Reservoir this winter or next), the sediment input rate may be high enough and of sufficient duration to prevent adequate diffusion of pore-water pressure, thus inducing conditions that may result in delta instability and collapse. Artesian water flow, seismic ground shaking, wave action, or any combination of these or similar factors may also instigate excess pore-water pressure along a failure plane. Artesian water flow may contribute to delta destabilization primarily if infiltrating waters recharging upstream are confined by beds of silt or clay within the delta. Seismic ground shaking may originate from the eastern section of the Santa Ynez Fault Zone,

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⁴ Technically speaking, a slide is a translational failure of material along a plane parallel to or coincident with the submerged sediment-water interface along the delta front. Because internal shear strength is essentially lost with failure, the distance traveled by the slide is limited by fluid drag rather than friction along the contact between the sliding mass and the surface below it.

⁵ Depending on the nature of the sediment, the morphology of the slumped feature, and the dynamics of the slump itself, sliding and/or further deformation at the toe of the slump can continue and progress down slope following the initial rotation.

which cuts across local rocks just south of both Lake Cachuma and Gibraltar Reservoir, or from the Los Alamos blind thrust and the Little Pine Fault along the northern boundaries of Lake Cachuma and Gibraltar (Jennings, 1994). Very few studies exist that constrain historic or geologically-recent activity along the fault, although the Santa Ynez Fault is classified in the 1-5 mm/yr slip rate category in the probabilistic seismic hazard assessment for the State of California (Treiman, 2000) and the Los Alamos Fault reportedly exhibits slip at 1-7 mm/yr. Other studies of seismic hazard along the southern margin of the Santa Ynez Mountains suggest similar slip rates (0.3 - 2 mm/yr) and potential rupture moment magnitudes (moment magnitude ≈ Richter Magnitude) of 5.0 - 7.0 (Keller and Gurrola, 2000). The magnitude of seismic shaking, however, may have little to do with subaqueous landslide initiation for earthquakes; Watts (2004) shows that for probabilistic modeling of submarine landslides off the coast of southern California that resultant tsunami amplitude is insensitive to earthquake moment magnitude above 4.5 (≈ 4.5 Richter Magnitude). In his model, earthquakes failed to generate slumps 20% of the time and slides 50% of the time, while 47% of earthquakes in his model generated detectable (≥1 cm wave amplitude) tsunamis. Only landslides in excess of 1 km in length generated tsunami amplitudes greater than 1 m, so this may be considered an upper limit on amplitude for the Cachuma and Gibraltar basins (but see below).

The most likely cause of delta-front instability in Lake Cachuma and Gibraltar Reservoir is rapid sedimentation generating elevated pore-water pressure and destabilization through liquefaction. Liquefaction can initiate collapse throughout the delta's depth profile, and separately-derived relationships bracket this behavior by describing this instability at a) the submerged water-sediment interface of the growing delta foreset, and b) the buried sediment-bedrock interface of the prograding delta in the case of basal slumping. A probabilistic estimate of the potential for a growing delta to collapse can be described by comparing the estimated foreset slope (provided in a separate letter report to you [Interim Phase I Progress Report on Sedimentation, initial draft of November 20, 2007], based on criteria outlined in the U.S. Army Corps of Engineers Manual 1110-2-4000) to sediment characteristics, sediment loading rates (also provided in our draft letter report of Nov. 20, 2007), and a theoretically-derived constant called the Gibson Number [Gbc] (Wolinsky and Pratson, 2007). For surface liquefaction, the relationship states that if the estimated delta foreset slope is greater than or equal to the product of the Gibson Number and a ratio between sediment hydraulic conductivity and sediment supply, collapse may occur. The relationship for basal liquefaction and delta collapse is similar. Thus, as the slope of the delta face increases, the likelihood of collapse becomes higher⁶.

Tables 1a and 1b outline the parameter values used in the calculation above that predicts delta instability under the influence of rapid sedimentation. It is likely that the sediment delivered to Lake Cachuma and Gibraltar Reservoir will range from fine-grained silty sand to sandy silt, with occasional interbeds of clay or silty clay. Thus, we have performed calculations for silty sand and silt7. As the results indicate under the headings "Surface liquefaction comparison" and "Basal liquefaction comparison" in Tables 1a and 1b, instability is likely to occur in either reservoir for sediment mixtures composed largely of silt, regardless of our incoming sediment supply rate estimates (because the foreset slope is greater than the corresponding "comparison" number). When silty sand is used in the

⁶ Steeper delta-face slopes imply both greater shear stress exerted on the deformable sediment mass and more spatially-focused deposition along the length of the delta foreset.

Note that for any given alluvial sediment, hydraulic conductivity ('permeability') and compressibility can vary

over several orders of magnitude, so our "mean" estimates are subject to considerable uncertainty.

predictive relationship, instability is much less likely to occur. We would like to caution that these predictions are based on homogeneous foreset deposits with a simple geometry, and as our footnote on hydraulic conductivity attests, spatial (and temporal) differences in sediment characteristics, sediment supply, and other morphologic and dynamic considerations lend inherent uncertainty to these predictions. Conversely, the quantitative predictions don't consider finite compaction, a process that would tend to stabilize the deltas.

In summary, delta collapse, if it occurs, will be due to excessive pore-water pressure in the delta sediment mass derived from very high and rapid sediment deposition rates in the reservoir following storms over the next few years (and possibly just the first winter). Prediction of instability is inherently difficult, but our assessment of instability using the Gibson Number predicts that there is a distinct potential for delta collapse in either Lake Cachuma or Gibraltar Reservoir, especially if there is a high proportion of silt entering the reservoirs. Unforeseeable heterogeneity in delta shape, sediment characteristics, and the dynamics of sediment deposition and erosion apply a healthy margin of uncertainty in these and any other predictions.

Predictive Tsunami Height and Period of Seiche

Murty (1979) provides a helpful method for estimating tsunami height based on simple geometric assumptions regarding the delta configuration and the predicted (or measured) slide geometry. The width of the slide is ignored, so the calculation approximates the height of the solitary wave generated at the site of a subaqueous slide. We use the predictive height equation to outline a range of possible tsunami wave heights based on variations in the size of the failed mass. Specifically, we provide estimates based on a range of failed mass thicknesses (0.5-5.0 m) for Lake Cachuma's delta; 0.1-1.0m for Gibraltar Reservoir's delta), which in turn correlate with the failed mass length based on statistical relationships for known, documented delta failures (50-500 m) for slides and 5-50 m for slumps in Lake Cachuma; 10 - 100 m for slides and 1 - 10 m for slumps in Gibraltar Reservoir). Reservoir survey information from Brown (1973) on the Loch Lomond Reservoir on Newell Creek in Santa Cruz County (one of the reservoirs used in our calculations of sedimentation rates in our previous memo to you) indicate that a subaqueous slide or large slump occurred between 1960 and 1971, resulting in a failed mass thickness of up to 6 m (20 ft). This suggests that our upper limit on estimated failed-mass thickness of 5 m for Lake Cachuma is not out of the realm of possibility. The estimates of tsunami height are also based on an assumed center of mass of the failed material that is half way between the top and bottom of the delta front. (If the center of mass is positioned closer to the shoreline [shallower], then the calculated tsunami-wave height increases; if the center of mass is positioned farther from the shoreline [deeper], then the calculated tsunami wave height decreases.) Energy transfer between the water column movement and resultant wave generation is cast in terms of an energy transfer coefficient in the calculation, which includes its own margin of uncertainty. We have used a widely employed value for this coefficient, but realize that this parameter may not be "fitted" for the specific case of the deltas in these reservoirs. Because the calculation considers the delta and resultant wave in profile (a slice taken along the length of the delta, where width is ignored), a true tsunami wave in nature will likely be less tall—wave energy will spread laterally (and dissipate) from the source of initial failure. The degree to which this dissipation will occur is unknown, but is likely to be greater in Lake Cachuma than in Gibraltar Reservoir, especially if the source is the Santa

Cruz Creek delta. Our calculations are obviously not exhaustive, but we want you to be aware of the possibilities that have been documented elsewhere (for example, Watts and others, 2005)⁸.

Tables 2a and 2b outline the values and calculations involved in our predictions of tsunami wave height for both Lake Cachuma and Gibraltar Reservoir. For slides and slumps in Lake Cachuma, tsunamis range in theoretical height from 0.4-9 m and 0.09-2 m, respectively. For slides and slumps in Gibraltar Reservoir, tsunamis range in height from 0.08-1.6 m and 0.02-0.4 m, respectively. So although Gibraltar Reservoir will trap most of the sediment eroded from surrounding catchments, it is the proportionately larger delta front in Lake Cachuma that derives higher estimates for tsunami height, should collapse occur. The upper estimates of tsunami height are not insignificant numbers; although tsunamis up to 9 m tall would be more common for predictions on the continental shelf, the predicted geometry of the evolving delta in Lake Cachuma, in rare circumstances, might provide for such an event.

Seiche can occur following (and responding to) perturbations to the water surface caused by tsunami. As the energy from a tsunami dissipates, the return to a quiet water surface may be accompanied by extended (up to a few days) adjustment in the form of water "sloshing" and resonating back and forth across the reservoir (seiche). The height of the seiche should not be greater than the initial tsunami wave height, unless the seiche initiates further delta destabilization in phase with its resonant period. The resonant period (T), or time it takes for vertical harmonic motion to propagate across the reservoir and return, can be calculated using the Merian formula [$T = 2L/\sqrt{g}h$; L = length of the water body, h = the average depth of the water body, and $\sqrt{g}h$ is the seiche celerity, or speed of propagation]. For Lake Cachuma, the average depth is estimated at 110 feet (spillway elevation [760 ft] minus the average between the reservoir bottom [600 ft] and the base of the delta [695 ft]) and for Gibraltar Reservoir it is 37 feet (1400' minus the average of 1350' and 1375'). Using reservoir lengths (L) of 8000 and 30000 feet for Gibraltar and Cachuma, respectively, yields seiche periods of 8 minutes for Gibraltar Reservoir and 17 minutes for Lake Cachuma.

Potential Impact to Dam Outlet Structures and Piping

Under the highly unlikely, but plausible, case of catastrophic tsunami predicted by nearly complete, deep-seated collapse of the delta front, damage to dam outlet structures and piping may occur. Damage, if it occurs, however, will be most likely restricted to features close to the water surface rather than at depth, because tsunamis travel as shallow-water (surface) waves (Komar, 1998). The closure depth (hc), or depth below which surface waves do not cause water motion ('wave base'), can be estimated for Lake Cachuma and Gibraltar Reservoir based on predicted tsunami height (H), using hc = 1.57H. Since the closure depth scales with the tsunami height, the deepest closure depth for Lake Cachuma is roughly 46 feet and for Gibraltar Reservoir it is roughly 8.5 feet. Thus water disturbance will be minimal to non-existent at the outlet tunnel in Lake Cachuma. Tecolote Tunnel and tower could potentially sustain damage from large tsunami waves from the wave energy itself or from water hammer developing in the tunnel if it is not vented. However, in speaking with Larry Anderson of the U.S. Bureau of Reclamation (pers. com., Jan 18, 2008) concerning the recent seismic retrofit of Lake

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⁸ One, solitary wave may not be the only disturbance developed by a delta failure. Subsequent waves may develop from the initial water column perturbation, which may actually be taller than the initial wave (Watts and others, 2005) despite that frictional and viscous loss should, theoretically, diminish wave heights over time.

Cachuma, the 20-30 feet of freeboard combined with implemented outlet works design criteria for withstanding extremely high seismic moment render tsunami activity relatively ineffective in inducing damage. The assessment of specific effects of wave energy and water hammer may be more suited for City and COMB engineers that have a more intimate knowledge of the design features and limitations of the outlet structures at each reservoir, and how they may respond to the predicted tsunami and seiche activity described in this memo.

A potential tactic to combat delta collapse and tsunami may be to coordinate reservoir lowering during high flow events with flood prevention objectives in such a way as to encourage spatially-extended distribution of deltaic deposition and to discourage focused sedimentation that might lead to excessive pore water pressure in the delta. These coordinated releases would enhance incision and reworking of deltaic deposits as the lake level drops while simultaneously dispersing incoming sediments to achieve lower sedimentation rates per unit area. Subsequent lake level increases following these events should take into consideration incoming sediment concentration (especially during the falling limb of the hydrograph as the storm passes) so that focused and rapid sedimentation can be avoided in the delta. Your respective reservoir operators will have intimate knowledge of the timing constraints imposed for refilling reservoirs to operational levels following these suggested releases during storm events.

Closing

Tsunami or seiche effects in both Lake Cachuma and Gibraltar Reservoir are more likely to occur because of intrinsic properties of fine-grained sands and silts eroded from the sedimentary rocks underlying virtually the entire watershed in question. In contrast, most California reservoirs receive coarser, angular sediments with less silt. Our findings suggest that delta collapse, if it occurs, will be due to excessive pore-water pressure in the deltas advancing into the lakes, derived from very high and rapid sediment deposition rates in the reservoir following storms over the next few years (and possibly just the first wet winter). If incoming sediments are mostly composed of silt rather than silty sand, the probability of delta collapse increases. Should a subaqueous mass failure occur, the approximation equations that we have used indicate that tsunami heights could be as little as a few centimeters to nearly 9 m (~30 feet), with seiche likely following for up to a few days duration. The resonant period of seiche would be approximately 8 minutes for Gibraltar Reservoir and 17 minutes for Lake Cachuma. If tsunami wave height and the magnitude of seiche are at the higher end of the spectrums predicted here, significant damage may occur to dam outlet structures at the water surface. Damage to subsurface structures is less likely to occur in either reservoir, unless outlet piping in connection with the water surface admits focused pressure from wave activity and causes water hammer damage displaced from the pressure source. Engineers involved in the design and maintenance of these facilities can take the information provided in this memo and evaluate whether intakes, tunnels, or terminal facilities may be at risk. We thank you for the opportunity to provide these estimates for Lake Cachuma and Gibraltar Reservoir, and should you have any questions or concerns regarding our analysis or otherwise, don't hesitate to contact us.

Enclosures: Tables 1a. and 1b. Tables 2a. and 2b.

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Table 1a: Estimates of delta instability potential in Lake Cachuma based on sediment characteristics, sediment supply, and the Gibson Number. Numbers in red below correspond to conditions in which liquefaction and delta collapse are likely to occur. These conditions, namely the magnitudes of K_s and q, are shown in the column to the left.

| Parameter in functional relationship | Quantity | Units |
|---|-------------|--------------|
| Hydraulic Conductivity (K _s) [silty sand]: | 100 | m²/y |
| Hydraulic Conductivity (K) [silt]: | 1 | m²/y |
| Hydraulic Conductivity (K _s) [clay]: | 0.01 | m²/y |
| Internal friction coefficient $(\mu)^1$: | 0.5 | - |
| Threshold loading intensity (Gb _c) ² : | 10 | - |
| Form factor (α) ¹ : | 1 | |
| Sediment supply (q) ⁴ | | |
| BAER: | 187 | AF |
| Rating Curve (upper estimate): | 548 | AF |
| Rating Curve (lower estimate): | 328 | AF |
| Similar watershed (upper estimate): | 350 | AF |
| Similar watershed (lower estimate): | 87 | AF |
| Foreset slope (S) ⁵ : | 0.089916667 | - |
| Maximum foreset slope (S _{max}): | 0.089916667 | - |
| Surface liquefaction comparison ⁶ : | | |
| $K_s = 100; q = 187$ | 1.744631095 | _ |
| $K_{\pi} = 100; q = 548$ | 0.595339443 | - |
| $K_{\rm g} = 100; q = 328$ | 0.994652484 | _ |
| $K_{\rm s} = 100; q = 350$ | 0.932131471 | _ |
| $K_{\rm n} = 100; q = 87$ | 3.749954193 | - |
| $K_{\mathfrak{g}} = 1; \ q = 187$ | 0.017446311 | - |
| $K_{\rm B} = 1$; $q = 548$ | 0.005953394 | • |
| $K_{\rm s} = 1$; $q = 328$ | 6,009946825 | |
| $K_n = 1; q = 350$ | 0.009321315 | _ |
| $K_{\mathfrak{u}}=1; q=87$ | 0.037409542 | |
| Basal liquefaction comparison ⁷ : | | |
| $K_s = 100; q = 187$ | 0.302864233 | _ |
| $K_s = 100; q = 548$ | 0.211641909 | - |
| $K_s = 100; q = 328$ | 0.251133072 | - |
| $K_s = 100; q = 350$ | 0.245756969 | <u></u> |
| $K_s = 100; q = 87$ | 0.390860791 | |
| $K_s = 1$; $q = 187$ | 0.065250121 | _ |
| $K_s = 1$; $q = 548$ | 9.045595857 | - |
| $K_s = 1$; $q = 328$ | \$ 0540 D | - |
| $K_{\rm a} = 1$; $q = 350$ | 0.052546734 | - |
| $K_n = 1$; $q = 87$ | 0.084208405 | _ |

Corresponds to a "drained" angle of repose of 26°.

² Gb_c is the non-dimensional Gibson Number from Wolinsky and Pratson (2007).

 $^{^3}$ Form factor is the ratio between S_{max} , the maximum foreset slope, and S_1 , the average foreset slope.

⁴ Sediment supply estimates come from the Interim Phase I Progress Report on Sedimentation.

⁵ USACE Manual 1110-2-4000 suggests a foreset slope roughly 6.5 times the estimated topset slope.

⁶ If this number is less than the foreset slope, instability may occur at the surface. The relationship is: $S >= Gb_c(K_s/q)$

⁷ If this number is less than the foreset slope, instability may occur at the basal surface. The relationship is: $S_{max} >= [(2\alpha/\pi)\mu^2(K_g/q)]^{1/3}$

Table 1b: Estimates of delta instability potential in Gibraltar Reservoir based on sediment characteristics, sediment supply, and the Gibson Number. Numbers in red below correspond to conditions in which liquefaction and delta collapse are likely to occur. These conditions, namely the magnitudes of K_s and q, are shown in the column to the left.

| Hydraulic Conductivity (K_s) [silty sand]: 100 m²/y Hydraulic Conductivity (K_s) [clay]: 0.01 m²/y Hydraulic Conductivity (K_s) [clay]: 0.01 m²/y Internal friction coefficient (μ)¹: 0.5 - Threshold loading intensity (Gb_c)²: 10 - Form factor (α)³: 1 - Sediment supply (q)⁴ Sediment supply (q)⁴ AF BAER: 660 AF Rating Curve (lower estimate): 556.8 AF Similar watershed (upper estimate): 1227 AF Similar watershed (lower estimate): 303 AF Foreset slope (S)⁵: 0.055397727 - Maximum foreset slope (S_{max}): 0.055397727 - Surface liquefaction comparison³: *** *** $K_s = 100; q = 660$ 0.494312144 - *** $K_s = 100; q = 303$ 1.076719521 - - $K_s = 1; q = 660$ 0.064943121 - - $K_s = 1; q = 303$ 0.010787195 - - <th>Parameter in functional relationship</th> <th>Quantity</th> <th>Units</th> | Parameter in functional relationship | Quantity | Units |
|---|--|-------------|--------------|
| Hydraulic Conductivity (K_s) [clay]: 0.01 $m^4 y$ Internal friction coefficient (μ) ¹ : 0.5 - Threshold loading intensity (Gb_o) ² : 10 - Form factor (α) ³ : 1 - Sediment supply (q) ⁴ - - BAER: 660 AF Rating Curve (lower estimate): 556.8 AF Similar watershed (upper estimate): 303 AF Foreset slope (S) ⁵ : 0.055397727 - Maximum foreset slope (S_max): 0.055397727 - Surface liquefaction comparison ⁶ : . . $K_s = 100$; $q = 660$ 0.494312144 - $K_s = 100$; $q = 660$ 0.494312144 - $K_s = 100$; $q = 303$ 1.076719521 - $K_s = 1$; $q = 660$ 0.004943121 - $K_s = 1$; $q = 303$ 0.002688892 - $K_s = 1$; $q = 303$ 0.010797195 - Basal liquefaction comparison ⁷ : $K_s = 100$; $q = 660$ 0.1989209 | Hydraulic Conductivity (K _s) [silty sand]: | 100 | m²/y |
| Internal friction coefficient $(\mu)^1$: 0.5 - Threshold loading intensity $(Gb_c)^2$: 10 - Form factor $(a)^3$: 1 - Sediment supply $(q)^4$ BAER: 660 AF Rating Curve (lower estimate): 556.8 AF Similar watershed (upper estimate): 1227 AF Similar watershed (lower estimate): 303 AF Foreset slope $(S)^5$: 0.055397727 - Maximum foreset slope $(S_{max})^2$: 0.055397727 - Surface liquefaction comparison ⁶ : $K_s = 100; q = 660$ 0.494312144 - Sequence of the surface of the | | 1 | m²/y |
| Threshold loading intensity $(Gb_c)^2$: 10 - Form factor $(a)^3$: 1 - Sediment supply $(q)^4$ BAER: 660 AF Rating Curve (lower estimate): 556.8 AF Similar watershed (upper estimate): 1227 AF Similar watershed (lower estimate): 303 AF Foreset slope $(S)^5$: 0.055397727 - Maximum foreset slope (S_{max}) : 0.055397727 - Surface liquefaction comparison ⁶ : $K_s = 100$; $q = 660$ $K_s = 100$; $q = 556.8$ $K_s = 100$; $q = 303$ $K_s = 100$; $q = 303$ $K_s = 100$; $q = 660$ $K_s = 1$; $q = 660$ $K_s = 100$; $q = 660$ | Hydraulic Conductivity (K s) [clay]: | 0.01 | m²/y |
| Form factor $(a)^3$: 1 - Sediment supply $(q)^4$ BAER: 660 AF Rating Curve (lower estimate): 556.8 AF Similar watershed (upper estimate): 1227 AF Similar watershed (lower estimate): 303 AF Foreset slope $(S)^5$: 0.055397727 - Maximum foreset slope (S_{max}) : 0.055397727 - Surface liquefaction comparison ⁶ : $K_s = 100$; $q = 660$ $K_s = 100$; $q = 556.8$ $K_s = 100$; $q = 303$ $K_s = 100$; $q = 303$ $K_s = 10$; $q = 303$ $K_s = 10$; $q = 303$ $K_s = 1$; $q = 660$ 0.198920959 0.107671952 | | 0,5 | - |
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¹ Corresponds to a "drained" angle of repose of 26".

² Gb_c is the non-dimensional Gibson Number from Wolinsky and Pratson (2007).

 $^{^3}$ Form factor is the ratio between S_{\max} , the maximum foreset slope, and S , the average foreset slope.

⁴ Sediment supply estimates come from the Interim Phase I Progress Report on Sedimentation.

⁵ USACE Manual 1110-2-4000 suggests a foreset slope roughly 6.5 times the estimated topset slope.

⁶ If this number is less than the foreset slope, instability may occur at the surface. The relationship is: $S >= Gb_c(K_s/q)$

⁷ If this number is less than the foreset slope, instability may occur at the basal surface. The relationship is: $S_{max} >= [(2\alpha/\pi)\mu^2(K_s/q)]^{1/3}$

Table 2a: Estimates of tsunami height in Lake Cachuma

| Parameter in functional relationship | Quantity | Units |
|--|----------------|-------------------|
| Delta foreset slope: | 0.0138 | - |
| Local water depth (D)1: | 19.812 | m |
| Depth at the top of the foreset slope: | 3.048 | m |
| Depth at the end of the foreset slope (D_0) : | 19.812 | m |
| Depth at center of gravity of failed mass $(D_x)^2$: | 8.382 | т |
| Length of della foreset surface ³ : | 850,037 | m |
| Wave energy transformation factor (β)4: | 0.01 | |
| Failed mass thickness in starting zone (h)5: | | |
| minimum estimate provided: | 0.5 | т |
| | 1 | m |
| + | 3 | m |
| maximum estimate provided: | 5 | m |
| Failed mass length (/) for slide ⁶ : | | |
| minimum estimate provided: | 50 | m |
| | 100 | m |
| | 300 | m |
| maximum estimate provided: | 500 | m |
| Failed mass length (/) for slump ⁵ : | | |
| minimum estimate provided: | 5 | m |
| | 10 | m |
| | 30 | m |
| maximum estimate provided: | 50 | m |
| Water density (p w): | 1000 | kg/m ³ |
| Sediment density (p s): | 1601 | kg/m³ |
| Tsunami wave height $(H)^7$ for silde $(h = 0.5 \text{ m})$: Tsunami wave height $(H)^7$ for silde $(h = 1 \text{ m})$: | 0,418 1,052 | m |
| Tsunami wave height $(H)^7$ for slide $(h = 3 \text{ m})$: | 4,553 | m. |
| Tsunami wave height $(H)^7$ for slide $(h = 5 \text{ m})$: | 8,997 | |
| Tsunami wave height $(H)^7$ for slump $(h = 0.5 \text{ m})$: | 0.090 | <u> </u> |
| Tsunami wave height $(H)^7$ for slump $(h = 1 \text{ m})$: | 0.227 | m. m |
| Tsunami wave height $(H)^7$ for slump $(h = 3 \text{ m})$: | 0.981 | m m |
| Tsunami wave height $(H)^7$ for slump $(h = 5 \text{ m})$: | 1.938 | m |
| | | *** |

Local water depth = the depth at the base of the delta foreset slope.

² Assumed to be at the center of the depth between the top and end depths of the foreset.

³ Available length of surface that can collapse, based on estimates of sediment input and geometric constraints used in calculations for our previous memo on predicted sedimentation rates.

 $^{^4}$ β is fraction of the potential energy released by the slide and transformed into wave energy (β is assumed equal to 0.01, according to Murty, 1979 and Kulikov et al., 1994).

 $^{^5}$ The falled mass thickness will be a fraction of the difference between $\!D$ and $\!D_0$, but is an adjustable (unknown) parameter here.

⁶ Statistically, failed mass length for slides is 100 times the thickness; failed mass length for slumps is 10 times the thickness (Watts et al., 2005). Failed mass length is constrained by the length of the delta foreset surface (850m).
⁷ H is calculated from Murty, 1979: $H = 1/D \left[8(3)^{1/2}\beta ih \left(\{p_x/p_w\}-1\right)\left(D_0-D_x\right)\right]^{2/3}$ The relationship is valid provided $D_x <= D <= D_0$

Table 2b: Estimates of tsunami height in Gibraltar Reservoir

| Parameter in functional relationship | Quantity | Units |
|---|----------|-------|
| Delta foreset slope: | 0.0085 | _ |
| Local water depth (D)1: | 7.62 | m |
| Depth at the top of the foreset slope: | 3.048 | m |
| Depth at the end of the foreset slope (D_0) : | 7.62 | m |
| Depth at center of gravity of failed mass $(D_{\bullet})^2$: | 2.286 | m |
| Length of delta foreset surface ³ : | 97.390 | m |
| Wave energy transformation factor (角) ⁴ : | 0.01 | - |
| Failed mass thickness in starting zone (h)5: | | |
| minimum estimale provided: | 0.1 | m |
| | 0.5 | m |
| \ | 0.75 | m |
| maximum estimate provided: | 1 | т |
| Failed mass length (I) for slide ⁶ : | | • |
| minimum estimate provided: | 10 | m |
| | 50 | m |
| ↓ | 75 | m |
| maximum estimate provided: | 100 | m |
| Failed mass length (I) for slump ⁶ : | | |
| minimum estimate provided: | 1 | m |
| | 5 | m |
| ↓ | 7.5 | т |
| maximum estimate provided: | 10 | m _ |
| Water density (p _w): | 1000 | kg/m³ |
| Sediment density (p .): | 1601 | kg/m³ |
| Tsunami wave height $(H)^7$ for slide $(h = 0.5 \text{ m})$: | 0.076 | m |
| Tsunami wave height $(H)^7$ for slide $(h = 1 \text{ m})$: | 0,653 | in in |
| Tsunami wave height $(H)^7$ for slide $(h = 3 \text{ m})$: | 1.122 | m |
| Tsunami wave height $(H)^7$ for slide $(h = 5 \text{ m})$: | 1.646 | m |
| Tsunami wave height $(H)^T$ for slump $(h = 0.5 \text{ m})$: | 0.016 | , m |
| Tsunami wave height $(H)^7$ for slump $(h = 1 \text{ m})$: | 0.141 | m |
| Tsunami wave height $(H)^7$ for slump $(h = 3 \text{ m})$: | 0.242 | m |
| Tsunami wave height $(H)^T$ for slump $(h = 5 \text{ m})$: | 0,355 | m |
| | | |

¹ Local water depth = the depth at the base of the delta foreset slope.

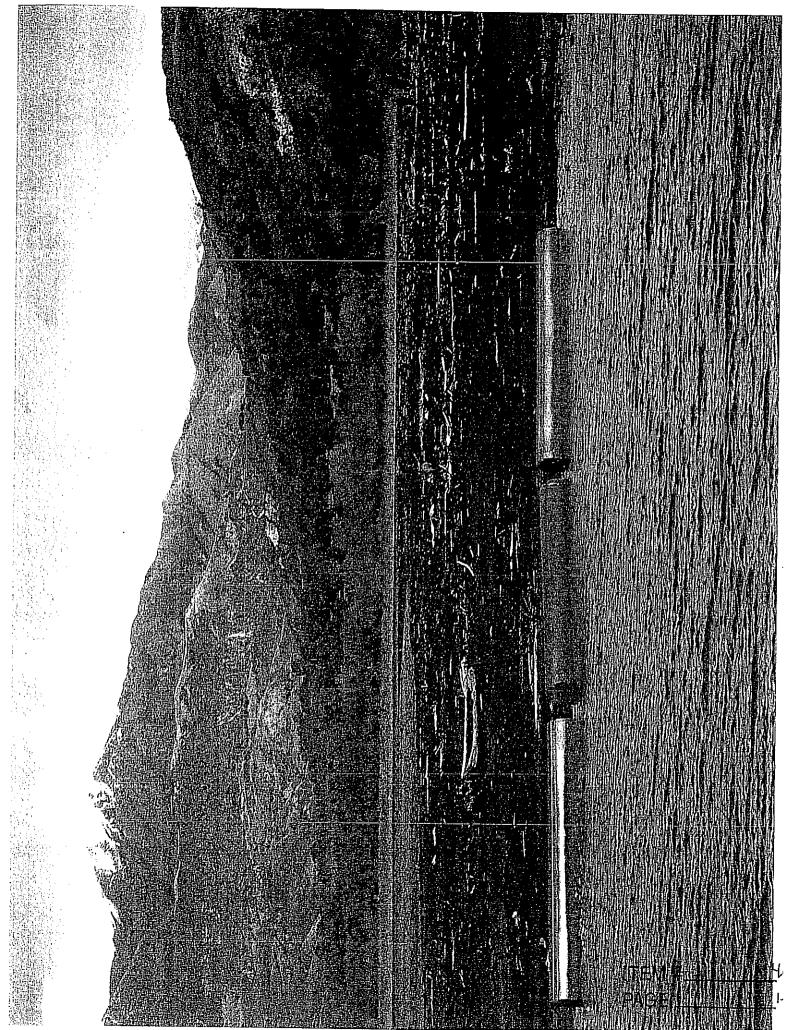
² Assumed to be at the center of the depth between the top and end depths of the foreset.

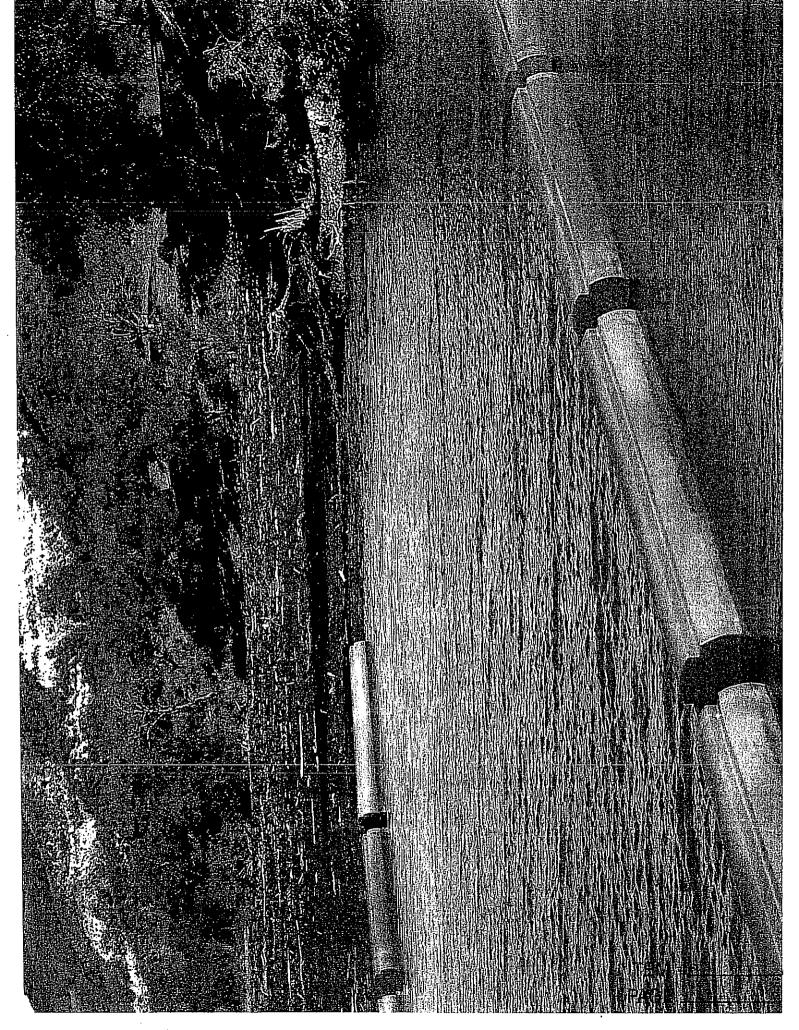
³ Available length of surface that can collapse, based on estimates of sediment input and geometric constraints used in calculations for our previous memo on predicted sedimentation rates.

 $^{^4}$ β is fraction of the potential energy released by the slide and transformed into wave energy (β is assumed equal to 0.01, according to Murty, 1979 and Kulikov et al., 1994).

 $^{^5}$ The failed mass thickness will be a fraction of the difference between D and $D_{\rm 0}$ but is an adjustable (unknown) parameter here.

⁶ Statistically, failed mass length for slides is 100 times the thickness; failed mass length for slumps is 10 times the thickness (Watts et al., 2005). Falled mass length is constrained by the length of the delta foreset surface (850m). ⁷ H is calculated from Murty, 1979: $H = 1/D \left[8(3)^{1/2}\beta lh (\{\rho_s/\rho_w\}-1)(D_0-D_s)\right]^{2/3}$ The relationship is valid provided $D_s \iff D_0$







United States Department of the Interior



BUREAU OF RECLAMATION South-Central California Area Office 1243 N Street Fresno, California 93721-1813

FEB - 1 2008

IN REPLY REFER TO: SCC-414 WTR-4,00

> Ms. Kate Rees Manager Cachuma Operation and Maintenance Board 3301 Laurel Canyon Road Santa Barbara, CA 93105-2017

Subject: Surplus Water Available for Water Year 2008- Master Contract No. 175r-180R - Cachuma

Project - Santa Barbara, California

Dear Ms. Rees: (at

This letter is to notify you of an immediate availability of surplus water as defined in the above referenced master contract.

In accordance with article 3(f) of the master contract, Reclamation is to provide you an estimated schedule for that availability. Our current availability of surplus water is from February 1, 2008 through March 31, 2008. There is no additional payment for surplus water. In addition, within 20 calendar days after the end of each month, please submit a water delivery report to this office showing actual deliveries for irrigation and municipal and industrial water separately for the prior month.

Reclamation will be monitoring the Cachuma Daily Operational report to ensure the continued availability of the surplus water. If there is any change, you will be notified immediately.

If you have any questions concerning this matter, please call me at 559-487-5299, at 559-487-5933 for the hearing impaired; or electronic email at SCarter@mp.usbr.gov.

Sincerely

Sheryl Carter //
Repayment Specialis

(Dallar

cc: Santa Barbara County Water Agency 123 East Anapamu Street, Suite 240 Santa Barbara, CA 93101-0257

cc: Continued Next Page

ITEM #<u>4d</u> PAGE ____

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cc: Continued

Carpinteria Valley Water District P.O. Box 578 Carpinteria, CA 93014-0578

Goleta Water District 4699 Hollister Avenue Goleta, CA 93110-1999

Monecito Water District 583 San Ysidro Road Montecito, CA 93108

City of Santa Barbara P.O. Box 1990 Santa Barbara, CA 93102-1990

Santa Ynez River Water Conservation District, Improvement District #I P.O. Box 157 Santa Ynez, CA 93460-0157

| Current Cachuma Reservoi | r Storage | Level | | |
|---|--------------|---|-----------|----------------------------------|
| Latest Daily Reading | Elevation | Storage | | |
| 2/19/2008 8:00:00 AM | ft 751.90 | af 193,871 | | |
| 27 072000 G.00.00 AW | 731.90 | 193,071 | | |
| | 750.00 | 188,030 | 5,841 | amount surcharged so far |
| | 753.00 | 197,302 | 3,431 | amount still needed to surcharge |
| | | *************************************** | 9,272 | |
| Projected Inflow for 10 days (assur | ning no rain | fall) | 10-Day To | tal |
| 2/19/08 8:00 to 2/29/08 8:00 AM | | | 2,930 | af |
| Projected Outflow from Evaporation | | | | |
| Based on average for 2/10/08 and 2 | 2/19/08 (10 | 2 afd) | 1,025 | af |
| Net Inflow of Water Available for Su | ırcharge | | 1,905 | af |
| Shortage (-)/ Surplus (+) in meeting | surcharge | | (1,526.1) | af |
| Projected Inflow for 30 days (assum | ning no rain | fall) | 30-Day To | <u>tal</u> |
| 2/19/08 8:00 to 3/20/08 8:00 AM | | | 5,537 | af |
| Projected Outflow from Evaporation | | unnel/Releas | | |
| Estimated Total (based on average | of 96 afd) | | 2,880 | af |
| Net Inflow of Water Available for Su | ırcharge | | 2,657 | af |
| Shortage (-)/ Surplus (+) in meeting | surcharge | | (774.1) | af |

| ITEM | # | 49 | 2/19/2008 |
|------|---|-----------|-----------|
| PAGE | | <u>.3</u> | |

Cachuma Operation and Maintenance Board

Memorandum

Date:

February 25, 2008

To:

Members of the Board of Directors

From:

Brett Gray, Operations Supervisor

RE:

Continuing Progress on the 2nd Pipeline Project and the Mission Creek

Crossing Project

Recommendation:

Authorize the use of \$143,000 of unexpended fund balance from Fiscal Year 2006-07 to continue the design process for the 2nd Pipeline Project (Project Component #1) and start the environmental process for the Mission Creek Crossing Project (Project Component #3).

Discussion:

Two of the projects being proposed for funding by the COMB Bond program are essential to the continued reliability of the South Coast Conduit (SCC); the 2nd Pipeline Project and the Mission Creek Crossing Project. Both of these projects have more complicated and lengthy design and environmental processes than the other proposed projects.

The Draft EIR and preliminary engineering design for the 2nd Pipeline Project are nearly complete. However, continued funding is needed prior to the bond issuance to complete the final design for the project.

Work has not yet begun on the planning documents for the Mission Creek Crossing Project. This project involves replacement of a section of the SCC that was damaged in the 1970's by rock impact during a very high flow event in Mission Creek. This project will also require an EIR along with extensive design work. To keep the bond program moving along, staff is requesting authorization to utilize current unexpended funds from FY 2006-07 to begin the planning and environmental processes for this project. This will enable staff to begin the preliminary documentation process, which will be beneficial for the overall timeline of the bond issuance process.

| ITEM | #5 |
|------|----|
| PAGE | 1 |

Cachuma Operation and Maintenance Board

Memorandum

Date:

February 25, 2008

To:

Members of the Board of Directors

From:

Brett Gray, Operations Supervisor

RE:

Bond CIP Project Information

Recommendation: None at this time.

Discussion:

Conceptual approval to issue a bond to fund a number of COMB's capital improvement projects was given by the Board at the October 2007 Board meeting. Over the past few months, staff has been working on the development of projects to be evaluated for funding through a revenue bond. Attached are project component worksheets for each proposed project. Each worksheet contains a project description, background information, a basic project schedule, and an estimated project budget. Also enclosed is a project schedule and cost estimate for all the projects, as well as a project prioritization worksheet.

Currently we are looking at a total of approximately \$26,000,000 in capital improvement projects. We are planning to include all of the proposed projects listed for bond financing, in the event that some of the projects on the list cannot be completed within the anticipated time frame. Grant funding might also offset the total amount of bond financing required. The bond issuance will be in the \$16,000,000 range.

Staff will be requesting comments from the Board Members on the list of projects and the prioritization of the projects at the March 24, 2008 Board meeting. Also, at the March meeting staff will discuss the level of completion needed for the engineer's report required by the COMB Board before approval is given to proceed with the bond process.

COMB's Bond CIP Projects information package is available upon request for the Member Units' governing Board, and staff would be happy to give an overview presentation to any of the Member Units, if requested. An overview of the CIP Projects and bond process will be given at the March General Managers meeting.

| TEM | #5 | , |
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| PAGE | 2 | |

CACHUMA OPERATION AND MAINTENANCE BOARD

MEMORANDUM

DATE:

February 25, 2008

TO:

Members of the Board of Directors

FROM:

Kate Rees, General Manager

RE:

License for Ocean View Homeowners Association at Ortega Reservoir

Recommendation:

Consider the License to Use Reclamation Right-Of-Way to the Ocean View Homeowners' Association in substantially the same form as presented.

Discussion:

This item was deferred from the January 28, 2008 Board meeting. The draft License included in the Board package has been revised so please disregard the draft you received last month.

The Ocean View Homeowners' Association (HOA) has long desired to acquire permission for the property owners to access their properties along Ortega Ridge Road, which runs above Ortega Reservoir to the north. Except for emergency access, they must currently access their properties through Summerland. The Ortega Ridge Road property is owned by the Bureau of Reclamation (Reclamation), which has transferred the responsibility for maintenance of the Ortega Reservoir facilities to COMB. Prior to Ortega Reservoir being covered, the COMB Board was of the opinion that access should be denied to the HOA in order to protect the water quality in Ortega Reservoir. However, that objection has been removed now that the reservoir cover is in place.

As part of the Settlement Agreement between the Montecito Water District and the HOA, an effort was to be made to acquire access for the property owners. COMB's General Counsel, Mr. Hair, and I have been assisting in that effort.

Reclamation has indicated that they cannot grant a permanent right-of-way easement to the HOA because the properties are not landlocked; the owners have another route by which to access their properties. However, the Transfer Contract allows COMB, acting as Reclamation's agent, to grant a license to the HOA for access rights, providing Reclamation has no objection. Reclamation has determined that this request is not incompatible with the purpose for which the land was obtained, and therefore has no objection to issuing a license to the HOA.

Attached is a draft license for the Board's consideration. There are some minor changes and clarifying statements that need to be added, but it is accurate as to substance. A recommendation for approval will be presented at the February Board meeting.

Respectfully submitted,

Kate Rees General Manager ITEM #_____6 PAGE _____!

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

(Ortega Ridge Access) Cachuma Project LICENSE TO USE RECLAMATION RIGHT-OF-WAY

| THIS LICENSE is given this day of 2008, in pursuance of the (32 Stat. 388) and Acts amendatory thereof or supplementary thereto, by THE UNITE AMERICA ("United States"), acting by and through its Bureau of Reclamation, Depa ("Reclamation"), to OCEAN VIEW HOMEOWNERS' ASSOCIATION, a California Benefit Corporation, with a business address at ("Licensee."). | ED STATES OF artment of the In | terior |
|--|--------------------------------------|--------|
| RECITALS: | | |
| A. The United States currently owns Assessor's Parcel No. 005-030-001, as ider Assessor's Records of the County of Santa Barbara, California, which includes certain Reclamation to establish a right-of-way to Ortega Reservoir and other facilities associ Cachuma Project (the "Ortega Ridge Access"). | n lands acquired | by |
| B. By Contract Number 14-06-200-522R dated March 1, 2003 (the "Transfer Contract Reclamation transferred to Cachuma Operation and Maintenance Board ("COMB") reoperation and maintenance of certain transferred project works associated with the Calincluding but not limited to the South Coast Conduit System, appurtenant control statistics. | esponsibility for Ichuma Project, | the |
| C. Under Section 6(a) of the Transfer Contract, Reclamation reserved the right to instruments for use of real property that is also subject to the Transfer Contract | to issue land us | |
| D. Licensee, through its Board of Directors, has requested that Reclamation auth portion of the Ortega Ridge Access, as described more fully herein, to benefit member own properties near the Ortega Reservoir, as well as other non-member owners of near whom Licensee may, in its sole judgment, grant access. | ers of Licensee v | vho |
| D. Reclamation has determined that Licensee's requested use is not, at this time, the purpose for which the subject land was obtained, and COMB has agreed that the incompatible with its rights and obligations pursuant to the Transfer Contract | | |
| E. Reclamation and COMB acknowledge that Licensee would prefer to have a pover the access area that is the subject of this License and that Licensee intends to see easement in the event that Montecito Water District and or Carpinteria Valley Water ownership of the subject area in the future. | ek a permanent | nent |
| Ocean View Homeowners' Ass'n License Page 1 of 9 | | |
| · | ITERA 4 | 6 |
| | ITEM # Page | 2 |

IT IS AGREED:

- 1. <u>License and License Area</u> Reclamation does hereby grant to Licensee a non-exclusive license to use that portion of the Ortega Ridge Access described more fully in Exhibit A hereto and epicted on Exhibit B hereto (the "License Area"). This License shall be considered personal, revocable, and nontransferable. It will neither constitute nor be construed as any surrender of the jurisdiction and supervision by the United States over the License Area.
- 2. <u>Reservation of Rights</u> This License is granted subject to any and all existing rights in favor of the public or third parties for highways, roads, railroads, telegraph, telephone and electrical transmission lines, canals, laterals, ditches, flumes, siphons, and pipelines on, over, and across the License Area.
- 3. <u>Permitted Use.</u> Licensee may use the License Area for vehicular and pedestrian ingress and egress (the "Permitted Use").
- 4. <u>Authorized Users</u>. Licensee is hereby authorized to offer all rights and benefits of this License to its member property owners and their occupants and invitees, as well as to non-member property owners and their occupants and inviteeswho, in Licensee's sole judgment, may benefit from use of the License Area (together the "Authorized Users"). All acts and omissions of Authorized Users within or in any manner affecting the License Area shall be deemed, for purposes of this License, the acts and omissions of Licensee. Licensee shall remain solely responsible for compliance with all terms and conditions of this License, and no authorization of use byany other person may be construed as a transfer of any of Licensee's responsibilities hereunder. Any attempted assignment or transfer of responsibility under this License shall be considered void and of no effect and shall constitute grounds for revocation of this License.
- 5. <u>Period of Use</u>. This License will become effective on the date hereinabove written and, unless otherwise sooner revoked or terminated, will continue through September 30, 2020 (the "Period of Use").
- 6. <u>Value of License</u>. Reclamation has waived the value of the right-of-use fee in accordance with 43 CFR 429.4.
- 7. <u>Prohibited Activity</u>. At no time under this License may Licensee engage in any of the following activity:
 - (a) Store any hazardous material on the License Area.
 - (b) Use water from the Ortega Reservoir for Licensee's activities.
 - (c) Leave waste and debris on the License Area.
- 8. <u>Environmental Requirements</u>. Licensee will comply with all applicable water, ground, and air pollution laws and regulations of the United States, the State of California and local authorities Licensee also will comply with the following hazardous materials restrictions:
 - (a) Licensee shall not allow contamination or pollution of Federal lands, waters or facilities for which Licensee has responsibility for care, operation, and maintenance by its employees or agents and shall take reasonable precautions to prevent such contamination or pollution by third paties.

Page 2 of 9

Substances causing contamination or pollution shall include but are not limited to hazardous materials, thermal pollution, refuse, garbage, sewage effluent, industrial waste, petroleum products, mine tailings, mineral salts, misused pesticides, pestide containers, and any other pollutants.

- (b) Licensee shall comply with all applicable Federal, State, and local laws and regulations, and Reclamation policies directives and standards, existing or hereafter enacted or promulgated, concerning any hazardous material that will be used, produced, transported, stored, or disposed of on or in Federal lands, waters or facilities.
- (c) "Hazardous material" means any substance, pollutant, or contaminant listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, et seq., and the regulations promulgated pursuant to that Act.
- (d) Upon discovery of any event which may or does result in contamination or pollution of Federal lands, waters or facilities, Licensee shall initiate any necessary emergency measures to protect health, safety and the environment and shall report such discovery and full details of the actions taken to Reclamation. Reporting may be within a reasonable time period. A reasonable time period means within twenty-four (24) hours of the time of discovery if it is an emergency or by the first working day if it is a non-emergency. An emergency is any situation that requires immediate action to reduce or avoid endangering public health and safety or the environment.
- (e) Violation of any of the provisions of this Paragraph 8, as determined by the Reclamation, may constitute grounds for termination of this License. Such violations require immediate corrective action by Licensee and shall make Licensee liable for the cost of full and complete remediation and/or restoration of any Federal resources or facilities that are adversely affected as a result of the violation.
- (f) Licensee agrees to include the provisions contained in paragraphs (a) through (e) of this Paragraph in any subcontract or third-party contract it may enter into pursuant to this License.
- (g) Reclamation agrees to provide information necessary for Licensee, using reasonable diligence, to comply with the provisions of this Paragraph 8.
- 9. <u>Cultural Resources Protection.</u> Licensee shall immediately provide an oral notification to Reclamation's authorized official of the discovery of any and all antiquities or other objects of cultural, historic, or scientific interest on Reclamation lands. Licensee shall forward a written report of its findings to Reclamation's authorized official within 48 hours. Objects under consideration include, but are not limited to, historic or prehistoric ruins, human remains, or artifacts discovered as the result of activities under this easement. Licensee shall cease activity, stabilizeany disturbed area, and protect such discoveries until authorized to proceed by Reclamation's authorized official. Protective and mitigative measures specified by Rælamation's authorized official shall be the responsibility of the Grantee For purposes of this Paragraph9, Reclamation's authorized official shall beits ________.
- 10. <u>Discovery of Human Remains</u>. Licensee shall immediately provide an ord notification to Reclamation's authorized official of the discovery of human remains on Reclamation land. Licensee shall forward a written report of its findings to Reclamation's authorized official within 48 hours by certified

mail. Licensee shall cease activity, stabilizeany disturbed area and protect such discoveries until authorized to proceed by the Regional Archaeologist for Reclamation (91&78-5041). Licensee shall be responsible for compliance with any protective and mitigative measures specified by the Regional Archaeologist. For purposes of this Paragraph 9, Reclamation's authorized official shall be its

- 11. <u>Illegal Activity</u>. Licensee shall be responsible for any activity by Licensee or Authorized Users that is deemed to be illegal on Federal lands Such activity shall constitute grounds for revocation of this License.
- 12. <u>Revocation of License</u> Reclamation may revoke his License upon thirty (30) days written notice to Licensee if:
 - (a) Licensee's use of the land interferes with existing or proposed facilities, or
 - (b) The License Area is needed for any United States purpose, or
 - (c) The United States disposes of its interest in the License Area, or
 - (d) Licensee violates a term or condition of this License identified as grounds for revocation.
- 13. <u>Termination of License</u> This License will terminate, and all rights of Licensee hereunder will cease
 - (a) At the expiration of the Period of Use as provided by Paragraph 5; or
- (b) Without notice, upon default in payment to the United States of any installment of rental charges as provided by Paragraph 6, if applicable; or
- (c) On the date provided by written notice from Reclamation to Licensee served 120 days in advance thereof; or
- (d) After failure of Licensee to observe any condition of this License, on the tenth day following service of written notice on Licensee of termination because of failure to observe such condition.

Notices required under this Paragraph 13 shall be served by certified mail addressed to the respective postal addresses provided by the parties pursuant to Paragraph 21 and the mailing of any such notice properly enclosed, addressed, stamped, and certified, will be considered service. In the event that Licensee has prepaid any License fee pursuant to Paragraph 5 at the time of termination,Reclamation shall refund a pro rata portion of the fee intended to cover the post-termination period. If this License is terminated under Paragraph 12(d), Reclamation reserves the right to bar Licensee fom subsequent use of Federal lands associated with the Cachuma Project for a period of time determined byReclamation's Area Manager.

14. <u>Licensee's Obligations at Terminationor Revocation</u>. At the end of the Period of Use, or upon the sooner revocation or termination of this License for any reason, Licensee shall without delay, and at Licensee's sole expense, remove anystructure(s) or appurtenances installed in the License Area and quietly deliver to the United States possession of the License Area in a condition as good as on the effective date of this License, reasonable wear and damage by theelements excepted

Page 4 of 9

- 15. <u>Severability</u>. Each provision of this License shall be interpreted in such a manner as tobe valid under applicable law, but if any provision of this License shall be deemed or determined by competent authority to be invalid or prohibited, such provision shall be ineffective and void only to the extent of such invalidity or prohibition, but shall not be deemed ineffective or invalid as the remainder of such provision or any other remaining provisions, or of the License as a whole.
- 16. <u>Installations and Repair and Maintenance of License Area</u> Licensee shall install two electrically-operated gates to enhance security at Ortega Reservir. One gate shall be located on Ortega Ridge Road within the License Area, in approximately the location noted as Gate #1 on Exhibit B hereto. The second gate shall be located on Hunt Drive adjacent to the property identified in the Assessor's Records for Santa Barbara County as APN 005-090-040. Said gates shall be designed and installed in a manner approved by COMB and by the Santa Barbara County Fire Department. Subject to such approvals, both gates shall be operated by keypads, with keypad access onboth sides of each gate. Licensee shall make access information available only to Authorized Users Reclamation, COMB, the Montecito Water District, and the Santa Barbara County Fire Department. The installation of other structures or appurtenances in the License Area shall be subject to the requirements of this paragraph.

Licensee shall be responsible forundertaking, at Licensee's sole expense, all maintenance and repair of License Area during the Period of Use under this License. Such maintenance and repair shall include, but not be limited to, routine maintenance of the roadway, periodic paving of the roadway, removal of brush for fire clearance and public safety, and other care of the License Area as Licensee may determine.

| Installations, repair and maintenance shall be conducted in accordance with all applic | cable Federal, |
|--|----------------|
| State of California, and local safety and environmental regulations and to the satisfaction of C | COMB and |
| Reclamation's designated representative. Licensee shall notify COMB and Reclamation's de | signated |
| representative by telephone at and COMB at | _ 72 hours |
| prior to initiating any installation, repair or maintenance activity on the License Area. A proj | |
| construction schedule will be submitted to Reclamation and COMB prior to the commencem | ent ofany |
| construction or repair activity that will compromise use of the License Area for vehicular according | ess. |

- Liability Insurance Coverage. Licensee shall obtain and keep in force a Commercial General Liability policy of insurance protecting Licensee, and protecting the United States, COMB and Montecito Water District as additional insureds, against claims for bodily injury, personal injury and property damage based upon or arising out of the use of the License Area. Policy limits shall benot less than \$1,000,000 for each person/occurrence and \$2,000,000 aggregate for bodily injury or death, and not less than \$1,000,000 for property damage. Such insurance shall insure against the acts and omissions of all Authorized Users impacting the License Area. The endorsement naming the United States, COMB and Montecito Water District as additional insureds will be the ISO CG 2010 endorsement form or equivalent will reference the contract number of this License in the description portion of the endorsement form and will provide that the policy will not be canceled or reduced in coverage without ten (10) days prior written notice to Reclamation. Licensee shall require any contractors engaged in construction wdr in the License Area to carry liability insurance in comparable amounts and worker compensation coverage, and shall provide proof of same to Reclamation upon request.
- 18. <u>Responsibility for Damage</u> Damage to any Reclamation property, including but not lmited to the License Area and adjacentservice roads, access roads, culvert crossings, siphon barrel, farm bridge, fence

gates and posts resulting from the Licensee's activities under this License will be corrected promptly at Licensee's expense to the satisfaction of Reclamation and COMB. [Needs to be reworded for this particular situation.]

- 19. <u>Indemnity</u>. Licensee shall indemnify, defend, and hold harmless COMB and the Montecito Water District, and their directors, managers, officers, employees agent and representatives from any loss, damage, claim, cost, lien, action, suit, liability, or judgment (including, without limitation, attorney's fees and costs) arising from, resulting from, or in any way related to the operations or other activities of Licensee on any portion of the License Area. This indemnity shall survive the revocation or termination of the License.
- 20. Officials Not to Benefit. No Member of Congress shall be admitted to any share or part of any contract or agreement made, enteredinto, or accepted by or on behalf of the United States, or to any benefit to arise thereupon, including without limitation this License.
- 21. <u>Warranty of Licensee</u> Licensee warrants that no person or agency has been employed or retained to solicit or secure this License upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee except bona fide employees and bona fide commercial agencies maintained by the Licensee for the purpose of securing business. For breach or violation of this warranty, Reclamation will have the right to revoke this License without liability or in its discretion to require Licensee to pay the full amount of such commission, percentage, brokerage, or contingency fee to the United States.
- 22. Notices. Except as otherwise expressly provided by law or this License, any and all notices, invoices, or other communication required or permitted by this License or by law to be served on or delivered to or given to a party by another party to this License shall be in writing, and shall be deemed duly served, given or delivered when personally delivered to the party to whom it is directed or, in lieu of such personal service, two (2) days after such written notice is deposited in the United States mail, First Class, postage prepaid, addressed to the party at the address identified in this Paragraph 21 for that party in this License. Any party may change its address for purposes of this paragraph by giving written notice of such change to each other party in the manner provide in this paragraph.

| Reclamation | 1 (1) (1) 1 (2) (4) 1 (3) (5) (6) (7) (7) | Licensee |
|-------------------------|---|----------|
| AMENIA PARAL MELL | | |
| | , t** | |

IN WITNESS WHEREOF, this License is granted and accepted as of the date first above written

UNITED STATES OF AMERICA
By and through its Bureau of Reclamation, Department of the Interior

Ocean View Homeowners' Ass'n License

COMB

Page 6 of 9

| ITEM | #6 |
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| PAGE | |

| By: | | | |
|--|--|--------------|---------------------|
| Its Area Manager South-Central California Area Office Bureau of Reclamation | | | |
| | | | |
| ACCEPTED: | | | |
| Licensee, by signature of its authorized represen | tative below, agrees to | the terms ar | d conditions above. |
| | | | |
| OCEAN VIEW HOMEOWNERS' ASSOCIAT | ION | J¥ | |
| Ву: | Dat | | <i>4</i> |
| Title: | The second secon | | |
| ACKNOWLEDGED: | | | |
| BY Cachuma Operation and Maintenance Board Its Duly Authorized Representative | i Approved as | s to form: | |
| Ву: | By: | | |
| Title: | District I | Legal Counse | 1 |
| | | | |

Ocean View Homeowners' Ass'n License

Page 7 of 9

ITEM #_______

PAGE ______ 8

Exhibit "A" Legal Description

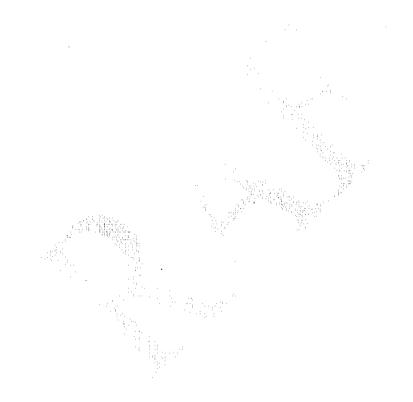
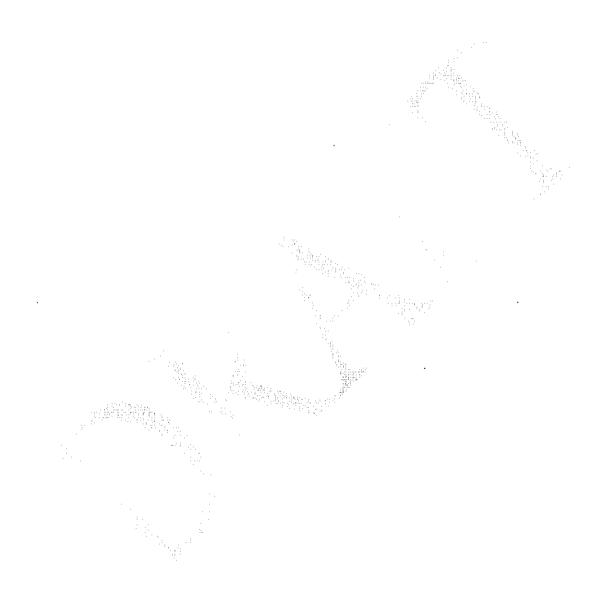


Exhibit "B" Plat Map



Ocean View Homeowners' Ass'n License

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ITEM #____6
PAGE ____(O___

SALUD CARBAJAL

First District Supervisor

JEREMY TITTLE

Executive Staff Assistant

MARY ELLEN WYLIE Administrative Assistant

ERIC FRIEDMAN Administrative Assistant



BOARD OF SUPERVISORS

105 East Anapamu Street Santa Barbara, California 93101

TELEPHONE: (805) 568-2186 FAX: (805) 568-2534

E-mail: supervisorcarbajal@sbcbosl.org

COUNTY OF SANTA BARBARA

BECEIVED

FEB 0 7 2008

CARTERIA. SEE STATE

February 5, 2008

Mr. C. Charles Evans, President Cachuma Operation and Maintenance Board 3301 Laurel Canyon Road Santa Barbara, CA 93105

Dear Mr. Evans,

Thank you for your letter regarding the potential threat of the quagga mussel to the ecosystem and infrastructure of Lake Cachuma. I am deeply concerned about this potential infestation.

I appreciate the background information and recommendations the Cachuma Operation and Maintenance Board has provided in the effort to be proactive in addressing the quagga mussel. I have forwarded a copy of your correspondence to Mike Brown, County CEO, and Dan Hernandez, Director of County Parks, for their review and to outline an appropriate action for the Board of Supervisors to consider.

I will continue to work with County staff and other stakeholders to identify and implement potential measures to prevent the quagga mussel from infesting Lake Cachuma. We will be in touch as to our course of action.

Again, thank you for taking the time to contact me on this important matter.

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> ITEM #___ PAGE ___



United States Department of the Interior

BUREAU OF RECLAMATION Mid-Pacific Regional Office 2800 Cottage Way Sacramento, California 95825-1898

FEB 0 8 2008

Honorable Elton Gallegly House of Representatives Washington, DC 20515

Dear Mr. Gallegly:

I am responding to your January 16, 2008, letter on behalf of Bureau of Reclamation Commissioner Robert Johnson. In your letter, you requested Reclamation's assistance in stopping the spread of the invasive quagga mussel. As you noted, the quagga can degrade water supply and quality, harm watershed habitats and endangered species, and negatively affect recreational activities and facilities.

Reclamation and our recreational managing partners are very concerned about the potential adverse consequences the quagga presents to both operational facilities and water supply. We have had a number of discussions regarding quagga infestation preventative measures with members of the Casitas Municipal Water District, the Cachuma Conservation Release Board, and the County of Santa Barbara.

Reclamation understands that preventative measures are currently being instituted at both Lake Casitas and Lake Cachuma. Prior to watercraft entry, mandatory inspections are taking place, and owners must confirm that their watercraft have not recently visited known infected quagga waters. Although each of these entities has certain unique interests, they are proactively approaching this serious matter in considering and developing alternatives to address the quagga invasion.

While the solution to this complex matter is a work in progress, Reclamation will continue to do what we can to assist all concerned in developing and implementing measures that are mutually acceptable. Should you require additional information, please do not hesitate to contact me at 916-978-5000.

Sincerely,

Michael R. Finnegan Acting Regional Director

cc: Honorable Elton Gallegly
Member, United States House of Representatives
2829 Townsgate Road, Suite 315
Thousand Oaks, CA 91361-3018

Continued on next page.

| ITEM | #7 |
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| PAGE | 2 |

cc: Continued from previous page.

Honorable Cathy McMorris Rodgers
Ranking Minority Member, Subcommittee on Water and Power
House Committee on Natural Resources
House of Representatives
Washington, DC 20515

Mr. Russ Bagerly President Casitas Municipal Water District 1055 Ventura Avenue Oakview, CA 93022

Mr. Roger E. Orr President United Water Conservation District 106 North 8th Street Santa Paula, CA 93060

Ms. Jan Abel President Cachuma Conservation Release Board 3301 Laurel Canyon Road Santa Barbara, CA 93105

> ITEM #_______ PAGE ________

ELTON GALLEGLY
24TH DISTRICT, CALIFORNIA
www.house.gov/gatleniv/

2309 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-0523 (202) 225-5811

2829 TOWNSGATE ROAD, SUITE 315 THOUSAND DASS, CA 91361 (800) 423-0023 (805) 497-2224

485 Ausal Road, Suite G-1A Solvang, CA 93463 (800) 423-0023 (805) 686-2525

Congress of the United States

House of Representatives Washington, DC 20515-0524

January 16, 2008

RECEIVED

JAN 26 2008

CHARLES AND LIST

COMMITTEES:

SUBCOMMITTEES:

SUBCOMMITTEES

RANKING MEMBER, EUROPE
 WESTERN HEMSPHERE

JUDICIARY

SUBCOMMITTEES

- VICE HANKING MEMBER, IMMIGRATION, CITIZENSHIP, REPUGEES, HORDER SECURITY, AND INTERNATIONAL LAW
- COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

NATURAL RESOURCES

SUBCOMMITTEE

■ ÎNSULAR AFFAIRS

HOUSE PERMANENT SELECT COMMITTEE ON INTELLIGENCE

SUCCOMMITTEE

 Terrorism, Human Intelligence, Analysis and Counterprelligence

Dear Commissioner Johnson,

Washington DC 20240-0001

Robert W. Johnson

1849 C Street NW

Bureau of Reclamation

Commissioner

I am writing to request your assistance in stopping the spread of a dangerous invasive species from infesting lakes and waterways in my congressional district and across the western United States.

As you know, quagga mussels were discovered in Lake Mead in January, 2007. Since then, quagga mussels have been confirmed in other lakes in Arizona and California that receive water from the Colorado River. And I'm sure you know how Quagga mussels can have a serious impact on a region. Water supply and quality can be degraded and watershed habitats and endangered species can be harmed. Additionally, recreational activities and facilities can be negatively affected.

There are three major lakes located within my congressional district and all three have dams built and/ or managed by the Bureau of Reclamation (BOR): Lake Casitas, which is managed by the Casitas Municipal Water District, Lake Piru, which is managed by the United Water Conservation District, and Lake Cachuma, which is managed in part by the Cachuma Conservation Release Board and the County of Santa Barbara. All of these agencies are concerned by the spread of the quagga mussel by boats and watercraft that may have been used in infested waters. A ban on recreational boating has been discussed at Lake Casitas, which would negatively impact the local economy, which depends on the fact that Lake Casitas is one of the region's most popular locations for recreational boating and for fishermen. Such a ban cannot be allowed.

I understand that the BOR is aiding officials at Lake Mead with a program to inspect and disinfect all recreation boats and watercraft entering and leaving the lake. I request that the BOR work with the staff at Lake Casitas, Lake Piru, and Lake Cachuma to implement similar programs so that our region's water infrastructure is not affected by the spread of the quagga mussel.

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Thank you for your consideration of this request and I look forward to your prompt reply.

Sincerely,

ELTON GALLEGLY Member of Congress

EG:bsf

cc: Russ Bagerly, President, Casitas Municipal Water District Roger E. Orr, President, United Water Conservation District Jan Abel, President, Cachuma Conservation Release Board The Honorable Cathy McMorris-Rodgers, Ranking Member, Subcommittee on Water and Power, House Committee on Natural Resources

CACHUMA OPERATION AND MAINTENANCE BOARD

3301 LAUREL CANYON ROAD

SANTA BARBARA, CALIFORNIA 93105-2017

TELEPHONE (805) 687-4011 FAX (805)569-5825

www.ccrb-comb.org

contactus@cachuma-board.org

February 12, 2008

Honorable Elton Gallegly Member U.S. House of Representatives 2309 Rayburn House Office Building Washington, DC 20515-0523

485 Alisal Road, Suite G-1A Solvang, CA 93463

Re: Quagga Mussel Danger for Lake Cachuma

Dear Congressman Gallegly:

The Board of Directors of the Cachuma Operation and Maintenance Board (COMB) was extremely disappointed to see your letter to Robert W. Johnson, Commissioner of the Bureau of Reclamation dated January 16, 2008 in which, among other things, in discussing the possible ban on recreational boating, you stated: "Such a ban cannot be allowed."

As we believe you are aware, COMB is a joint powers authority made up of the City of Santa Barbara, Goleta Water District, Montecito Water District, Carpinteria Valley Water District and the Santa Ynez River Water Conservation District, Improvement District #1. COMB is responsible for the operation and maintenance of the Cachuma Transferred Project Works which generally constitute those facilities consisting of the Tecolote Tunnel, the South Coast Conduit System and related appurtenances, all of which are for the purpose of supplying potable water to the residents of the five Member Units.

The primary purpose of the Cachuma Project is to provide potable water. The recreational use of Lake Cachuma is secondary to this primary purpose and the primary purpose must be protected even if at the expense of the secondary recreational purposes. In your letter you only consider the negative impacts on the local economy if private boats are banned, but give no consideration to the huge and permanent financial impacts if the water delivery systems are impacted. If this happens, you can expect demands that congress provide federal funds to offset these impacts.

COMB has requested the County of Santa Barbara, the recreational operator of Lake Cachuma and the Bureau of Reclamation to take a proactive stance in preventing an infestation by the Quagga mussel and its relative, the Zebra mussel from Lake Cachuma including a temporary ban on private boats until permanent protective measures can be put into operation. In this connection, I am enclosing copies of our letters of January 23, 2008 to Mr. Salud Carbajal, Chair of the Santa Barbara County Board of Supervisors and Mr.

Carpinteria Valley Water District
City of Santa Barbara
Goleta Water District
Montecito Water District
Santa Ynez River Water Conservation District, Improvement District #1
General Manager/Secretary of the Board, Kathleen A. Rees

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Michael R. Finnigan, acting Regional Director of the U.S. Bureau of Reclamation in Sacramento. As you can see, we have not suggested a permanent ban of private boats from Lake Cachuma, but have suggested that some very serious proactive measures be taken and that private boats be banned pending the implementation of satisfactory methods of preventing infestation.

We strongly suggest that you step away from the position that a ban cannot be allowed. Certainly, the loss of some recreation on Lake Cachuma could have a financial impact, but the infestation of Lake Cachuma by the invasive Quagga mussel and its cousin the Zebra mussel will cause untold financial consequences that will last for decades to come.

Thank you for your consideration in this matter.

Sincerely,

C. Charles Evans

President of the Board

cc: Charles Hamilton, Manager Carpinteria Valley Water District
Rebecca Bjork, Interim Water Resources Manager, City of Santa Barbara
Kevin Walsh, Manager, Goleta Water District
Tom Mosby, Manager, Montecito Water District
Chris Dahlstrom, Manager, SYR Water Conservation District ID No.1

Enclosures.

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CACHUMA OPERATION AND MAINTENANCE BOARD

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contactus@cachuma-board.org

February 12, 2008

Robert W. Johnson, Commissioner Bureau of Reclamation 1849 C Street Northwest Washington, DC 20240-0001

Re: Quagga Mussel Danger for Lake Cachuma

Dear Commissioner Johnson:

As I am sure you are aware, the Cachuma Operation and Maintenance Board (COMB) is the operator of the Transferred Project Works of the Cachuma Project. We recently received a copy of the letter from Congressman Elton Gallegly to you dated January 16, 2008 in which, among other things, he asserts that a ban of private boating on Lake Cachuma "cannot be allowed".

COMB, in response to the Quagga mussel threat, has written to the Santa Barbara County Board of Supervisors as operator of the recreational facilities of Lake Cachuma and to the Acting Regional Director of the Bureau of Reclamation suggesting that certain proactive measures be taken to help prevent the infestation of Lake Cachuma with the Quagga mussel which included, among other things, a temporary ban on private boating, until such time as effective measures could be put in place to prevent infestation. Copies of our letters to Mr. Salud Carbajal, Chair of the Santa Barbara County Board of Supervisors and to Mr. Michael R. Finnigan, Acting Regional Director of the Bureau of Reclamation are enclosed. Also enclosed is our more recent letter to Congressman Gallegly responding to his letter to you.

COMB urgently requests that the Bureau of Reclamation undertake the reasonable proactive measures that have been suggested to prevent the infestation of the Cachuma Project with the Quagga mussel and the Zebra mussel. If these measures are not undertaken, and infestation does occur, the damages that will result will continue for decades and will be incalculable. As we have pointed out to Congressman Gallegly, the primary purpose of the Cachuma Project is to provide a reliable water supply. The recreational uses are secondary to that primary purpose, and the primary purpose must be protected.

Thank you for your consideration.

Carpinteria Valley Water District
City of Santa Barbara
Goleta Water District
Montecito Water District
Santa Ynez River Water Conservation District, Improvement District #1
General Manager/Secretary of the Board, Kathleen A. Rees

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Sincerely,

C. Charles Evans, President of the Board

C. Charles Evans

CACHUMA OPERATION AND MAINTENACE BOARD

cc: Charles Hamilton, Manager Carpinteria Valley Water District
Rebecca Bjork, Interim Water Resources Manager, City of Santa Barbara
Kevin Walsh, Manager, Goleta Water District
Tom Mosby, Manager, Montecito Water District
Chris Dahlstrom, Manager, SYR Water Conservation District ID No.1

Enclosures

CACHUMA OPERATION AND MAINTENANCE BOARD

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contactus@cachuma-board.org

February 12, 2008

The Honorable Lois Capps
Member, United States House of Representatives
23rd Congressional District
101 W. Anapamu Street, Suite C
Santa Barbara, CA 93101

Re: Quagga Mussel Danger for Lake Cachuma

Dear Congresswoman Capps:

I am writing on behalf of the Cachuma Project Member Units regarding a recently identified, serious threat to Lake Cachuma and the Cachuma Project water supply facilities at the Lake. We are very concerned about a potential infestation of quagga mussels at Lake Cachuma that may be introduced into the Lake via private recreational boats. I would like to ask your assistance with preventing this from occurring.

The Cachuma Member Units, acting through the Cachuma Operation and Maintenance Board ("COMB"), do not have jurisdiction over the recreational activities at Lake Cachuma. The recreational area is managed by the County of Santa Barbara Parks Department under a contract with the U.S. Bureau of Reclamation ("Reclamation"). Consequently, the County is ultimately responsible for preventing quagga mussels from entering the Lake, and for removing mussels and maintaining the water delivery facilities should they become encrusted with mussels. This could cost millions of dollars and be a perpetual, ongoing expense because once quagga mussels are found in the Lake they cannot be eradicated.

The COMB Board of Directors recently sent the enclosed letters to the County and Reclamation requesting that an immediate temporary ban on private boating be put in place for a minimum of six months, or until every possible preventative measure can be put in place, including disinfection stations. We strongly urge you to support our position to prevent what could be a catastrophic impact to the water supply facilities and to the ecosystem in Lake Cachuma. We are not suggesting that fishing be curtailed. There are fishing boats for rent at Lake Cachuma that can be used in the interim.

Congressman Gallegly is opposed to such a ban. Although he recognizes that water supply facilities could be negatively affected, he places greater importance on fishermen and recreation than on protecting these vital public facilities. A letter from Mr. Gallegly to Reclamation's Commissioner, Robert Johnson, is also enclosed.

Carpinteria Valley Water District
City of Santa Barbara
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Montecito Water District
Santa Ynez River Water Conservation District, Improvement District #1
General Manager/Secretary of the Board, Kathleen A. Rees

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Thank you for your consideration of this matter. Any assistance you can provide would be greatly appreciated. If you have any questions, please contact our General Manager, Kate Rees, at (805) 687-4011.

Sincerely,

C. Charles Evans

President of the Board

cc: Elton Gallegly, Member of Congress

Russ Bagerly, President, Casitas Municipal Water District

Bruce E. Dandy, President, United Water Conservation District

The Honorable Cathy McMorris-Rodgers, Ranking Member, Subcommittee on Water

and Power, House Committee on Natural Resources

Charles Hamilton, Manager Carpinteria Valley Water District

Rebecca Bjork, Interim Water Resources Manager, City of Santa Barbara

Kevin Walsh, Manager, Goleta Water District

Tom Mosby, Manager, Montecito Water District

Chris Dahlstrom, Manager, SYR Water Conservation District ID No.1

Enclosures

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February 12, 2008

Mr. David Bolland Senior Regulatory Advocate Association of California Water Agencies 910 K Street, Suite 100 Sacramento, CA 95814-3577

Re: Quagga Mussel Danger

Dear Mr. Bolland:

I am the President of the Cachuma Operation and Maintenance Board ("COMB") in Santa Barbara, an active member of ACWA. The Cachuma Project, which includes Lake Cachuma, Bradbury Dam, and the conveyance facilities along the south coast of Santa Barbara, is owned by the Bureau of Reclamation ("Reclamation"). It is operated and maintained by COMB on behalf its five Member Agencies (City of Santa Barbara, Goleta, Montecito, and Carpinteria Valley Water Districts, and Santa Ynez River Water Conservation District, Improvement District No. 1), who hold full entitlement for the water supply provided by Lake Cachuma.

Our General Manager, Kate Rees, attended the Quagga Mussel session at the ACWA Fall Conference in Indian Wells and found it very informative regarding the imminent serious threat to every water supply canal and reservoir in the State of California. COMB and each of the Cachuma Member Agencies are gravely concerned about an infestation of quagga mussels at Lake Cachuma. I am writing to request that ACWA support this important issue to affect emergency state and federal legislation to assist with the cost of implementing preventative measures to keep quagga mussels out of water bodies in the state not yet infected, and the cost of removing quagga mussels and associated long-term maintenance for facilities that are already infected.

As I am sure you know, the quagga mussel was discovered in Lake Mead on January 6, 2007, and has spread rapidly to the four western states. It has been found in more than a dozen locations in the state including the Colorado River Aqueduct, Lake Havasu, Lake Mojave, Lake Powell, Lake Matthews near Riverside, and has now moved into five reservoirs in San Diego County as well. In addition, the zebra mussel, a close relative of the quagga mussel, has very recently been discovered in a Hollister-area reservoir in San Benito County. Lake Wolford and Lake Cuyamaca have imposed a ban on private boats until high-powered, heated sprayers can be installed. At Lake Poway, officials have banned float

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tubes, private motors, anchors and live-bait containers. The rate of reproduction and growth of the quagga mussels is the most experts have ever seen, due to warmer temperatures, abundant food supply, and calcium available in these waters. This has resulted in a direct threat to every county in the state, including Santa Barbara County.

Quagga mussels and their free-floating larvae spread to waters from fishing boats, motors, hull surfaces, bait tanks, and boat trailers. They "hitch hike" on boats that have been in infested water bodies, and then enter a new water body when the boat is launched. The mussel's ability to rapidly colonize on soft and hard surfaces clogs water intake and outlet structures, hampering the flow of water. The wet surfaces of all objects, such as pipes, valves, pumps, sensors, and other hydraulic devices can become completely incrusted with the mussels. And it is virtually impossible to eradicate them once they are established. If they do enter Lake Cachuma, they will severely impact all Cachuma Project physical facilities, including the Bradbury Dam radial gates, intake and outlet structures to the mainstem Santa Ynez River and Hilton Creek, Tecolote Tunnel, valving and piping at the north and south portals, the South Coast Conduit all the way to the Corona del Mar and Cater Water Treatment Plants, and the water treatment plants themselves. In addition, once in the Lake, quagga mussels could enter the State Water Pipeline through the Bradbury Dam outlet works, which in turn could impact each State Water turnout on the Santa Ynez River.

The quagga and zebra mussels have caused an estimated \$100 million a year in damages in the eastern United States and Canada. The Metropolitan Water District has already spent nearly \$10 million over the last 18 months on mussel control measures. If Lake Cachuma becomes infested, it will cost hundreds of thousands of dollars annually to remove the mussels and maintain the water delivery system that provides this vital resource to some 300,000 residents on the South Coast and in the Santa Ynez Valley, as well as thousands of visitors to Santa Barbara County. The local water agencies do not have the financial resources needed to combat this huge threat. Therefore, state or federal money is needed to address this critical emergency.

Prevention is critical. This threat is from the recreational use of boats on Lake Cachuma. Consequently, COMB has requested that Reclamation instruct the County of Santa Barbara, as the operator of the recreational facility under contract with Reclamation, to take all available steps to protect this valuable resource, including temporarily closing the Lake to private boats in order to implement the following additional preventative measures.

- 1. Carry out thorough and adequate inspections of all boats entering the County Park.
- 2. Obtain signed affidavits from boat owners as they enter the Park that their boat is clean and dry, and that it has not been in infected waters.

- 3. Establish a decontamination protocol that boat owners must follow for boats and other recreational equipment.
- 4. Purchase and install high-powered, heated, sprayers and decontamination stations, and require that all boats with ANY potential for harboring quagga mussels or vellegers be decontaminated prior to entering the Lake.
- 5. Continue regular inspections of the Lake, boating facilities, and Cachuma Project facilities and equipment. Expand the current inspections of the Lake to include diving inspections and plankton tows.
- Make operational the boat registration tracking system being 6. developed by the Department of Fish and Game for all boats. Turn away all boats that have been in infected waters unless owner can demonstrate the boat has been in dry dock for a minimum of 10 days.
- 7. Develop an exit inspection program.
- 8. Revise public information handouts to inform the public that all of these measures will be strictly enforced.

All of these measures cost money. However, if they are not carried out, permanent annual maintenance costs in the hundreds of thousands of dollars will be incurred if quagga mussels infest Lake Cachuma. The County of Santa Barbara has little in the way of discretionary funding to carry out these measures, and the Park's revenue will be reduced if private boats are restricted from entering the Lake. Therefore, we respectfully request that ACWA take up this cause to secure funding on behalf of the Cachuma Project and every other water supply project in the state.

Very truly yours,

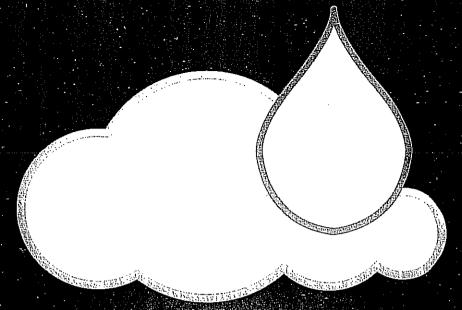
C. Charles Evans

President of the Board

Chuck Evans

cc: Charles Hamilton, Manager, Carpinteria Valley Water District Rebecca Bjork, Interim Water Resources Manager, City of Santa Barbara Kevin Walsh, Manager, Goleta Water District Tom Mosby, Manager, Montecito Water District Chris Dahlstrom, Manager, SYR Water Conservation District ID No.1

kr.comb/quagga/ACWA ltr 021208



41st Annual

Mid Pacific Region Mater Olsers Conference

January 23-25, 2008 Reno, Nevada

2008 MID PACIFIC REGION WATER USERS CONFERENCE SCHEDULE OF EVENTS

PLEASE NOTE: In response to attendee requests, we have added "Concurrent Session Workshops" that will run at the same time as General Session presentations on Thursday. Concurrent sessions are featured in gray boxes below the General Session presentation for that time slot.

WEDNESDAY, JANUARY 23

7:30am-5:00pm

REGISTRATION

8:00am

CONTINENTAL BREAKFAST

8:30am-11:15am

CALL TO ORDER and GENERAL SESSION

Welcome and Description of Conference Events: Jeff Bryant, Firebaugh Canal Water District, Chair, WUC Planning Committee

"What's Happening Locally" - Nevada Governor Jim Gibbons (invited)

Keynote Speaker: Robert Johnson - Commissioner, U.S. Bureau of Reclamation - "Challenges and Opportunities"

U.S Bureau of Reclamation: "What's on the Horizon?"

John Davis, Acting Regional Director, Mid Pacific Region

Frank Michny, Assistant Regional Director - Technical Services, Mid Pacific Region Katherine Thompson, Assistant Regional Director - Support Services, Mid Pacific Region

"Fish, Critters, Man – the New Paradigm?" – Panel Discussion on the question and how that is (or is not)

reflected in the Upcoming Biological Opinions, Recovery Plans, and Potential ESA Regulatory Changes Steve Thompson, Manager, U.S. Fish & Wildlife Service, Cal/Nev Operation Office, Sacramento

Scott Hill, Division Manager, NOAA/NMFS

Frank Michny, Assistant Regional Director - Technical Services, USBR Mid Pacific Region

11:30am-12:45pm LUNCHEON and PROGRAM

F. Gordon Johnston Award Presented by Robert Stackhouse, CVP Water Association

Honorariums - Recently Retired Mid-Pacific Region Leaders

1:00pm-5:00pm

FIELD TRIP: Tour of Naval Air Station TACTS and Top Gun

The Naval Air Station TACTS (Tactical Aircrew Training System) tour will include Electronic Warfare training sessions to include air to air combat training scenarios, surface to air threats, ground threats and early warning radar.

The Top Gun portion will include a tour of the Fleet Training Building presented by a pilot active in a base squadron.

5:30pm-7:30pm

EXHIBITOR RECEPTION

Complimentary Cocktails, Hors d'oeuvres, and Visits with Exhibitors

THURSDAY, JANUARY 24

7:30am-5:00pm

REGISTRATION

8:00am-9:15am

BREAKFAST and PROGRM

Keynote Speaker: Lester Snow, Director, California Department of Water Resources

9:30am-11:00am GENERAL SESSION - The Bay Delta

Panel Discussion on the Various Bay Delta Programs and Initiates, How They Interact and How the Programs will Work Together and Result in an Implementable Overall Program

Moderated by Jason Peltier (Chief Deputy General Manager, Westlands Water District), the panel will include representatives from the Delta Vision Task Force, the Levee Integrity Program, the Bay-Delta Conservation Plan, CALFED, and the Integrated Regional Water Management Program

| 9:30am-10:10am GONCURRENT SESSION WORKSHOP | /l # | 8 |
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| Tynns Burley Senior Project Manageri, Santa Clara Valley Water District, Moderator. PAG | <u> </u> | 2 |
| Katherine Thompson, Assistant Regional Director for Support Services, USBR Mid Pacific Region Kathleen Burks, Regional Financial Manager, USBR Mid Pacific Region | Cor | ntinued 🦃 |

2008 MID PACIFIC REGION WATER USERS CONFERENCE SCHEDULE OF EVENTS (CONTINUED)

THURSDAY, JANUARY 24 (continued)

10:15an-11:00an GONGURRENT SESSION WORKSHOP

Update on Developments In Water Accounting—A Panel Discussion
Anthea Hansen Assistant Manager, Del Ruerto Water District Moderator

Julia McGinnis BORWORKS Project Manager, USBR Mid Pacific Region

- Yolanda Wesson, Ratesetting Services Branch Manager, USBR Mid Pacific Region

11:00am-12:00pm **GENERAL SESSION—Wanger Decisions**

Panel Discussion on Immediate Stressors and Alternatives to Continue Critical Water Deliveries South of the Bay Delta in 2008, 2009, etc.

Chris Dahlstrom, General Manager, Santa Ynez River WCD, ID #1, Moderator

Greg Wilkinson, Partner Attorney, Best, Best & Krieger

Daniel O'Hanlon, Shareholder, Kronick, Moskovitz, Tiedemann & Girard

Chris Scheuring, Managing Counsel, Natural Resources and Environmental Division, California Farm Bureau Federation

Deborah Wordham, Deputy Attorney General, Office of the California Attorney General

1:00am-12:00pm GONGURRENT SESSION WORKSHOP

Folsom Dam Effects of SOD Activities and Re-Operation Studies on Water Contractors

Garth Hall, East Bay Municipal Unlin District, Moderator.

Mike Emnegan, Manager Central California Area Office: USBR Mid Pacific Region Jems/Toenjes: Consultant: Northern California Power Agency Russ Harrington: Financial Analyst: Westlands Water District

12:15pm-1:45pm LUNCHEON and PROGRAM

Washington Perspectives - Greg Wang, Partner, The Ferguson Group

Klamath, Newlands, and Cachuma Field Reports - A Panel Discussion

Greg Addington, Executive Director, Klamath Water Users Association

Daye Overholt, Project Manager, Truckee-Carson Irrigation District

Ernie Schank, Board Chairman, Truckee-Carson Irrigation District

Chris Dahlstrom, General Manager, Santa Ynez River WCD, ID #1

2:00pm-2:45pm GENERAL SESSION

Climate Change - The Family Farm Alliance - Dan Keppen, Executive Director, Family Farm Alliance

OOpm-2:45pm CONGURRENT SESSION WORKSHOP

PARReport Results of CVETA Program Activity Review

Frank Michny Assistant Regional Director for Technical Services, USBR Mid Pacific Region

John Engbring Deputy Manager Cal/Nev Operations Office, U.S. Fish & Wildlife Service

2:45pm-3:30pm GENERAL SESSION

2007 Farm Bill - Programs that Help Water Districts and the Environment

Dan Keppen, Executive Director, Family Farm Alliance, Moderator

Marc Kelley, Advocate, Sonoma County Water Agency

Michael Powelson, Director of Agency Relations, The Nature Conservancy

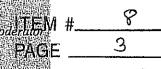
2:45pm-3:30pm CONCURRENT SESSION WORKSHOP

Water and Power Contractors Perspective on CPAR Report and the CPAR Process

Ara: Azhderian Water Policy Administrator, SanyLus & Delta Mendota Water Authority, Moderato #_

Jerry Toenyes, Gonsultant, Northern California Power Agency

Frances Brewer: Project Manager, Santa Clara Valley Water District



2008 MID PACIFIC REGION WATER USERS CONFERENCE SCHEDULE OF EVENTS (CONTINUED)

THURSDAY, JANUARY 24 (continued)

3:45pm-4:15pm

GENERAL SESSION

The SJR Settlement - Ron Jacobsma, General Manager, Friant Water Authority

3:45pm-4:15pm

CONCURRENT SESSION WORKSHOP

Available Water-Management/Measurement Tool for Contractors

Tracy/Slavm Resources Management, USBR Mid Pacific Region

Stuart Styles Director of Irragation Training and Research Center, Cal Poly SLO

Brad Laffins, SCADA Technician, Chico State

4:15pm-4:45pm

GENERAL SESSION

The San Luis Unit Collaborative Drainage Settlement Proposal

Tom Birmingham, General Manager and Chief Counsel, Westlands Water District

:15pm=4:45pm: GONCURRENT SESSION WORKSHOP

GAUFED Activities

4. Candusti Regional Planning Officer USBR Mid Pacific Region

Bill Rohver Deputy Planning Officer USBR Mid Pacific Region Speaker TDA Special Projects Officer USBR Mid Pacific Region

6:30pm-9:30pm

BOWLING FOR DOLLARS - National Bowling Stadium

A new twist on one of your favorite events! Bowling, poker, cash & merchandise prizes, cocktails, and dinner with friends. See the enclosed flyer for more information on this new and improved event!!

FRIDAY, JANUARY. 25

8:30am-10:45am

BREAKFAST and PROGRAM

Keynote Speaker: Brenda Burman, Deputy Assistant Secretary for Water and Science, US Department of the Interior

ETA Through M4E - Reclamation's Managing for Excellence Program - Overview, Status and What Remains Larry Todd, Deputy Commissioner, Policy and Administration, U.S. Bureau of Reclamation

2008 Water Operations Under the Wanger Decisions -

A Panel Discussion on What is Known 30 days into 2008 Operations, What is Not, and ...

Ron Milligan, Central Valley Project Operations Manager, USBR Mid Pacific Region Tom Boardman, Water Resources Engineer, San Luis and Delta-Mendota Water Authority

2008 Water Supply Outlook - U.S. Bureau of Reclamation

Paul Fujitani, Central Valley Operations Christine Karas, Klamath Basin Deputy Area Manager Elizabeth Rieke, Lahontan Basin Area Manager Michael Jackson, South Central California Area Office

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Closing Comments and Cash Raffle:

*HOTEL AND CONFERENCE REGISTRATION INFORMATION IS ENCLOSED *****

The Mid-Racific Region Water Users Conference is an annual conference attended by Managers, Directors, O&M Personnell Consultants; and Government Agency Representatives/from districts served by the United States/Bureau of Reclamation facilities in California: Nevada, and Oregon's The Alst Annual Mid-Pacific Region Water Users: Conference will be held at the Eldorado Hotel and Casino in Reno, Nevada January 23-25, 2008. The deadline for Conference:pre-registration is January 8, 2008.