



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

**Monday, September 26, 2022  
1:00 P.M.**

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**BY TELECONFERENCE**

**NOTICE:** Pursuant to California Government Code sections 54953(b)(1), (b)(2), (e)(1) and (e)(3) (AB 361), members of the Cachuma Operation & Maintenance Board (COMB) Board of Directors, staff, and members of the public will participate in this meeting electronically by video and/or teleconference, as described below.

**HOW TO OBSERVE THE MEETING**

Members of the public may observe the meeting as set forth below.

**Join via video conference:**

<https://us02web.zoom.us/j/83044883758?pwd=EHWLwE80yyg1tFc3noe119gdYum66O.1>

Passcode: 413926

**Join via teleconference:**

US: +1 669 900 6833 Conference ID: 830 4488 3758 Passcode: 413926

**HOW TO MAKE A PUBLIC COMMENT**

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

**By Video:** Those observing the meeting by video may make comments during designated public comment periods using the “raise hand” feature. Commenters will be required to unmute their respective microphone when providing comments.

**By Telephone:** Those observing the meeting by telephone may make comments during the designated public comment periods by pressing \*9 on the key pad to indicate such interest. Commenters will be prompted to press \*6 to unmute their respective telephone when called upon to speak.

**AMERICANS WITH DISABILITIES ACT**

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

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

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**Monday, September 26, 2022**

**1:00 PM**

**AGENDA**

**NOTICE:** This Meeting shall be conducted through remote access as authorized and in accordance with Government Code section 54953 and the California Governor's Executive Order's N-08-21, N-15-21 and as amended by AB 361.

1. **CALL TO ORDER, ROLL CALL**
2. **PUBLIC COMMENT** *(Public may address the Board on any subject matter within the Board's jurisdiction. See "Notice to the Public" below.)*
3. **RESOLUTION NO. 766 – CONFIRMATION OF LOCAL EMERGENCY - RATIFICATION OF GOVERNOR NEWSOM'S DECLARED STATE OF EMERGENCY (HEALTH AND SAFETY)**  
Action: Recommend adoption by motion and roll call vote of the Board
4. **CONSENT AGENDA** *(All items on the Consent Agenda are considered to be routine and will be approved or rejected in a single motion. Any item placed on the Consent Agenda may be removed and placed on the Regular Agenda for discussion and possible action upon the request of any Board Member.)*  
Action: Recommend Approval of Consent Agenda by motion and roll call vote of the Board:
  - a. Minutes of August 22, 2022 Regular Board Meeting
  - b. Investment of Funds
    - Financial Reports
    - Investment Reports
  - c. Review of Paid Claims
5. **VERBAL REPORTS FROM BOARD COMMITTEES**  
Receive verbal information regarding the following committee meetings:
  - Lake Cachuma Oak Tree Committee Meeting – September 16, 2022
6. **LAKE CACHUMA OAK TREE RESTORATION PROGRAM – FISCAL YEAR 2022-23**  
Action: Recommend approval by motion and roll call of the Board
7. **LAKE CACHUMA EMERGENCY PUMPING FACILITY SECURED PIPELINE PROJECT – STATUS REPORT**  
Receive and file a preliminary status report on the Lake Cachuma Emergency Pumping Facility Secured Pipeline Project

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**8. GENERAL MANAGER REPORT**

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

- Administration / Staff Training
- Virtual Meetings

**9. ENGINEER'S REPORT**

Receive information from the COMB Engineer, including but not limited to the following:

- Climate Conditions
- Lake Elevation Projection
- Infrastructure Improvement Projects

**10. OPERATIONS DIVISION REPORT**

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

- Lake Cachuma Operations
- Operation and Maintenance Activities

**11. FISHERIES DIVISION REPORT**

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

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

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

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

- Maintenance and Monitoring

**13. MONTHLY CACHUMA PROJECT REPORTS**

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

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

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

**15. [CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: POTENTIAL LITIGATION**

- a. [Government Code Section 54956.9(d)(1)]  
Name of matter: *Kimball-Griffith L.P. v. Brenda Wren Burman, et al.*, Case No. 2:20-cv-10647  
– Request for Declaratory and Injunctive Relief
- b. Potential Litigation: Conference with Legal Counsel
- c. Potential Litigation: Conference with Legal Counsel

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**16. RECONVENE INTO OPEN SESSION**

[Government Code Section 54957.7]

Disclosure of actions taken in closed session, as applicable

[Government Code Section 54957.1]

15a. Name of matter: *Kimball-Griffith L.P. v. Brenda Wren Burman, et al.*, Case No. 2:20-cv-10647  
– Request for Declaratory and Injunctive Relief

15b. Potential Litigation: Conference with Legal Counsel

15c. Potential Litigation: Conference with Legal Counsel

**17. MEETING SCHEDULE**

- **October 24, 2022 at 1:00 PM**
- **Board Packages available on COMB website [www.cachuma-board.org](http://www.cachuma-board.org)**

**18. COMB ADJOURNMENT**

**NOTICE TO PUBLIC**

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

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

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

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

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

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# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2022
Submitted by:	Edward Lyons
Approved by:	Janet Gingras

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**SUBJECT:** Resolution No. 766 – Confirmation of Local Emergency – Ratification of Governor Newsom’s Declared State of Emergency (Health and Safety)

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**RECOMMENDATION:**

The Board of Directors receive an update on the existing state of emergency and local COVID-19 status and provide direction to staff, as appropriate, including adopting Resolution No. 766 pursuant to the requirements of AB 361, authorizing remote teleconference meetings of the Board of Directors and its Committees pursuant to Government Code Section 54953(e) (Brown Act).

**SUMMARY:**

On March 4, 2020, Governor Gavin Newsom declared a state of emergency to exist due to the COVID-19 pandemic and its impact on human health and safety. Governor Newsom issued Executive Order N-29-20 which allows local agencies to meet virtually rather than in-person while still complying with state open-meeting laws (e.g., Brown Act), using videoconferencing technology to decrease meeting attendees’ potential exposure to COVID-19. The pandemic still persists and the declared state of emergency remains in place. COMB has met successfully and in compliance with the Brown Act using a commercial videoconferencing platform and providing for public access.

The Executive Order N-29-20 waiver of Brown Act meeting requirements expired on September 30, 2021. Assembly Bill 361 (Open meetings: state and local agencies: teleconferences) was signed into law on September 16, 2021 and, effective October 1, 2021, applies to local agencies intending to meet virtually in the interest of reducing COVID-19 exposure. AB 361 requires public agencies to regularly review and find an ongoing need to hold public meetings by teleconference. Accordingly, COMB must make the following findings by majority vote within 30 days of holding a meeting by teleconference for the first time under AB 361, then every 30 days thereafter. The requirements that allow the board to meet virtually are:

- a) a governor-declared state of emergency is in effect;
- b) a majority of the Board must vote that, as a result of the emergency, meeting in person would present imminent risk to the health or safety of attendees.

The COMB Board of Directors has continued to review and consider the ongoing circumstances of the declared state of emergency since the effective date of Assembly Bill 361 and, based on those circumstances, has authorized and re-authorized the adoption of resolutions acknowledging the emergency conditions for each 30-day period.

To date, Governor Newsom has not rescinded the emergency authorization executive order. He has released a pandemic exit plan called the SMARTER plan. The SMARTER plan is an acronym for Shots, Masks, Awareness, Readiness, Testing, Education, and Rx and focuses on the next phase of the pandemic and learning to live with an endemic. It will continue to emphasize vaccines and boosters as an essential prevention in

spreading the disease.

On September 28, 2021, Santa Barbara County Health Officials issued a social distancing recommendation related to the passing of AB 361. On February 16, 2022, Santa Barbara County Health Officials released an extension to continue a social distancing recommendation and continue teleconferencing options for public meetings.

The California Department of Public Health releases data tracking the spread of the coronavirus in Santa Barbara County. About 1 out of every 4 people in the county has tested positive, 111,746 in total. Over the past week, the county has averaged 66 new cases and 0.1 new deaths per day. On Tuesday, 285 new cases and 1 deaths were reported. There are now 34 patients admitted to county hospitals with a confirmed case of COVID-19, a change of -19% from two weeks ago. Of those, 0 are in an intensive care unit.

Last year, in response to the COVID-19 local emergency and global pandemic, staff established operational protocols and implemented business continuity practices to ensure the safety of our employees and the community. These protocols and procedures communicated the serious nature of this pandemic and outlined specific preventative and proactive measures for staff to follow such as heightened hygiene routines and workplace / social distancing practices. In addition, critical essential functions and designation of key personnel were defined with necessary situational actions for continuity of operations.

COMB staff is comprised of a small team of fifteen full time employees (and three part time employees) who are classified as essential critical infrastructure workers according to the State Public Health Officer and Executive Orders signed by Governor Newsom. If two or three of COMB's essential workers become affected by an infectious pandemic disease, nearly twenty percent of our workforce would be displaced from duty. COMB does not maintain a depth of personnel to counter such an incident.

The COMB established protocols continue to be followed and align with the suggested protocols issued by the Santa Barbara County Public Health Department and the Centers for Disease Control (CDC) to protect employees and our community against the risk posed by COVID-19. Alternative work schedules continue to be implemented to increase work space distancing in order to reduce the chance of exposure of COVID-19 among staff members.

**LEGAL CONCURRENCE:**

Counsel continues to review legislation impacting the return to in-person meetings and will keep staff apprised as matters evolve.

**LIST OF EXHIBITS:**

- 1) Resolution No. 766

**RESOLUTION NO. 766**

**A RESOLUTION OF THE GOVERNING BOARD OF THE  
CACHUMA OPERATION AND MAINTENANCE BOARD  
ACKNOWLEDGING A LOCAL EMERGENCY, ACKNOWLEDGING THE  
PROCLAMATION OF A STATE OF EMERGENCY BY GOVERNOR NEWSOM'S  
ORDER DATED MARCH 4, 2020 AND RE-AUTHORIZING REMOTE  
TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF THE  
CACHUMA OPERATION AND MAINTENANCE BOARD  
FOR THE PERIOD SEPTEMBER 26, 2022 TO OCTOBER 26, 2022 PURSUANT TO  
BROWN ACT PROVISIONS**

**Recitals**

**WHEREAS**, the Cachuma Operation & Maintenance Board (“COMB”) is a joint powers authority and public entity, organized and existing in the County of Santa Barbara in accordance with Government Code Section 6500 *et seq.*, and operating pursuant to the 1996 Amended and Restated Agreement for the Establishment of a Board of Control to Operate and Maintain the Cachuma Project - Cachuma Operation And Maintenance Board, dated May 23, 1996 (“Amended and Restated Agreement”), as amended by an Amendment to the Amended and Restated Agreement made effective September 16, 2003, and a Second Amendment to the Amended and Restated Agreement made effective November 20, 2018 (collectively the “Joint Powers Agreement”); and

**WHEREAS**, the Member Agencies of COMB are the Goleta Water District, the City of Santa Barbara, the Montecito Water District, and the Carpinteria Valley Water District; and

**WHEREAS**, COMB operates and maintains Cachuma Project facilities pursuant to a Transfer of Operation and Maintenance Contract with the United States Bureau of Reclamation; and

**WHEREAS**, COMB is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

**WHEREAS**, all meetings of the COMB Governing Board are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code sections 54950 – 54963)(“Brown Act”), so that any member of the public may attend, participate and watch COMB’s governing body conduct its business; and

**WHEREAS**, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

**WHEREAS**, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the State caused by conditions as described in Government Code section 8558; and

**WHEREAS**, it is further required that State or local officials have imposed or recommended measures to promote social distancing, or, the governing body determines that meeting in person would present risks to the health and safety of attendees; and

**WHEREAS**, on March 4, 2020, Governor Gavin Newsom proclaimed a State of Emergency to exist in California due to the threat of COVID-19; despite sustained efforts, the virus, and its variants, continues to spread and has impacted nearly all sectors of California; and

**WHEREAS**, as a consequence of the declared emergency, the COMB Governing Board does hereby find that meeting in person would pose risks to the health or safety of attendees; and

**WHEREAS**, the COMB Governing Board does hereby find that COMB shall continue to conduct its meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

**WHEREAS**, all meeting agendas, meeting dates, times and manner in which the public may participate in the public meetings of COMB and offer public comment by telephone or internet-based services options, including video conference, are posted on the COMB website and physically within COMB's jurisdictional boundaries.

**WHEREAS**, the COMB Governing Board adopted virtual meeting protocols on April 9, 2020, which includes options for public participation.

**NOW, THEREFORE, IT IS HEREBY RESOLVED** by the COMB Governing Board, as follows:

1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.
2. Acknowledgment of Governor's Proclamation of a State of Emergency. The Governing Board hereby acknowledges the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.
3. Risks to Health and Safety of Attendees. The Governing Board hereby determines that meeting in person would present risks to the health and safety of attendees.
4. Remote Teleconference Meetings. COMB staff are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

5. Effective Date of Resolution. This Resolution shall take effect on September 26, 2022, and shall be effective until the earlier of (i) October 26, 2022, or such time the Governing Board adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of COMB may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

**PASSED, APPROVED AND ADOPTED** by the Governing Board of the Cachuma Operation and Maintenance Board on September 26, 2022, by the following roll call votes:

**AYES:**

**NAYES:**

**ABSENT:**

**ABSTAINED:**

**APPROVED:**

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President of the Governing Board

**ATTEST:**

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Secretary of the Governing Board

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

**Monday, August 22, 2022  
1:00 PM**

**MINUTES**

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**1. CALL TO ORDER, ROLL CALL**

The regular meeting of the Board of Directors was called to order by President Holcombe at 1:02 PM.

All attendees participated electronically pursuant to California Government Code sections 54953(b)(1), (b)(2), (e)(1) and (e)(3) (AB 361).

**Directors Present:**

Polly Holcombe, Carpinteria Valley Water District

Kristen Sneddon, City of Santa Barbara

Lauren Hanson, Goleta Water District

Cori Hayman, Montecito Water District (\*)

*(\*) Director Hayman arrived after roll call was taken*

**General Counsel Present:**

William Carter - Musick, Peeler, Garrett, LLP

**Staff Present:**

Janet Gingras, General Manager

Edward Lyons, Administrative Manager/CFO

Joel Degner, Engineer/Operations Division Manager

Elijah Papan, Program Analyst III

Timothy Robinson, Fisheries Division Manager

Dorothy Turner, Administrative Assistant

**Others Present:**

Joshua Haggmark, City of Santa Barbara

Matt Young, COSB Water Agency

**2. PUBLIC COMMENT**

There was no public comment.

**3. CONSENT AGENDA**

- a. Minutes of July 25, 2022 Regular Board Meeting
- b. Investment of Funds
  - Financial Reports
  - Investment Reports
- c. Review of Paid Claims

Ms. Gingras presented Consent Agenda item 3.a. as a single item for approval. President Holcombe asked for a motion which was provided by Director Sneddon and seconded by Director Hanson. The motion carried with a vote of five in favor and one abstention.

**Ayes:** Sneddon, Hanson, Holcombe  
**Nays:**  
**Absent:**  
**Abstain:** Hayman

Mr. Lyons provided information regarding the financial reports and highlighted the receipt of 2.4 million in first quarter O&M revenues. He drew Board attention to various paid claims of note, including disbursements to R.A. Atmore for clearing of vegetation, Aspect Engineering with respect to the SCADA system, Flowers & Associates for construction management, as well as the quarterly remittance to the United States Geological Survey for the stream gauge program.

As there were no questions from the Board, Director Hanson motioned to approve the remainder of the Consent Agenda, followed by a second from Director Sneddon. The motion passed unanimously with a vote of six in favor.

**Ayes:** Sneddon, Hayman, Hanson, Holcombe  
**Nays:**  
**Absent:**  
**Abstain:**

**4. RESOLUTION NO. 765 – CONFIRMATION OF LOCAL EMERGENCY -  
ACKNOWLEDGEMENT OF GOVERNOR NEWSOM’S DECLARED STATE OF  
EMERGENCY (HEALTH AND SAFETY)**

President Holcombe introduced Resolution No. 765 and provided comment. Director Hayman also provided comment. Director Hanson motioned to approve the resolution which was seconded by Director Sneddon and carried with five aye votes and one nay vote.

**Ayes:** Sneddon, Hanson, Holcombe  
**Nays:** Hayman  
**Absent:**  
**Abstain:**

**5. FINANCIAL REVIEW – 4<sup>th</sup> QUARTER FISCAL YEAR 2021-22**

Mr. Lyons shared his presentation of the fourth quarter financial review with the Board. He reviewed revenues collected during the quarter, consisting primarily of the O&M budget assessments, as well as a line-by-line examination of expenditures by division. Mr. Lyons provided explanation for any variances in comparison to the budget. He noted that Year-to-Date figures are actual, pending any adjustments generated from the annual audit, currently underway. Finally, Mr. Lyons reviewed the status of the various Administrative Division’s deliverables. He fielded questions from the Board.

**6. GENERAL MANAGER REPORT**

- Administration

Ms. Gingras presented the General Manager report, highlighting the receipt of the Certificate of Achievement for Excellence in Financial Report for COMB’s Annual Comprehensive Financial Report, as well as the receipt of the GFOA Distinguished Budget Award for COMB’s Fiscal Year 2022-23 Operating Budget. She reported that COMB had renewed the Cyber Security Liability insurance. She provided a summary of calendar year 2023 Health Insurance premiums, noting a reduction in rates for most plans. In addition, Ms. Gingras advised the Board that COMB will realize a major reduction in



the Other Post-Employment Benefits liability due to the migration of medicare-eligible retiree health coverage to United Healthcare. She provided information on various internal operating safety procedures which have been updated. Finally Ms. Gingras reported that staff has been scanning paper documents to electronic storage for document preservation. She fielded questions from the board.

## **7. ENGINEER'S REPORT**

- Climate Conditions and Water Quality
- Lake Elevation Projection
- Watershed Management
- Infrastructure Improvement Projects

Mr. Degner presented the Engineer's report, providing an update on current and forecasted climate conditions. He reported the status of the downstream water rights release. With continued dry conditions, he advised that there is a 50% chance of the Board being approached for approval of the pumping barge installation by February 2023. Mr. Degner also reported that the Forest Service is developing an Ecological Restoration Project focused on attaining watershed resilience to wildfires. COMB plans to send a letter of support with an offer of technical assistance to the Forest Service in respect of this project as it pertains to water quality. Despite the drought, the Board expressed concern about extreme flooding posing infrastructure risks, as a result of a potential mega-storm. Following a short discussion, Mr. Degner fielded questions from the Board.

## **8. OPERATIONS DIVISION REPORT**

- Lake Cachuma Operations
- Operation and Maintenance Activities

Mr. King presented the Operations Division report and provided updates on various projects, including the collaboration with Carpinteria Water District to replace lateral in the lower reach. He reported that the annual load tests on the backup generators had been completed as well as meter calibrations and ongoing structure maintenance. Finally, Mr. King advised the Board that two game cameras and warning signs had been installed at Lauro reservoir to deter trespassers. He fielded questions from the Board.

## **9. FISHERIES DIVISION REPORT**

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

Mr. Robinson presented the Fisheries Division report and noted that staff had been very busy. COMB participated with Reclamation in testing of flow to the Hilton Creek Watering System (HCWS) and Emergency Backup System. He reported that staff responded to an emergency unplanned power failure to the HCWS and assisted CDFW in additional post-emergency activities. Further, Mr. Robinson reported on the status of the downstream water rights release and required RPM6 monitoring of same. Finally, he provided an update on the stream gauge project underway at the Highway 154 Bridge. Mr. Robinson fielded questions from the Board.

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

- Maintenance and Monitoring

Mr. Robinson presented the Oak Tree Report noting ongoing irrigation of the trees. He reported that parasitic mistletoe is being eradicated to preserve the health of the young trees and also noted that some of the trees have reached adequate maturity to produce acorns.

**12. MONTHLY CACHUMA PROJECT REPORTS**

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

Ms. Gingras presented the water reports, commenting that unaccounted-for water loss has been kept very low due to new meters and member agency conservation.

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

There were no requests from Directors for future agenda items.

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

- a. [Government Code Section 54956.9(d)(1)]  
Name of matter: *Kimball-Griffith L.P. v. Brenda Wren Burman, et al.*, Case No. 2:20-cv-10647  
– Request for Declaratory and Injunctive Relief
- b. [Government Code Section 54956.9(d)(1)] Potential Litigation: Conference with Legal Counsel
- c. [Government Code Section 54956.9(d)(1)] Potential Litigation: Conference with Legal Counsel

The Board adjourned into Closed Session at 2:41 PM

**15. RECONVENE INTO OPEN SESSION**

[Government Code Section 54957.7]  
Disclosure of actions taken in closed session, as applicable  
[Government Code Section 54957.1]

- 13a. Name of matter: *Kimball-Griffith L.P. v. Brenda Wren Burman, et al.*, Case No. 2:20-cv-10647  
– Request for Declaratory and Injunctive Relief
- 13b. Potential Litigation: Conference with Legal Counsel
- 13c. Potential Litigation: Conference with Legal Counsel

The Board reconvened into Open Session at 4:43 PM. There was no reportable action on Items 13a., 13b., or 13c.

**16. MEETING SCHEDULE**

- **September 26, 2022 at 1:00 PM**
- **Board Packages available on COMB website [www.cachuma-board.org](http://www.cachuma-board.org)**

**17. COMB ADJOURNMENT**

There being no further business, the meeting was adjourned at 4:44 PM.

Respectfully submitted,

\_\_\_\_\_  
Janet Gingras, Secretary of the Board

	<i>Approved</i>
√	<i>Unapproved</i>

**APPROVED:**

\_\_\_\_\_  
Polly Holcombe, President of the Board

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**Cachuma Operation & Maintenance Board**  
**Statement of Net Position**  
As of August 31, 2022  
**UNAUDITED**

**August 31, 2022**

**ASSETS**

**Current Assets**

**Checking/Savings**

**Trust Funds**

1210 · Warren Act Trust Fund 313,002.72

1220 · Renewal Fund 55,285.20

**Total Trust Funds** 368,287.92

1050 · General Fund 325,641.45

1100 · Revolving Fund 285,912.20

**Total Checking/Savings** 979,841.57

**Accounts Receivable**

1301 · Accounts Receivable 1,570.00

**Total Accounts Receivable** 1,570.00

**Other Current Assets**

1010 · Petty Cash 500.00

1200 · LAIF 3,044,714.25

1303 · Bradbury SOD Act Assessments Receivable 220,819.00

1304 · Lauro Dam SOD Assessments Receivable 33,776.14

1305 · Accrued Interest Receivable 2,152.92

1400 · Prepaid Insurance 11,512.72

1900 · Deposits 5,868.34

**Total Other Current Assets** 3,319,343.37

**Total Current Assets** 4,300,754.94

**Fixed Assets**

1500 · Vehicles 514,898.60

1505 · Office Furniture & Equipment 258,022.85

1510 · Mobile Offices 424,910.38

1515 · Field Equipment 546,703.62

1525 · Paving 38,351.00

1530 · Construction in Progress 258,766.83

1550 · Accumulated Depreciation (1,084,071.34)

**Total Fixed Assets** 957,581.94

**Other Assets**

1910 · Long Term Bradbury SOD Act Assessments Receivable 3,836,553.07

1920 · Long Term Lauro SOD Act Assessments Receivable 705,536.76

1922 · Deferred Outflow of Resources (GASB 68) 497,209.00

1923 · Deferred Outflow (GASB 75) 870,598.00

**Total Other Assets** 5,909,896.83

**TOTAL ASSETS** **11,168,233.71**

**Cachuma Operation & Maintenance Board**  
**Statement of Net Position**  
As of August 31, 2022  
**UNAUDITED**

**August 31, 2022**

**LIABILITIES & NET POSITION**

**Liabilities**

**Current Liabilities**

**Accounts Payable**

2200 · Accounts Payable 670,557.72

**Total Accounts Payable**

670,557.72

**Other Current Liabilities**

2505 · Accrued Wages 26,770.37

2550 · Vacation/Sick 223,146.58

2561 · Bradbury Dam SOD Act 220,818.99

2563 · Lauro Dam SOD Act 33,776.14

2565 · Accrued Interest SOD Act 40,842.00

2590 · Deferred Revenue 368,287.92

2594 · Deferred Revenue - Assessments 599,085.52

2595 · Deferred Revenue - Oak Tree 2,690.43

**Total Other Current Liabilities** 1,515,417.95

**Total Current Liabilities**

2,185,975.67

**Long Term Liabilities**

2602 · Long Term SOD Act Liability-Bradbury 3,836,543.07

2603 · Long Term SOD Act Liability - Lauro 705,536.76

2604 · OPEB Long Term Liability 5,789,486.00

2610 · Net Pension Liability (GASB 68) 2,078,203.00

2611 · Deferred Inflow of Resources (GASB 68) 103,202.00

2612 · Deferred Inflow of Resources (GASB 75) 588,356.00

**Total Long Term Liabilities** 13,101,326.83

**Total Liabilities**

15,287,302.50

**Net Position**

3000 · Opening Balance Net Position (5,296,580.05)

3901 · Retained Net Assets 95,004.65

**Net Surplus / Deficit** 1,082,506.61

**Total Equity** (4,119,068.79)

**TOTAL LIABILITIES & NET POSITION**

**11,168,233.71**

**Cachuma Operation & Maintenance Board**  
**Statement of Revenues and Expenditures (Unaudited)**  
 Budget vs. Actuals July 2022 - June 2023

	Fisheries				Operations				TOTAL			
	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget
<b>Revenue</b>												
<b>3000 REVENUE</b>												
3001 · O&M Budget (Qtrly Assessments)	\$ 369,149.00	\$ 1,153,196.00	\$ (784,047.00)	32.01%	\$ 2,041,328.00	\$ 4,951,331.00	\$ (2,910,003.00)	41.23%	\$ 2,410,477.00	\$ 6,104,527.00	\$ (3,694,050.00)	39.49%
3006 · Warren Act	0.00	118,293.00	-118,293.00	0.0%	0.00				0.00	118,293.00	-118,293.00	0.0%
3007 · Renewal Fund	0.00	155,723.00	-155,723.00	0.0%	0.00				0.00	155,723.00	-155,723.00	0.0%
3010 · Interest Income	0.00				2,152.92	0.00	2,152.92	100.0%	2,152.92	0.00	2,152.92	100.0%
3020 · Misc Income	0.00				876.00	0.00	876.00	100.0%	876.00	0.00	876.00	100.0%
3021 · Grant Income	0.00				442.00	0.00	442.00	100.0%	442.00	0.00	442.00	100.0%
3035 · Cachuma Project Betterment Fund	0.00	90,000.00	-90,000.00	0.0%	0.00				0.00	90,000.00	-90,000.00	0.0%
3044 · DWR Drought Relief Grant	0.00				0.00	2,250,000.00	-2,250,000.00	0.0%	0.00	2,250,000.00	-2,250,000.00	0.0%
3045 · USBR WaterSmart Grant	0.00				0.00	750,000.00	-750,000.00	0.0%	0.00	750,000.00	-750,000.00	0.0%
3046 · CVWD Cooperative Agrmnt Funding	0.00				0.00	550,000.00	-550,000.00	0.0%	0.00	550,000.00	-550,000.00	0.0%
<b>Total 3000 REVENUE</b>	<b>\$ 369,149.00</b>	<b>\$ 1,517,212.00</b>	<b>\$ (1,148,063.00)</b>	<b>24.33%</b>	<b>\$ 2,044,798.92</b>	<b>\$ 8,501,331.00</b>	<b>\$ (6,456,532.08)</b>	<b>24.05%</b>	<b>\$ 2,413,947.92</b>	<b>\$ 10,018,543.00</b>	<b>\$ (7,604,595.08)</b>	<b>24.1%</b>
<b>Expense</b>												
3100 · LABOR - OPERATIONS	\$ -	\$ -	\$ -	0.0%	\$ 150,506.36	\$ 1,090,525.00	\$ (940,018.64)	13.8%	\$ 150,506.36	\$ 1,090,525.00	\$ (940,018.64)	13.8%
<b>3200 VEH &amp; EQUIPMENT</b>												
3201 · Vehicle/Equip Mtce	0.00				7,547.27	40,000.00	-32,452.73	18.87%	7,547.27	40,000.00	-32,452.73	18.87%
3202 · Fixed Capital	0.00				0.00	150,000.00	-150,000.00	0.0%	0.00	150,000.00	-150,000.00	0.0%
3203 · Equipment Rental	0.00				0.00	5,000.00	-5,000.00	0.0%	0.00	5,000.00	-5,000.00	0.0%
3204 · Miscellaneous	0.00				0.00	10,000.00	-10,000.00	0.0%	0.00	10,000.00	-10,000.00	0.0%
<b>Total 3200 VEH &amp; EQUIPMENT</b>	<b>0.00</b>				<b>7,547.27</b>	<b>205,000.00</b>	<b>-197,452.73</b>	<b>3.68%</b>	<b>7,547.27</b>	<b>205,000.00</b>	<b>-197,452.73</b>	<b>3.68%</b>
<b>3300 · CONTRACT LABOR</b>												
3301 · Conduit, Meter, Valve & Misc	0.00				2,080.24	20,000.00	-17,919.76	10.4%	2,080.24	20,000.00	-17,919.76	10.4%
3302 · Buildings & Roads	0.00				0.00	20,000.00	-20,000.00	0.0%	0.00	20,000.00	-20,000.00	0.0%
3303 · Reservoirs	0.00				1,225.56	60,000.00	-58,774.44	2.04%	1,225.56	60,000.00	-58,774.44	2.04%
3304 · Engineering, Misc Services	0.00				0.00	30,000.00	-30,000.00	0.0%	0.00	30,000.00	-30,000.00	0.0%
<b>Total 3300 · CONTRACT LABOR</b>	<b>0.00</b>				<b>3,305.80</b>	<b>130,000.00</b>	<b>-126,694.20</b>	<b>2.54%</b>	<b>3,305.80</b>	<b>130,000.00</b>	<b>-126,694.20</b>	<b>2.54%</b>
<b>3400 · MATERIALS &amp; SUPPLIES</b>												
3401 · Conduit, Meter, Valve & Misc	0.00				5,088.22	65,000.00	-59,911.78	7.83%	5,088.22	65,000.00	-59,911.78	7.83%
3402 · Buildings & Roads	0.00				0.00	15,000.00	-15,000.00	0.0%	0.00	15,000.00	-15,000.00	0.0%
3403 · Reservoirs	0.00				12.45	5,000.00	-4,987.55	0.25%	12.45	5,000.00	-4,987.55	0.25%
<b>Total 3400 · MATERIALS &amp; SUPPLIES</b>	<b>0.00</b>				<b>5,100.67</b>	<b>85,000.00</b>	<b>-79,899.33</b>	<b>6.0%</b>	<b>5,100.67</b>	<b>85,000.00</b>	<b>-79,899.33</b>	<b>6.0%</b>
<b>3500 · OTHER EXPENSES</b>												
3501 · Utilities	0.00				1,126.48	7,000.00	-5,873.52	16.09%	1,126.48	7,000.00	-5,873.52	16.09%
3502 · Uniforms	0.00				0.00	5,750.00	-5,750.00	0.0%	0.00	5,750.00	-5,750.00	0.0%
3503 · Communications	0.00				1,314.60	15,800.00	-14,485.40	8.32%	1,314.60	15,800.00	-14,485.40	8.32%
3504 · USA & Other Services	0.00				2,252.10	7,250.00	-4,997.90	31.06%	2,252.10	7,250.00	-4,997.90	31.06%
3505 · Miscellaneous	0.00				1,477.29	12,000.00	-10,522.71	12.31%	1,477.29	12,000.00	-10,522.71	12.31%
3506 · Training	0.00				829.99	3,000.00	-2,170.01	27.67%	829.99	3,000.00	-2,170.01	27.67%
<b>Total 3500 · OTHER EXPENSES</b>	<b>0.00</b>				<b>7,000.46</b>	<b>50,800.00</b>	<b>-43,799.54</b>	<b>13.78%</b>	<b>7,000.46</b>	<b>50,800.00</b>	<b>-43,799.54</b>	<b>13.78%</b>
4100 · LABOR - FISHERIES	117,829.38	785,564.00	-667,734.62	15.0%	0.00				117,829.38	785,564.00	-667,734.62	15.0%
4200 · VEHICLES & EQUIP - FISHERIES												

**Cachuma Operation & Maintenance Board**  
**Statement of Revenues and Expenditures (Unaudited)**  
 Budget vs. Actuals July 2022 - June 2023

	Fisheries				Operations				TOTAL			
	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget
4270 · Vehicle/Equip Mtce	5,074.49	30,000.00	-24,925.51	16.92%	0.00				5,074.49	30,000.00	-24,925.51	16.92%
4280 · Fixed Capital	0.00	90,000.00	-90,000.00	0.0%	0.00				0.00	90,000.00	-90,000.00	0.0%
4290 · Miscellaneous	0.00	2,500.00	-2,500.00	0.0%	0.00				0.00	2,500.00	-2,500.00	0.0%
<b>Total 4200 · VEHICLES &amp; EQUIP - FISHERIES</b>	<b>5,074.49</b>	<b>122,500.00</b>	<b>-117,425.51</b>	<b>4.14%</b>	<b>0.00</b>				<b>5,074.49</b>	<b>122,500.00</b>	<b>-117,425.51</b>	<b>4.14%</b>
4220 · CONTRACT LABOR - FISHERIES												
4221 · Meters & Valves	0.00	3,000.00	-3,000.00	0.0%	0.00				0.00	3,000.00	-3,000.00	0.0%
4222 · Fish Projects Maintenance	0.00	11,100.00	-11,100.00	0.0%	0.00				0.00	11,100.00	-11,100.00	0.0%
<b>Total 4220 · CONTRACT LABOR - FISHERIES</b>	<b>0.00</b>	<b>14,100.00</b>	<b>-14,100.00</b>	<b>0.0%</b>	<b>0.00</b>				<b>0.00</b>	<b>14,100.00</b>	<b>-14,100.00</b>	<b>0.0%</b>
4300 · MATERIALS/SUPPLIES - FISHERIES												
4390 · Miscellaneous	1,638.97	7,000.00	-5,361.03	23.41%	0.00				1,638.97	7,000.00	-5,361.03	23.41%
<b>Total 4300 · MATERIALS/SUPPLIES - FISHERIES</b>	<b>1,638.97</b>	<b>7,000.00</b>	<b>-5,361.03</b>	<b>23.41%</b>	<b>0.00</b>				<b>1,638.97</b>	<b>7,000.00</b>	<b>-5,361.03</b>	<b>23.41%</b>
4500 · OTHER EXPENSES - FISHERIES												
4502 · Uniforms	0.00	5,000.00	-5,000.00	0.0%	0.00				0.00	5,000.00	-5,000.00	0.0%
<b>Total 4500 · OTHER EXPENSES - FISHERIES</b>	<b>0.00</b>	<b>5,000.00</b>	<b>-5,000.00</b>	<b>0.0%</b>	<b>0.00</b>				<b>0.00</b>	<b>5,000.00</b>	<b>-5,000.00</b>	<b>0.0%</b>
4999 · GENERAL & ADMINISTRATIVE												
5000 · Director Fees	0.00				653.90	12,400.00	-11,746.10	5.27%	653.90	12,400.00	-11,746.10	5.27%
5001 · Director Mileage	0.00				0.00	600.00	-600.00	0.0%	0.00	600.00	-600.00	0.0%
5100 · Legal	0.00				8,505.20	75,000.00	-66,494.80	11.34%	8,505.20	75,000.00	-66,494.80	11.34%
5101 · Audit	0.00				1,449.50	22,750.00	-21,300.50	6.37%	1,449.50	22,750.00	-21,300.50	6.37%
5150 · Unemployment Tax	0.00				0.00	5,000.00	-5,000.00	0.0%	0.00	5,000.00	-5,000.00	0.0%
5200 · Liability Insurance	0.00				6,416.99	33,326.00	-26,909.01	19.26%	6,416.99	33,326.00	-26,909.01	19.26%
5310 · Postage/Office Exp	0.00				1,057.86	6,000.00	-4,942.14	17.63%	1,057.86	6,000.00	-4,942.14	17.63%
5311 · Office Equip/Leases	0.00				1,133.12	13,440.00	-12,306.88	8.43%	1,133.12	13,440.00	-12,306.88	8.43%
5312 · Misc Admin Expenses	0.00				1,094.14	14,000.00	-12,905.86	7.82%	1,094.14	14,000.00	-12,905.86	7.82%
5313 · Communications	0.00				1,368.04	9,500.00	-8,131.96	14.4%	1,368.04	9,500.00	-8,131.96	14.4%
5314 · Utilities	0.00				1,627.43	9,737.00	-8,109.57	16.71%	1,627.43	9,737.00	-8,109.57	16.71%
5315 · Membership Dues	0.00				148.85	11,450.00	-11,301.15	1.3%	148.85	11,450.00	-11,301.15	1.3%
5316 · Admin Fixed Assets	0.00				0.00	8,000.00	-8,000.00	0.0%	0.00	8,000.00	-8,000.00	0.0%
5318 · Computer Consultant	0.00				1,960.66	25,000.00	-23,039.34	7.84%	1,960.66	25,000.00	-23,039.34	7.84%
5325 · Emp Training/Subscriptions	0.00				0.00	2,000.00	-2,000.00	0.0%	0.00	2,000.00	-2,000.00	0.0%
5330 · Admin Travel/Conferences	0.00				752.15	2,000.00	-1,247.85	37.61%	752.15	2,000.00	-1,247.85	37.61%
5331 · Public Information	0.00				390.00	3,500.00	-3,110.00	11.14%	390.00	3,500.00	-3,110.00	11.14%
<b>Total 4999 · GENERAL &amp; ADMINISTRATIVE</b>	<b>0.00</b>				<b>26,557.84</b>	<b>253,703.00</b>	<b>-227,145.16</b>	<b>10.47%</b>	<b>26,557.84</b>	<b>253,703.00</b>	<b>-227,145.16</b>	<b>10.47%</b>
5299 · ADMIN LABOR	0.00				96,163.88	631,303.00	-535,139.12	15.23%	96,163.88	631,303.00	-535,139.12	15.23%
5400 · GENERAL & ADMIN - FISHERIES												
5407 · Legal - FD	253.00	25,000.00	-24,747.00	1.01%	0.00				253.00	25,000.00	-24,747.00	1.01%
5410 · Postage / Office Supplies	609.99	4,000.00	-3,390.01	15.25%	0.00				609.99	4,000.00	-3,390.01	15.25%
5411 · Office Equipment / Leases	538.10	8,533.00	-7,994.90	6.31%	0.00				538.10	8,533.00	-7,994.90	6.31%
5412 · Misc. Admin Expense	589.16	7,500.00	-6,910.84	7.86%	0.00				589.16	7,500.00	-6,910.84	7.86%
5413 · Communications	736.64	4,455.00	-3,718.36	16.54%	0.00				736.64	4,455.00	-3,718.36	16.54%
5414 · Utilities	876.31	5,243.00	-4,366.69	16.71%	0.00				876.31	5,243.00	-4,366.69	16.71%
5415 · Membership Dues	80.15	7,200.00	-7,119.85	1.11%	0.00				80.15	7,200.00	-7,119.85	1.11%
5416 · Admin Fixed Assets	0.00	3,000.00	-3,000.00	0.0%	0.00				0.00	3,000.00	-3,000.00	0.0%
5418 · Computer Consultant	1,055.74	15,000.00	-13,944.26	7.04%	0.00				1,055.74	15,000.00	-13,944.26	7.04%



**Cachuma Operation & Maintenance Board**  
**Statement of Revenues and Expenditures (Unaudited)**  
 Budget vs. Actuals July 2022 - June 2023

	Fisheries				Operations				TOTAL			
	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget	Jul - Aug 22	Budget	\$ Over / (Under) Budget	% of Budget
5425 · Employee Education/Subscription	0.00	2,500.00	-2,500.00	0.0%	0.00				0.00	2,500.00	-2,500.00	0.0%
5426 · Director Fees	352.10	6,700.00	-6,347.90	5.26%	0.00				352.10	6,700.00	-6,347.90	5.26%
5427 · Director Mileage	0.00	300.00	-300.00	0.0%	0.00				0.00	300.00	-300.00	0.0%
5430 · Travel	2,106.43	2,500.00	-393.57	84.26%	0.00				2,106.43	2,500.00	-393.57	84.26%
5431 · Public Information	210.00	1,500.00	-1,290.00	14.0%	0.00				210.00	1,500.00	-1,290.00	14.0%
5441 · Audit	780.50	12,250.00	-11,469.50	6.37%	0.00				780.50	12,250.00	-11,469.50	6.37%
5443 · Liab & Property Ins	3,455.29	17,745.00	-14,289.71	19.47%	0.00				3,455.29	17,745.00	-14,289.71	19.47%
<b>Total 5400 · GENERAL &amp; ADMIN - FISHERIES</b>	<b>11,643.41</b>	<b>123,426.00</b>	<b>-111,782.59</b>	<b>9.43%</b>	<b>0.00</b>				<b>11,643.41</b>	<b>123,426.00</b>	<b>-111,782.59</b>	<b>9.43%</b>
5499 · ADMIN LABOR-FISHERIES	35,831.75	274,622.00	-238,790.25	13.05%	0.00				35,831.75	274,622.00	-238,790.25	13.05%
5510 · Integrated Reg. Water Mgt Plan	0.00				0.00	5,000.00	-5,000.00	0.0%	0.00	5,000.00	-5,000.00	0.0%
<b>6199 · SPECIAL PROJECTS</b>												
6097 · GIS and Mapping	0.00				0.00	10,000.00	-10,000.00	0.0%	0.00	10,000.00	-10,000.00	0.0%
6105 · ROW Management Program	0.00				0.00	20,000.00	-20,000.00	0.0%	0.00	20,000.00	-20,000.00	0.0%
6110 · SCADA Improvements & Support	0.00				712.39	35,000.00	-34,287.61	2.04%	712.39	35,000.00	-34,287.61	2.04%
6115 · COMB Biding Improvemnts & Maint	0.00				9,193.46	45,000.00	-35,806.54	20.43%	9,193.46	45,000.00	-35,806.54	20.43%
6138 · Cachuma Watershed Mgmt Study	0.00				0.00	50,000.00	-50,000.00	0.0%	0.00	50,000.00	-50,000.00	0.0%
<b>Total 6199 · SPECIAL PROJECTS</b>	<b>0.00</b>				<b>9,905.85</b>	<b>160,000.00</b>	<b>-150,094.15</b>	<b>6.19%</b>	<b>9,905.85</b>	<b>160,000.00</b>	<b>-150,094.15</b>	<b>6.19%</b>
<b>6000 · INFRASTRUCTURE IMPROVEMENT PROJ</b>												
6096 · SCC Structure Rehabilitation	0.00				0.00	440,000.00	-440,000.00	0.0%	0.00	440,000.00	-440,000.00	0.0%
6120 · Lake Cachuma Secured Pipeline	0.00				853,237.82	4,400,000.00	-3,546,762.18	19.39%	853,237.82	4,400,000.00	-3,546,762.18	19.39%
6136 · SCC Isolation Valve Evaluation	0.00				0.00	500,000.00	-500,000.00	0.0%	0.00	500,000.00	-500,000.00	0.0%
6137 · SCC Lower Reach Lateral Structu	0.00				0.00	550,000.00	-550,000.00	0.0%	0.00	550,000.00	-550,000.00	0.0%
<b>Total 6000 · INFRASTRUCTURE IMPROVEMENT PROJ</b>	<b>0.00</b>				<b>853,237.82</b>	<b>5,890,000.00</b>	<b>-5,036,762.18</b>	<b>14.49%</b>	<b>853,237.82</b>	<b>5,890,000.00</b>	<b>-5,036,762.18</b>	<b>14.49%</b>
<b>6200 · PROGRAM SUPPORT SERVICES</b>												
6201 · FMP Implementation	0.00	42,000.00	-42,000.00	0.0%	0.00				0.00	42,000.00	-42,000.00	0.0%
6202 · GIS and Mapping	0.00	10,000.00	-10,000.00	0.0%	0.00				0.00	10,000.00	-10,000.00	0.0%
6205 · USGS Stream Gauge Program	0.00	105,000.00	-105,000.00	0.0%	0.00				0.00	105,000.00	-105,000.00	0.0%
<b>Total 6200 · PROGRAM SUPPORT SERVICES</b>	<b>0.00</b>	<b>157,000.00</b>	<b>-157,000.00</b>	<b>0.0%</b>	<b>0.00</b>				<b>0.00</b>	<b>157,000.00</b>	<b>-157,000.00</b>	<b>0.0%</b>
<b>6300 · HABITAT IMPROVEMENT PROJECTS</b>												
6207 · Oak Tree Restoration Program	97.36	18,000.00	-17,902.64	0.54%	0.00				97.36	18,000.00	-17,902.64	0.54%
6303 · Tributary Projects Support	0.00	10,000.00	-10,000.00	0.0%	0.00				0.00	10,000.00	-10,000.00	0.0%
<b>Total 6300 · HABITAT IMPROVEMENT PROJECTS</b>	<b>97.36</b>	<b>28,000.00</b>	<b>-27,902.64</b>	<b>0.35%</b>	<b>0.00</b>				<b>97.36</b>	<b>28,000.00</b>	<b>-27,902.64</b>	<b>0.35%</b>
<b>Total Expense</b>	<b>\$ 172,115.36</b>	<b>\$ 1,517,212.00</b>	<b>\$ (1,345,096.64)</b>	<b>11.34%</b>	<b>\$ 1,159,325.95</b>	<b>\$ 8,501,331.00</b>	<b>\$ (7,342,005.05)</b>	<b>13.64%</b>	<b>1,331,441.31</b>	<b>10,018,543.00</b>	<b>-8,687,101.69</b>	<b>13.29%</b>
	<b>\$ 197,033.64</b>	<b>\$ -</b>	<b>\$ 197,033.64</b>	<b>100.0%</b>	<b>\$ 885,472.97</b>	<b>\$ -</b>	<b>\$ 885,472.97</b>	<b>100.0%</b>	<b>1,082,506.61</b>	<b>0.00</b>	<b>1,082,506.61</b>	<b>100.0%</b>

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# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2022
Submitted by:	Janet Gingras

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**SUBJECT:** Investment Report – August 31, 2022

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### **RECOMMENDATION**

The Board of Directors receive and file the Cachuma Operation & Maintenance Board Investment Report as of August 31, 2022.

### **DISCUSSION**

Cash and investment programs are maintained in accordance with California Government Code Section 53600 et seq. and COMB's adopted investment policy. These policies ensure proper control and safeguards are maintained throughout the financial transaction process. Pursuant to State law, the COMB Board adopts a detailed investment policy through a Board resolution on an annual basis.

Reports on COMB's investment portfolio and cash position are developed and presented to the COMB Board on a monthly basis, in conformity with the California Government Code.

#### Unrestricted Cash

Unrestricted cash exceeding current operating needs is invested in LAIF to generate interest income. The average effective yield rate, as of August 2022, is reported at 1.276%.

See Table 1 below for a summary of balances held in unrestricted accounts.

Table 1			
Unrestricted Reserve Funds			
Local Agency Investment Fund (LAIF)			
	7/31/2022	\$	1,144,714.25
(+) Deposits/Credits			1,900,000.00
(-) Checks/Withdrawals			-
Statement Balance	8/31/2022	\$	3,044,714.25

#### Restricted Cash


The Cachuma Project Warren Act Trust Fund (Trust Fund) and Cachuma Project Master Contract Renewal Fund (Renewal Fund) are two separate funds that have been established through contracts with the U.S. Bureau of Reclamation (Reclamation). The Trust Fund and the Renewal Fund require annual and five-year plans which are used to inform the Funds Committee in making decisions on expenditures for betterment of the Cachuma Project.

See Table 2 below for a summary of balances held in restricted accounts.

Table 2			
Restricted Reserve Funds			
American Riviera Bank			
Renewal Account			
Previous Balance	7/31/2022	\$	55,285.20
(+) Deposits/Credits			-
(-) Checks/Withdrawals			-
Statement Balance	8/31/2022	\$	55,285.20
American Riviera Bank			
Warren Act Trust Fund			
Previous Balance	7/31/2022	\$	313,002.72
(+) Deposits/Credits			-
(-) Checks/Withdrawals			-
Statement Balance	8/31/2022	\$	313,002.72

**STATEMENT**

The above statement of investment activity for the month of August 2022, complies with legal requirements for investment policy of government agencies, AB 1073. I hereby certify that it constitutes a complete and accurate summary of all American Riviera Bank and LAIF investments of this agency for the period indicated.

  
 \_\_\_\_\_  
 Secretary

## Cachuma Operation &amp; Maintenance Board

## Paid Claims

As of August 31, 2022

Date	Num	Name	Memo	Amount
<b>1050 - General Fund</b>				
08/02/2022	29508	A-OK Power Equipment-SB	Equipment (Ops)	-130.46
08/02/2022	29509	Agri-Turf Supplies, Inc.	Brushcutter Parts (Ops)	-818.85
08/02/2022	29510	Association of Ca Water Agencies/JPIA	September 2022 Health Benefits Premium	-31,151.39
08/02/2022	29511	City of Santa-Barbara	Trash & Recycling July 2022	-326.22
08/02/2022	29512	Dig Safe Board	Annual Regulatory Fee (Ops)	-636.28
08/02/2022	29513	ECHO Communications	Message Service August 2022	-78.00
08/02/2022	29514	Frontier Communications	Phone Service - North Portal	-63.63
08/02/2022	29515	Frontier Communications	Phone Service - Main Office Land Lines	-102.16
08/02/2022	29516	Home Depot Credit Services	Supplies (Ops)	-328.58
08/02/2022	29517	Instrument & Valve Services Company	Calibration of Equipment	-2,080.24
08/02/2022	29518	Kristen Sneddon	Director Meeting Fees July 2022	-150.00
08/02/2022	29519	Lauren W. Hanson	Director Meeting Fees July 2022	-150.00
08/02/2022	29520	Paychex, Inc. (Payroll)	Payroll & Payroll Tax Services 7/8/22 & 7/22/22	-235.40
08/02/2022	29521	Polly Holcombe	Director Meeting Fees July 2022	-128.00
08/02/2022	29522	Powell Garage	2015 Ford F-150 Tune Up & Ignition Repair	-557.63
08/02/2022	29523	Rayne of Santa Barbara Inc	August RO Rental	-32.00
08/02/2022	29524	Underground Service Alert of So. Calif.	Ticket Charges & Database Fee	-118.50
08/02/2022	29525	Wells Fargo Vendor Fin Serv	Copier Lease - Kyocera Taskalfa 6054ci	-303.41
08/02/2022	29526	WEX Fleet Universal	Fleet Fuel July 2022	-3,017.23
08/02/2022	29527	Zac Gonzalez Landscaping & Tree Care	Landscape Maintenance July 2022	-480.00
08/08/2022	29528	ACWA/Joint Powers Insurance Authority	Cyber Liability Insurance 7/1/22-6/30/23	-2,659.90
08/08/2022	29529	Cox Communications Santa Barbara	Business Internet August 2022	-195.44
08/08/2022	29530	J&C Services	Office Cleaning Service - Weekly 7/15/22 -8/5/22	-680.00
08/08/2022	29531	Santa Barbara Office Interiors	COMB Building Improvements - Accounting Trailer Furniture	-5,904.40
08/08/2022	29532	Southern California Edison	Electricity - Main Office & Outlying Stations	-1,501.82
08/08/2022	29533	Sparkletts	Operations Safety	-96.79
08/17/2022	29534	Aspect Engineering Group	SCADA Improvements & Support - Ortega UPS Installation	-674.38
08/17/2022	29535	AT&T	Long Distance Service 6/28-7/27/22	-38.00
08/17/2022	29536	County of SB-Public Works Water Agency	IRWM Program MOU Cost Share 1/1/22 - 6/30/22	-1,930.99
08/17/2022	29537	Federal Express	Shipping (Ops)	-98.74
08/17/2022	29538	Impulse Advanced Communications	Phone Service - Main Office	-817.85
08/17/2022	29539	Justin Waller	D3 Certification Course	-249.99
08/17/2022	29540	O'Reilly Automotive, Inc.	Automotive Supplies (Ops)	-54.70
08/17/2022	29541	Premiere Global Services	Conference Calls July 2022	-26.62
08/17/2022	29542	Quinn Company	Annual Lauro Generator Load Test	-1,960.91
08/17/2022	29543	Southern California Edison	Electricity - SCADA USBs	-38.27
08/17/2022	29544	SWRCB - DWOCP	Gooding, Jacob D-2 Certificate Fee	-80.00
08/17/2022	29545	Total Compensation Systems, Inc.	GASB 75 Full Valuation - Installment #2	-1,530.00
08/17/2022	29546	Turenchalk Network Services, Inc.	Network Support July 2022 (Ops & Fisheries)	-2,537.40
08/17/2022	29547	Turenchalk Network Services, Inc.	2022 Subscription Renewal - Watchguard Firewall (Ops & Fisheries)	-479.00
08/17/2022	29548	Verizon Wireless	Wireless Services (Ops)	-723.72
08/29/2022	29549	American Riviera Bank - Card Service	Website, Safety, Trail Cameras, Travel, Supplies (Ops & Fisheries)	-2,426.77
08/29/2022	29550	Coast Reprographics	EPF Secured Pipeline Project - Drawings	-317.32
08/29/2022	29551	Cori Hayman	Director Meeting Fees August 2022	-150.00
08/29/2022	29552	Cushman Contracting Corp.	EPF Secured Pipeline - Construction Services	-194,946.65
08/29/2022	29553	Cushman Contracting Corp.	EPFP Pumping System - Pay Req 100	-3,500.00
08/29/2022	29554	Eurofins Eaton Analytical, LLC	Lake Cachuma Water Quality Sampling (Ops)	-1,025.00
08/29/2022	29555	Graybar Electric Company, Inc.	Trapping Materials (Fisheries)	-1,623.90
08/29/2022	29556	Kristen Sneddon	Director Meeting Fees August 2022	-150.00
08/29/2022	29557	Lauren W. Hanson	Director Meeting Fees August 2022	-150.00
08/29/2022	29558	MarBorg Industries	Trash & Recycling August 2022	-847.52
08/29/2022	29559	Musick, Peeler & Garrett LLP	General Counsel July 2022 (Ops & Fisheries)	-9,149.20
08/29/2022	29560	PG&E	Electricity - North Portal & Tecolote Tunnel	-377.71
08/29/2022	29561	Polly Holcombe	Director Meeting Fees August 2022	-128.00

Cachuma Operation & Maintenance Board

**Paid Claims**

As of August 31, 2022

<b>Date</b>	<b>Num</b>	<b>Name</b>	<b>Memo</b>	<b>Amount</b>
08/29/2022	29562	Quinn Company	Annual North Portal Generator Load Test	-1,960.91
08/29/2022	29563	Rayne of Santa Barbara Inc	September RO Rental	-32.00
08/29/2022	29564	Securitas Electronic Security	Alarm Equipment Service - Admin Keypad	-310.00
08/29/2022	29565	Specialty Tool, LTD	Supplies (Ops)	-30.30
08/29/2022	29566	Wells Fargo Vendor Fin Serv	Copier Lease - Kyocera Taskalfa 3253ci	-123.98
Total 1050 - General Fund				<u>-280,416.16</u>
<b>TOTAL</b>				<b><u>-280,416.16</u></b>

**APPROVALS**

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# CACHUMA OPERATION & MAINTENANCE BOARD

## Lake Cachuma Oak Tree Committee Meeting

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**Friday, September 16, 2022**

**10:00 AM**

### **AGENDA**

*Chair: Director Hayman*

*Member: Director Sneddon*

1. Call to Order
2. Public Comment (*Public may address the Committee on any subject matter not on the agenda and within the Committee's jurisdiction*)
3. Lake Cachuma Oak Tree Restoration Program Annual Update - Fiscal Year 2022-23 Expenditures (*for information and possible recommendation*)
4. Adjournment

#### NOTICE TO THE PUBLIC

**Public Comment:** The public is welcome to attend remotely and observe the meeting. A public comment period will be included at the meeting where any member of the public may address the Committee on any subject within the Committee's jurisdiction. The total time for this item will be limited by the Chair.

**Americans with Disabilities Act:** In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Cachuma Operation & Maintenance Board (COMB) at 687-4011 at least 48 hours prior to the meeting to enable staff to make reasonable arrangements.

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

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# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2022
Submitted by:	Tim Robinson
Approved by:	Janet Gingras

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**SUBJECT:** Lake Cachuma Oak Tree Restoration Program – Fiscal Year 2022-23

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**RECOMMENDATION:**

The Board of Directors receive information on the Lake Cachuma Oak Tree Restoration Program (Program) and approve the proposed program of work for Fiscal Year 2022-23.

**SUMMARY:**

The Lake Cachuma Oak Tree Restoration Program 2021 Annual Report contains the results of the 2021 annual tree inventory of all planted mitigation oak trees since the Program started in 2005 (which includes 13 planting years) and the Fiscal Year 2021-2022 financial and water usage details. The results of the 2015 Lakeshore Survey set the mitigation number for the Lake Cachuma Oak Tree Restoration Program at 4,721 alive and self-sustaining trees in 2025 (20 years into the Program). This number included the established mitigation ratio of two to one (2:1) (alive to dead plus at-risk trees in 2015) and an 18% mortality rate that was determined from the 2015 and 2016 annual survey reports. As of the end of this year's inventory, 5,734 oak trees have been planted (and 57 trees have been adopted for a total of 5,791 trees) and 4,712 are alive which is a survival rate of 81.37%. The number of mitigation trees still to be planted is **9** trees (mitigation number minus total alive trees). The cost of the program during Fiscal Year 2021-22 was \$135,594 which included consultant costs, staff time plus burden, materials and supplies for the planting of trees, and operation and maintenance of the entire program of work. Water usage for irrigation during the year was 0.80 acre-feet.

The COMB Lake Cachuma Oak Tree Committee reviewed the Report on 9/16/22 and recommended that 50 dead trees be replaced at the beginning of the winter when favorable planting conditions exist. These additional replacement trees will provide a margin of safety to meet the mitigation target, which is prudent given the ongoing drought and excessive heat waves experienced this summer. The cost to implement the Committees' recommendation is included within the COMB Fiscal Year 2022-23 adopted operating budget.

**FISCAL IMPACT:**

The current Fiscal Year 2022-23 COMB Operating Budget includes \$18,000 for the Oak Tree Restoration Program, which provides for consultant work and materials and supplies.

**COMMITTEE STATUS:**

The Lake Cachuma Oak Tree Committee reviewed the Draft 2021 Annual Lake Cachuma Oak Tree Program Report with Fiscal Year 2021-22 financials and water use information, and forwards the final to the Board a recommendation to approve the program of work outlined for Fiscal Year 2022-23.

**LIST OF EXHIBITS:**

1. Lake Cachuma Oak Tree Restoration Program Annual Report

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# LAKE CACHUMA OAK TREE RESTORATION PROGRAM

## 2021 ANNUAL REPORT

*with*

*Fiscal Year 2021-2022 Financials and Water Usage*



**Planted oak trees at Live Oak Camp**

**Prepared for:** Cachuma Operation and Maintenance Board

**Prepared by:** Timothy H. Robinson (COMB), Scott J. Volan (COMB), Daniel Razo (COMB) and Kenneth A. Knight (Kenneth A. Knight, Consulting)

**September 16 2022**

## **Executive Summary**

The following is the annual report for the Lake Cachuma Oak Tree Restoration Program that contains the results of the 2021 annual inventory of all planted mitigation oak trees and the Fiscal Year 2021-2022 financial and water usage details. The results of the 2015 Lakeshore Survey set the mitigation number for the Lake Cachuma Oak Tree Restoration Program at 4,721 by 2025 (COMB, 2016). This number included the established mitigation ratio of two to one (2:1) and an 18% mortality rate that was determined from the 2015 and 2016 annual survey reports (COMB, 2017a; COMB, 2017b). As of the end of this year's inventory, 5,734 oak trees have been planted (and 57 adopted trees for a total of 5,791 trees) and 4,712 are alive which is a survival rate of 81.37% (Figures 1, 3 and 4). The number of mitigation trees still to be planted is **9** trees (mitigation number minus total alive trees). The cost of the program during Fiscal Year 2021/2022 was \$135,594 with a total cost of the program since it started in 2005 of \$2,023,084. Water usage for irrigation over the year was 0.80 acre-feet.

Recommendations for next year to meet the program mitigation objective in 2025 would be to replant approximately 50 oak trees that had perished in planted areas with a high success rate.

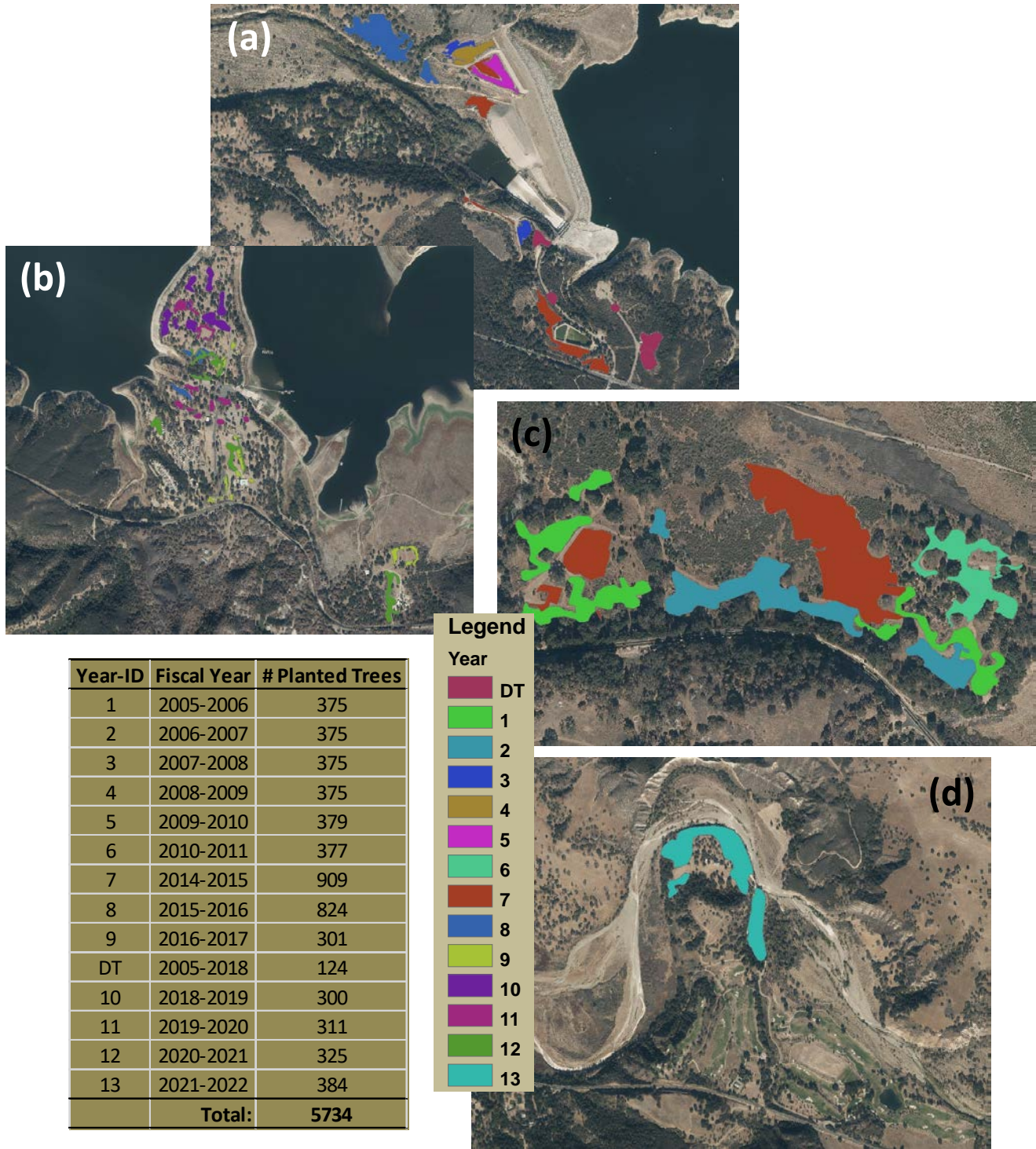
## **Introduction/Background**

This Annual Report presents the results of the 2021 oak tree inventory and Fiscal Year 2021/2022 (FY21/22) maintenance with water use and financials for the Lake Cachuma Oak Tree Restoration Program (Program). For Program details and objectives, see the 2-Year Plan for Fiscal Years 2013/14 and 2014/15 (COMB, 2014). This annual report contains oak tree survival rates, maintenance with water usage, financials, and suggested program improvements. Annual Reports have been written for each year of the Program. References for the recent reports are as follows: 2015 (COMB, 2017a), 2016 (COMB, 2017b), 2017 (COMB, 2018), 2018 (COMB, 2019), 2019 (COMB, 2020), and 2020 (COMB, 2021).

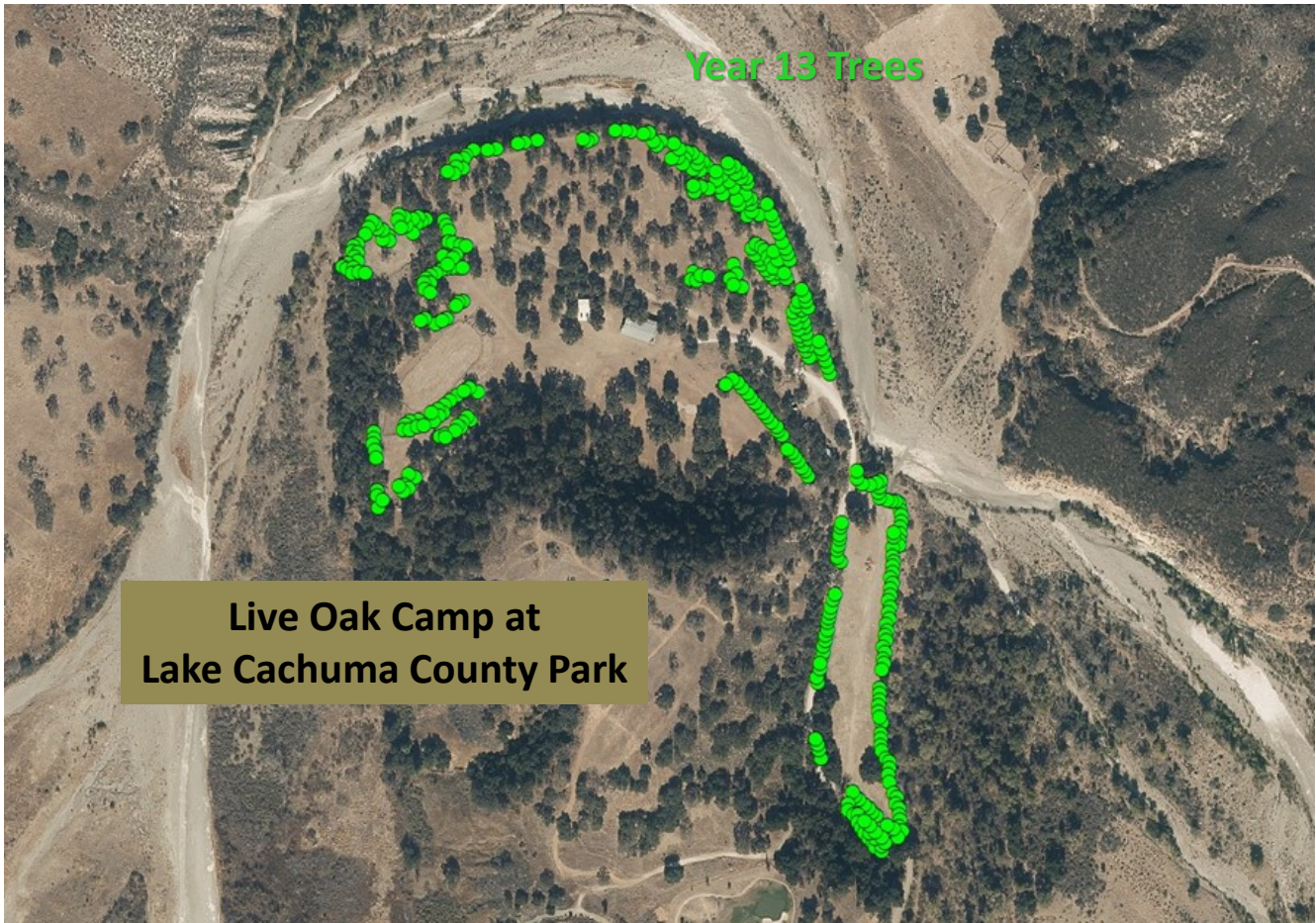
There were 384 oak trees planted during FY21/22 at Lake Cachuma County Park Live Oak Camp that are referenced as Year (YR) 13 trees, the thirteenth year of planting trees since the Program started in 2005 (Figure 2). The survey results for this reporting period are presented by the year of the program that they were planted, and include the financials and maintenance effort.

## **Results**

The 2021 inventory (or survey) of the oak trees planted through the Lake Cachuma Oak Tree Restoration Program was completed on 7/1/22 with the data entry and quality-assurance/quality-control occurring during the first half of the month. The objective of the annual survey is to determine the status and success rate of the trees planted since the beginning of the program with thirteen years of plantings; Year 1 (2005-2006), Year 2 (2006-2007), Year 3 (2007-2008), Year 4 (2008-2009), Year 5 (2009-2010), Year 6 (2010-2011), Year 7 (2014-2015), Year 8 (2015-2016), Year 9 (2016-2017), Year 10 (2018-2019), Year 11 (2019-2020), Year 12 (2020-2121), Year 13 (2021-2122), and the Dam Tender (DT) trees (approximately 2005 through 2018). Annual surveys traditionally are conducted in the late fall and early winter to best document the survival after the dry season and growth since the last survey. With the increased number of planted trees in recent years, the annual inventory takes longer with the objective now of completion by late spring of the following year. Methods for reducing the survey time continue to be investigated.



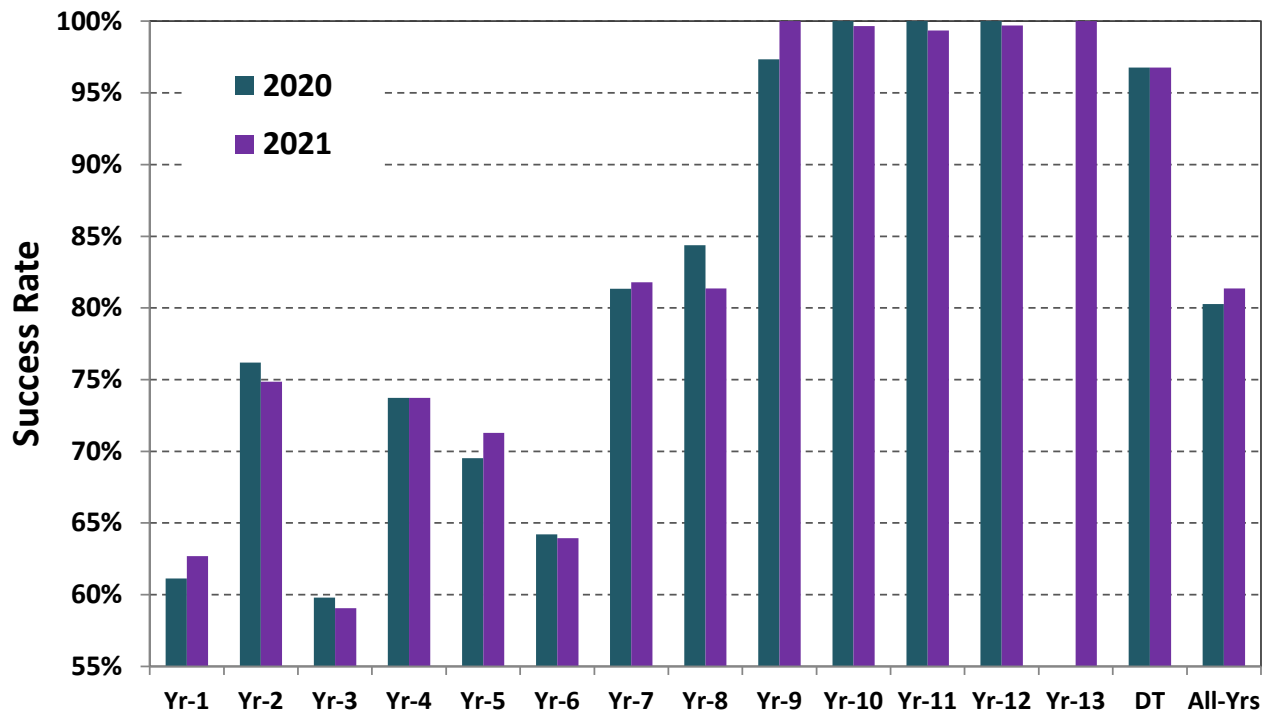
**Figure 1:** Oak tree planting locations by year planted (Year-ID) at; (a) Bradbury Dam area, (b) Cachuma Lake Recreation Area (County Park), (c) Storke Flats, and (d) Live Oak Camp.



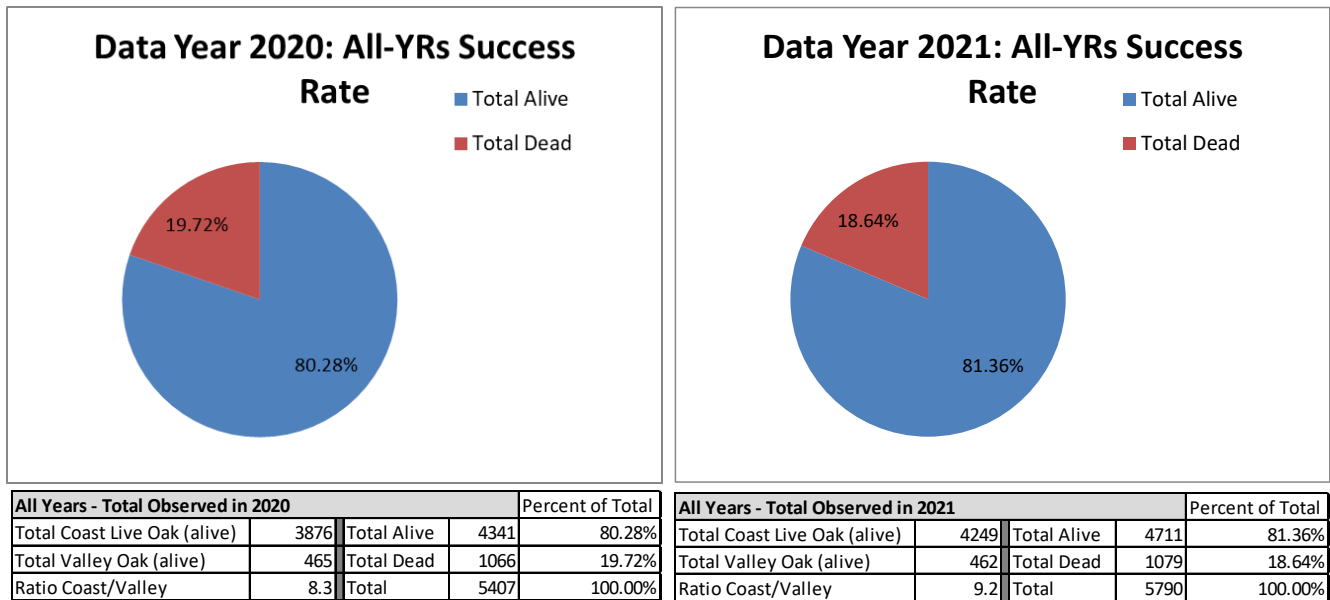
**Figure 2:** Year 13 trees within Live Oak Camp at Lake Cachuma County Park as mapped in FY21/22.

The following figures and tables are the results of the survey in 2021 with 2020 results included for comparison; overall success rates in 2020 and 2021 (Figures 3 and 4) and success by planting year in 2020 and 2021 (Figures 5-18). The overall success rate went from 80.28% in 2020 to 81.37% in 2021; which includes Year 13 trees and replacement of some dead trees in Year 10, Year 11, and Year 12.

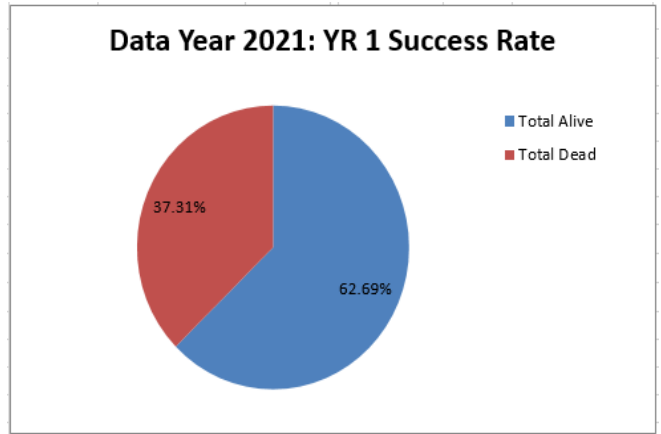
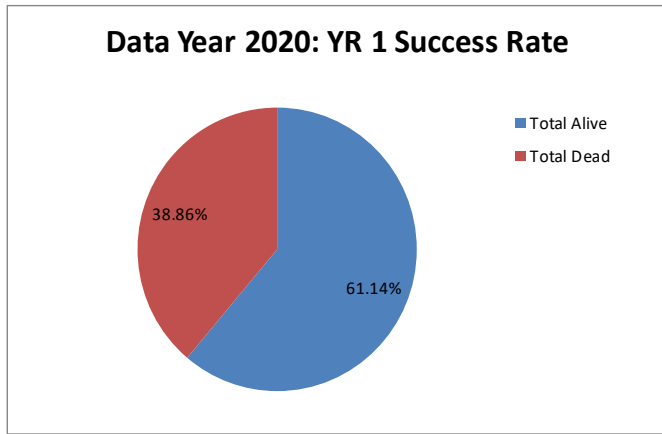
Prior to WY2017, six consecutive years of below average rainfall were observed that made it difficult for planted trees to survive particularly in the Year 1 through Year 6 trees that were thought to be self-sustaining by now at a minimum of ten years since planted. The number of required mitigated trees from the Lake Cachuma Surcharge Project was set in 2015 and reported in the 2015 Lakeshore Survey Report (COMB, 2016). The required mitigation ratio is two to one (2:1) survival rate (self-sustaining) in 2025. The results of the 2015 Lakeshore Survey found there were 879 dead and 1,122 at-risk oak trees. With a 2:1 mitigation ratio and an estimated 18% mortality rate, it was estimated that 4,721 trees would need to be planted to meet our mitigation requirements in 2025. To date, there are 4,712 planted alive trees suggesting that 9 trees (mitigation number minus total alive trees) still need to be planted and soon to get established and be self-sustaining within five years (2025).



**Figure 3:** Success rate comparison from 2020 to 2021 for each and all tree years (Yr).

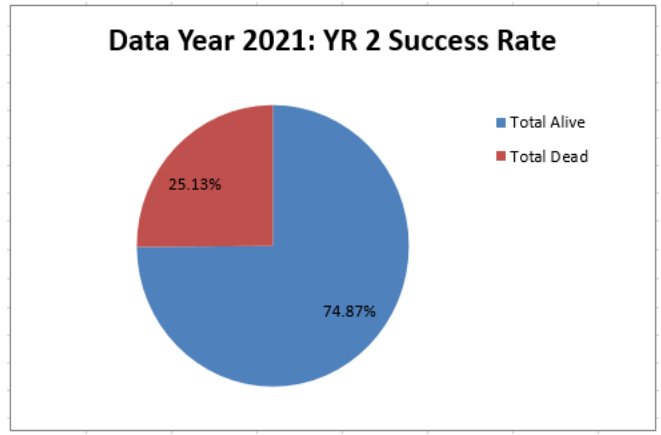
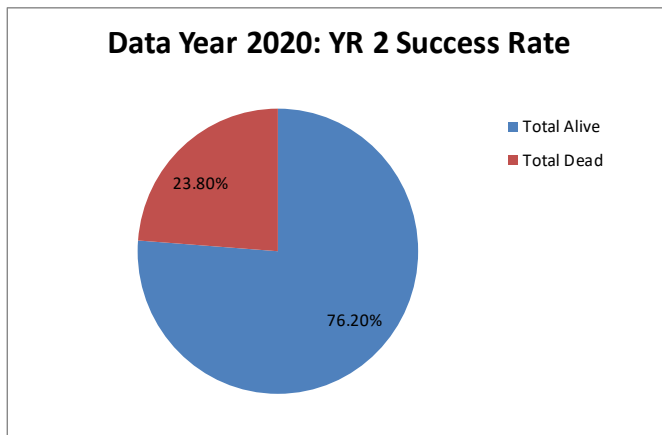


**Figure 4:** 2020 and 2021 status of oak trees from all years (Years 1 through 13) planted; including DT trees.



Year 1 - Total Observed in 2020				Percent of Total		Year 1 - Total Observed in 2021				Percent of Total	
Total Coast Live Oak (alive)	222	Total Alive	236	61.14%		Total Coast Live Oak (alive)	230	Total Alive	242	62.69%	
Total Valley Oak (alive)	14	Total Dead	150	38.86%		Total Valley Oak (alive)	12	Total Dead	144	37.31%	
Ratio Coast/Valley	15.9	Total	386	100.00%		Ratio Coast/Valley	19.2	Total	386	100.00%	

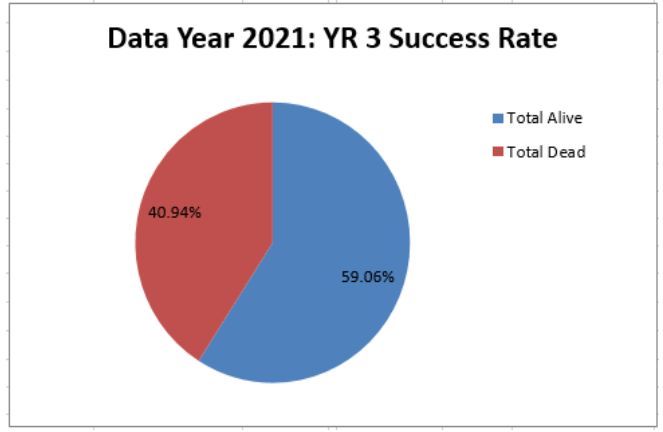
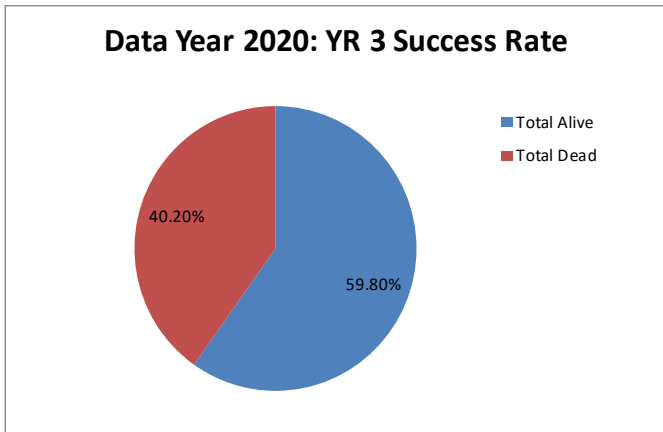
**Figure 5:** Status comparison of Year 1 trees from 2020 to 2021.



Year 2 - Total Observed in 2020				Percent of Total		Year 2 - Total Observed in 2021				Percent of Total	
Total Coast Live Oak (alive)	261	Total Alive	285	76.20%		Total Coast Live Oak (alive)	259	Total Alive	280	74.87%	
Total Valley Oak (alive)	24	Total Dead	89	23.80%		Total Valley Oak (alive)	21	Total Dead	94	25.13%	
Ratio Coast/Valley	10.9	Total	374	100.00%		Ratio Coast/Valley	12.3	Total	374	100.00%	

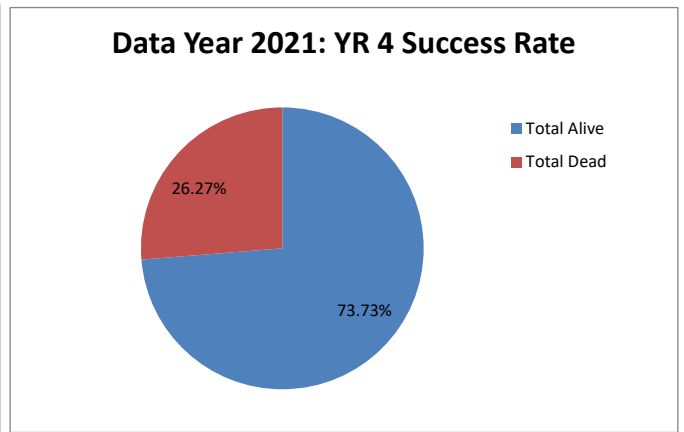
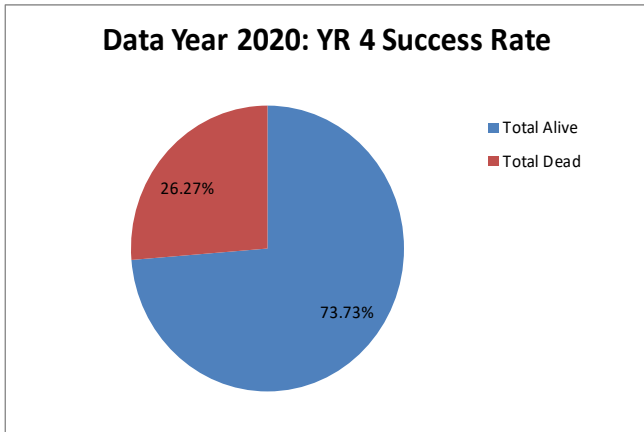
**Figure 6:** Status comparison of Year 2 trees from 2020 to 2021.





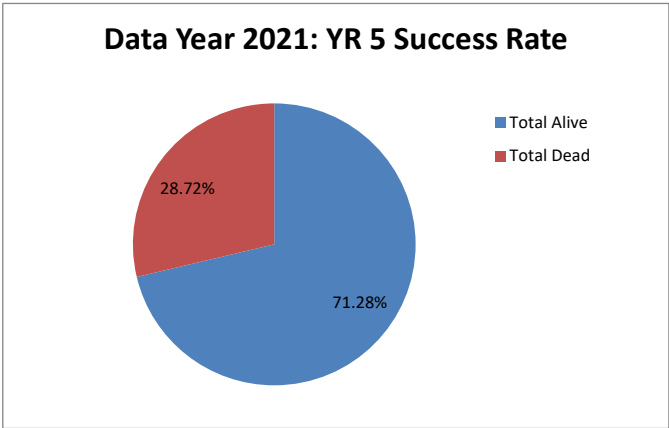
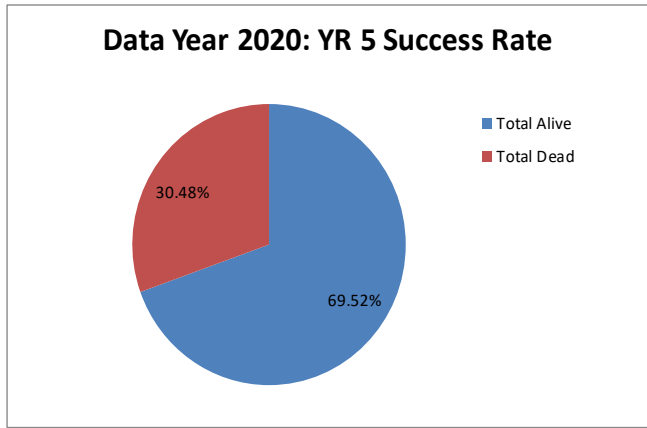
Year 3 - Total Observed in 2020				Percent of Total		Year 3 - Total Observed in 2021				Percent of Total	
Total Coast Live Oak (alive)	220	Total Alive	241	59.80%	Total Coast Live Oak (alive)	214	Total Alive	238	59.06%		
Total Valley Oak (alive)	21	Total Dead	162	40.20%	Total Valley Oak (alive)	24	Total Dead	165	40.94%		
Ratio Coast/Valley	10.5	Total	403	100.00%	Ratio Coast/Valley	8.9	Total	403	100.00%		

**Figure 7:** Status comparison of Year 3 trees from 2020 to 2021.



Year 4 - Total Observed in 2020				Percent of Total		Year 4 - Total Observed in 2021				Percent of Total	
Total Coast Live Oak (alive)	249	Total Alive	275	73.73%	Total Coast Live Oak (alive)	249	Total Alive	275	73.73%		
Total Valley Oak (alive)	26	Total Dead	98	26.27%	Total Valley Oak (alive)	26	Total Dead	98	26.27%		
Ratio Coast/Valley	9.6	Total	373	100.00%	Ratio Coast/Valley	9.6	Total	373	100.00%		

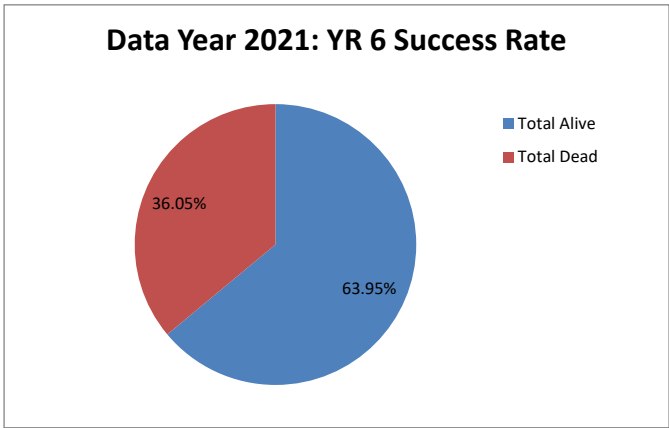
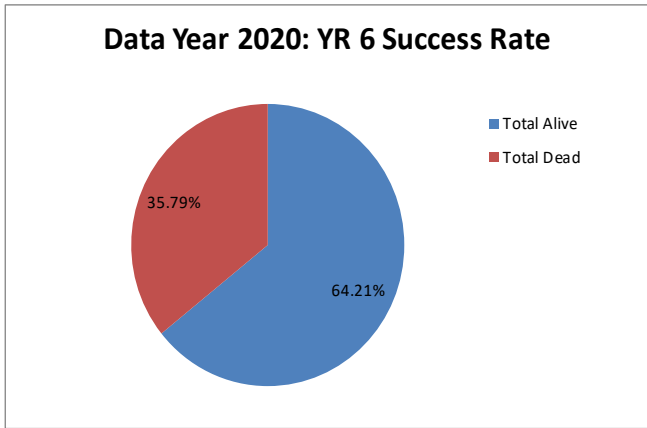
**Figure 8:** Status comparison of Year 4 trees from 2020 to 2021.



Year 5 - Total Observed in 2020		Percent of Total	
Total Coast Live Oak (alive)	237	Total Alive	276 69.52%
Total Valley Oak (alive)	39	Total Dead	121 30.48%
Ratio Coast/Valley	6.1	Total	397 100.00%

Year 5 - Total Observed in 2021		Percent of Total	
Total Coast Live Oak (alive)	232	Total Alive	283 71.28%
Total Valley Oak (alive)	50	Total Dead	114 28.72%
Ratio Coast/Valley	4.6	Total	397 100.00%

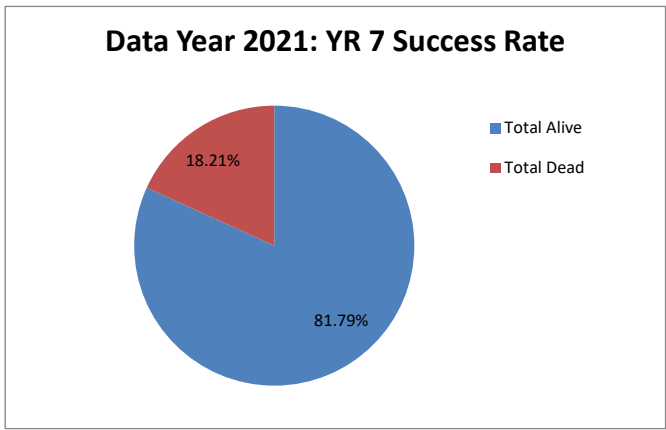
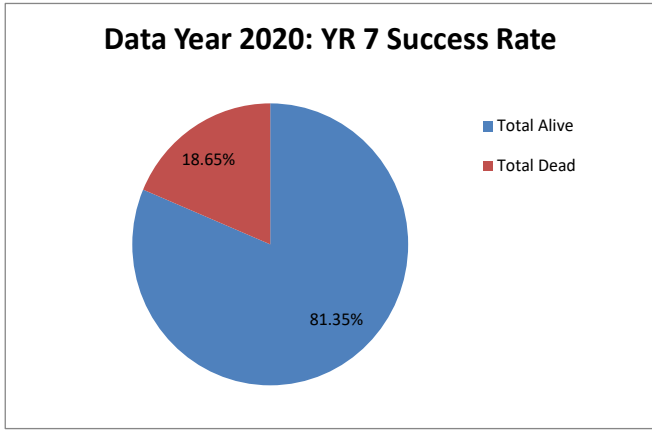
**Figure 9:** Status comparison of Year 5 trees from 2020 to 2021.



Year 6 - Total Observed in 2020		Percent of Total	
Total Coast Live Oak (alive)	215	Total Alive	244 64.21%
Total Valley Oak (alive)	29	Total Dead	136 35.79%
Ratio Coast/Valley	7.4	Total	380 100.00%

Year 6 - Total Observed in 2021		Percent of Total	
Total Coast Live Oak (alive)	212	Total Alive	243 63.95%
Total Valley Oak (alive)	31	Total Dead	137 36.05%
Ratio Coast/Valley	6.8	Total	380 100.00%

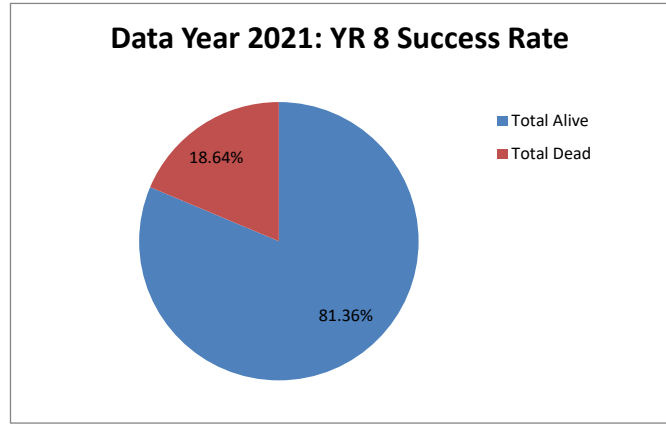
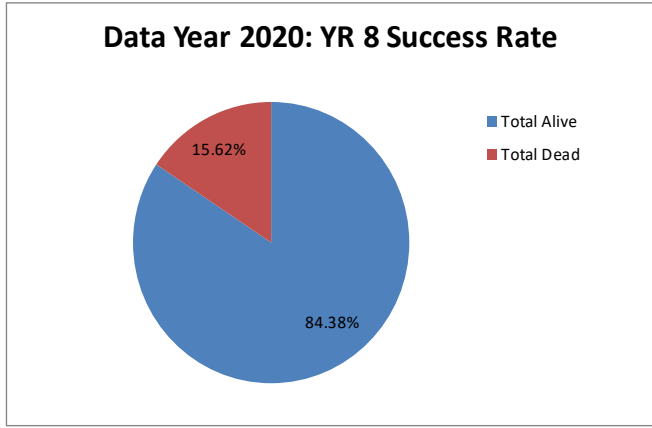
**Figure 10:** Status comparison of Year 6 trees from 2020 to 2021.



Year 7 - Total Observed in 2020			Percent of Total	
Total Coast Live Oak (alive)	604	Total Alive	737	81.35%
Total Valley Oak (alive)	133	Total Dead	169	18.65%
Ratio Coast/Valley	4.5	Total	906	100.00%

Year 7 - Total Observed in 2021			Percent of Total	
Total Coast Live Oak (alive)	610	Total Alive	741	81.79%
Total Valley Oak (alive)	131	Total Dead	165	18.21%
Ratio Coast/Valley	4.7	Total	906	100.00%

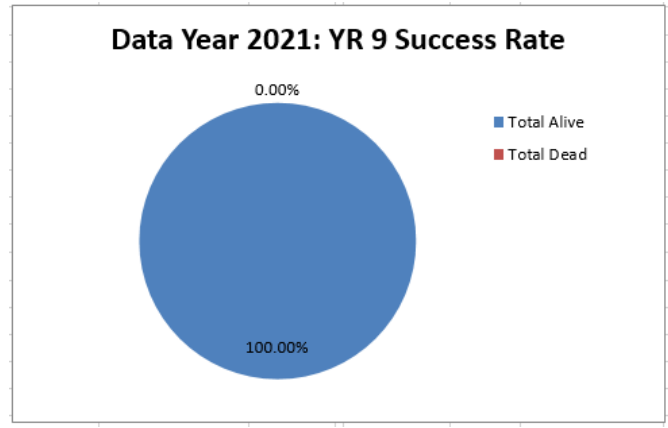
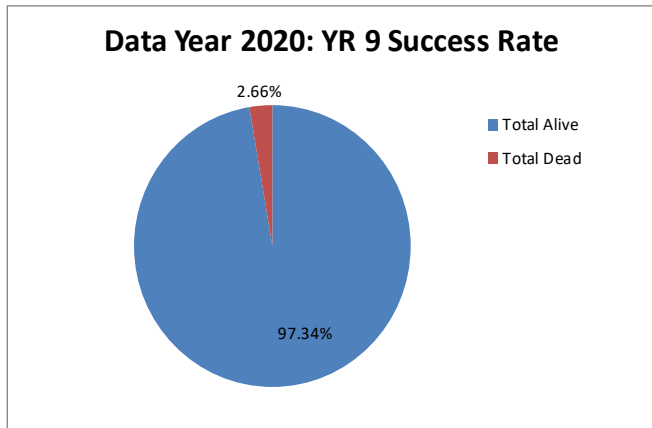
**Figure 11:** Status comparison of Year 7 trees from 2020 to 2021.



Year 8 - Total Observed in 2020			Percent of Total	
Total Coast Live Oak (alive)	653	Total Alive	697	84.38%
Total Valley Oak (alive)	44	Total Dead	129	15.62%
Ratio Coast/Valley	14.8	Total	826	100.00%

Year 8 - Total Observed in 2021			Percent of Total	
Total Coast Live Oak (alive)	625	Total Alive	672	81.36%
Total Valley Oak (alive)	47	Total Dead	154	18.64%
Ratio Coast/Valley	13.3	Total	826	100.00%

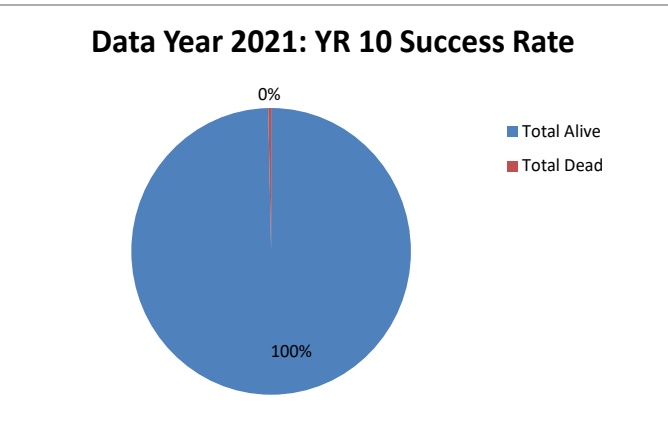
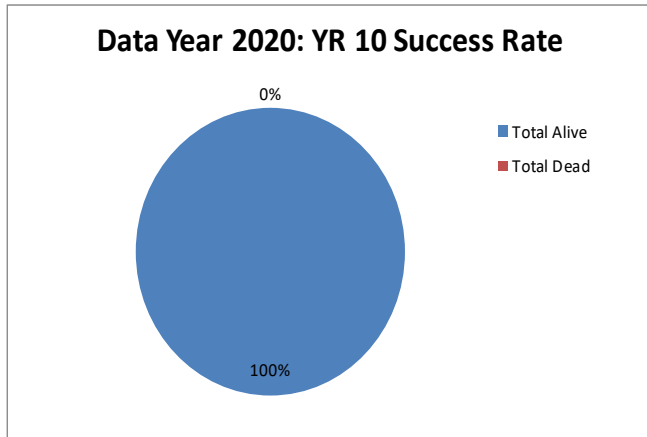
**Figure 12:** Status comparison of Year 8 trees from 2020 to 2021.



Year 9 - Total Observed in 2020			Percent of Total	
Total Coast Live Oak (alive)	273	Total Alive	293	97.34%
Total Valley Oak (alive)	20	Total Dead	8	2.66%
Ratio Coast/Valley	13.7	Total	301	100.00%

Year 9 - Total Observed in 2021			Percent of Total	
Total Coast Live Oak (alive)	283	Total Alive	301	100.00%
Total Valley Oak (alive)	18	Total Dead	0	0.00%
Ratio Coast/Valley	15.7	Total	301	100.00%

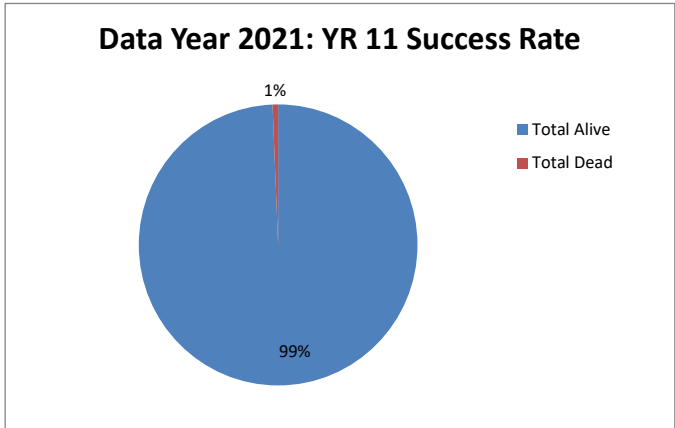
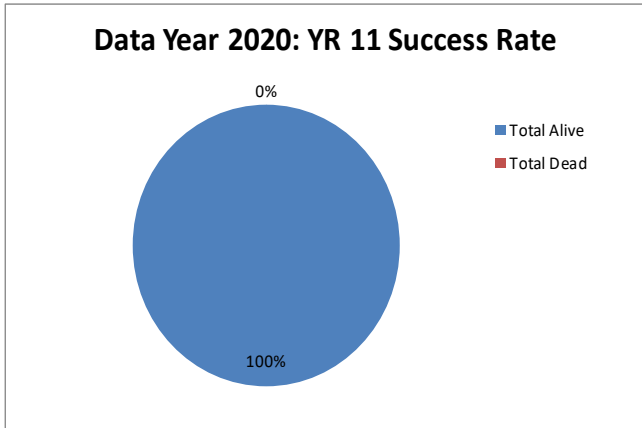
**Figure 13:** Status comparison of Year 9 trees from 2020 to 2021.



Year 10 - Total Observed in 2020			Percent of Total	
Total Coast Live Oak (alive)	272	Total Alive	300	100.00%
Total Valley Oak (alive)	28	Total Dead	0	0.00%
Ratio Coast/Valley	9.7	Total	300	100.00%

Year 10 - Total Observed in 2021			Percent of Total	
Total Coast Live Oak (alive)	272	Total Alive	299	99.67%
Total Valley Oak (alive)	27	Total Dead	1	0.33%
Ratio Coast/Valley	10.1	Total	300	100.00%

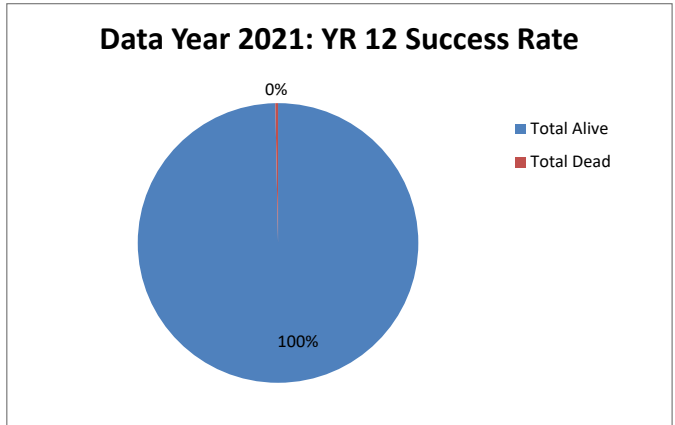
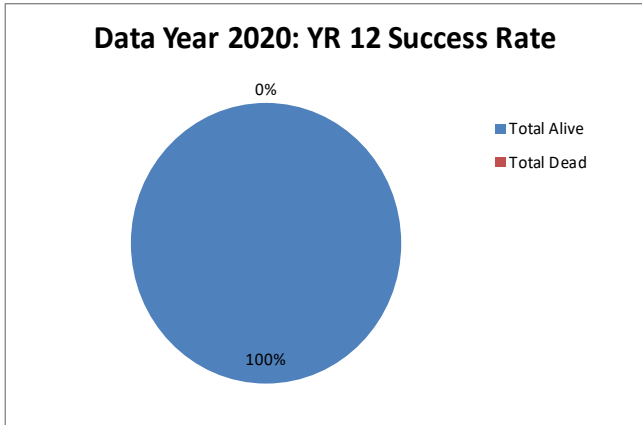
**Figure 14:** Status comparison of Year 10 trees from 2020 to 2021.



Year 11 - Total Observed in 2020			Percent of Total	
Total Coast Live Oak (alive)	275	Total Alive	312	100.00%
Total Valley Oak (alive)	37	Total Dead	0	0.00%
Ratio Coast/Valley	7.4	Total	312	100.00%

Year 11 - Total Observed in 2021			Percent of Total	
Total Coast Live Oak (alive)	285	Total Alive	310	99.36%
Total Valley Oak (alive)	25	Total Dead	2	0.64%
Ratio Coast/Valley	11.4	Total	312	100.00%

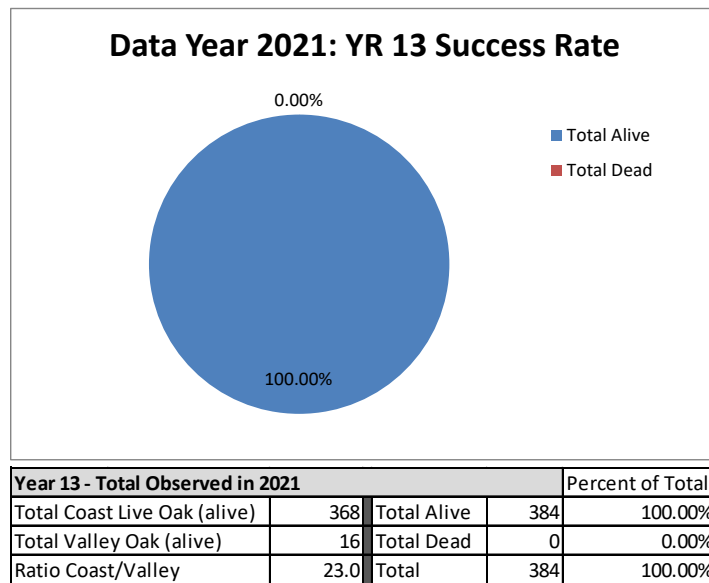
**Figure 15:** Status comparison of Year 11 trees from 2020 to 2021.



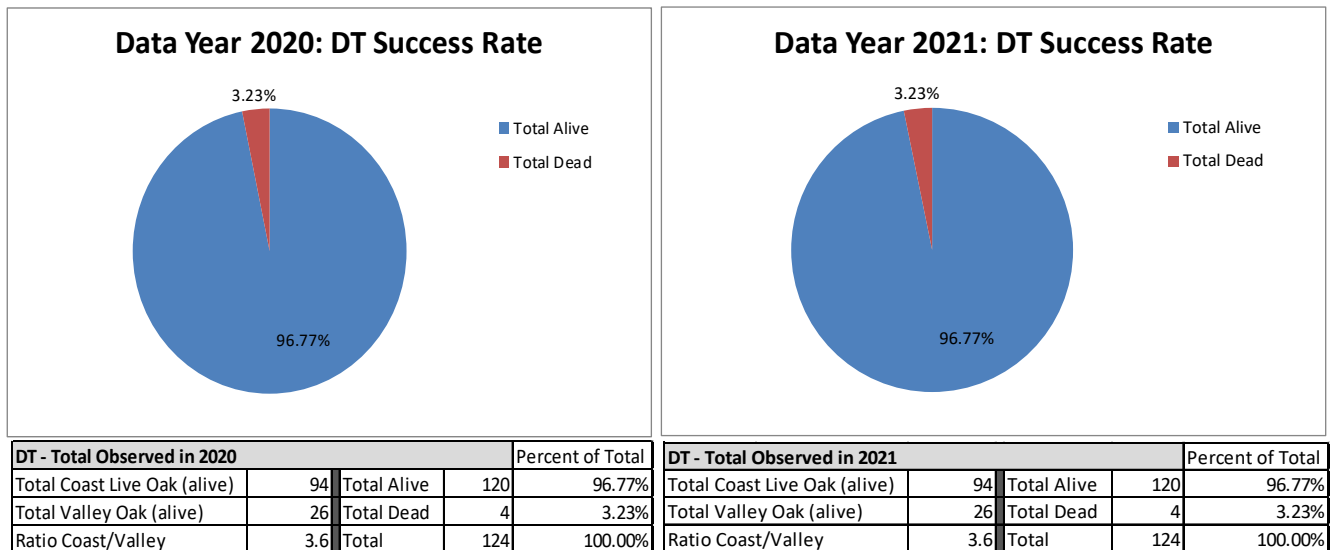
Year 12 - Total Observed in 2020			Percent of Total	
Total Coast Live Oak (alive)	301	Total Alive	325	100.00%
Total Valley Oak (alive)	24	Total Dead	0	0.00%
Ratio Coast/Valley	12.5	Total	325	100.00%

Year 12 - Total Observed in 2021			Percent of Total	
Total Coast Live Oak (alive)	316	Total Alive	324	99.69%
Total Valley Oak (alive)	8	Total Dead	1	0.31%
Ratio Coast/Valley	39.5	Total	325	100.00%

**Figure 16:** Status comparison of Year 12 trees from 2020 to 2021.



**Figure 17:** Data of Year 13 from 2021.



**Figure 18:** Status comparison of Dam Tender (DT) trees from 2020 to 2021.

**Maintenance**

Maintenance of all planted oak trees in FY20/21 included irrigating, weeding, mulching, and deer cage maintenance is presented in Table 1. The total amount of water used from Lake Cachuma to irrigate oak trees from all year classes in FY20/21 was 0.80 acre-feet, which was lower than last year at 1.54 acre-feet. (Table 2).

**Table 1:** Cachuma Oak Tree Restoration Program completed maintenance in FY20/21.

	July 2021	Aug 2021	Sept 2021	Oct 2021	Nov 2021	Dec 2021 <sup>1</sup>	Jan 2022	Feb 2022 <sup>2</sup>	Mar 2022 <sup>2</sup>	Apr 2022 <sup>2</sup>	May 2022 <sup>2</sup>	June 2022 <sup>2</sup>
<b>Year 13 Oaks</b> <b>(2021-2022)</b>					New Trees	New Trees	New Trees	New Trees	Irrigated	Irrigated		Irrigated
					Gopher Baskets	QA/QC	QA/QC	QA/QC	Weeded	Weeded		Weeded
					Fert/Comp	Tree Tags	Tree Tags	Tree Tags				
					Deer Cages		Deer Cages	Deer Cages				
					Mulch/Irrigated		Mulch/Irrigated	Mulch/Irrigated				
<b>Year 12 Oaks</b> <b>(2020-2021)</b>	Irrigated	Irrigated	Irrigated					Irrigated	Irrigated		Irrigated	Irrigated
	Weeded	Weeded	Weeded					Weeded	Weeded		Weeded	Weeded
<b>Year 11 Oaks</b> <b>(2019-2020)</b>	Irrigated	Irrigated	Irrigated	Irrigated						Irrigated	Irrigated	
	Weeded	Weeded	Weeded	Weeded						Weeded	Weeded	
<b>Year 10 Oaks</b> <b>(2018-2019)</b>		Irrigated		Irrigated								
		Weeded		Weeded								
<b>Year 9 Oaks</b> <b>(2016-2017)</b>		Irrigated	Irrigated	Irrigated		Irrigated						
		Weeded	Weeded	Weeded		Weeded						
<b>Year 8 Oaks</b> <b>(2015-2016)</b>												
<b>Year 7 Oaks</b> <b>(2014-2015)</b>												
<b>Year 6 Oaks</b> <b>(2005-2011)</b>												
<b>Year 5 Oaks</b> <b>(2009-2010)</b>												
<b>Year 1-4 Oaks</b> <b>(2005-2009)</b>												
<b>Year 1-3 Oaks</b> <b>(2005-2008)</b>												
<b>Year 2 Oaks</b> <b>(2006-2007)</b>												
<b>Year 1 Oaks</b> <b>(2005-2006)</b>												
<sup>1</sup> Dead trees replaced.												
<sup>2</sup> Oak tree inventory.												

**Table 2:** Cachuma Oak Tree Restoration Program water usage from Lake Cachuma for irrigation during FY20/21.

	Gallons	Acre-feet
<b>July</b>	24,000	0.074
<b>August</b>	42,125	0.129
<b>September</b>	41,075	0.126
<b>October</b>	19,600	0.060
<b>November</b>	15,300	0.047
<b>December</b>	4,070	0.012
<b>January</b>	7,350	0.023
<b>February</b>	16,350	0.050
<b>March</b>	18,150	0.056
<b>April</b>	21,250	0.065
<b>May</b>	27,550	0.085
<b>June</b>	24,800	0.076
<b>Total:</b>	261,620	0.80

**Financials**

Annual expenses by Fiscal Year since the beginning of the Lake Cachuma Oak Tree Restoration Program in FY05/06 are presented in Table 3. The totals include COMB staff (plus burden) and consulting arborist hours, material, supplies, fuel expenses, GPS mapping, conducting the annual inventory, replanting trees over the period, and reporting. The breakout for those costs is presented by

labor (Table 4) and the total cost (labor, materials, and supplies) (Table 5). The financials do include the Year 13 planting and mapping efforts.

**Table 3:** Total program costs by Fiscal Year including planting, maintenance, mapping, conducting the annual inventory, and reporting by year (Year-ID) and number of trees planted during those years.

# of Years	Fiscal Year	Operator	Year-ID	# Planted Trees	Cost
1	2005-2006	Fournier	1	375	\$116,731
2	2006-2007	Fournier	2	375	\$117,620
3	2007-2008	Fournier	3	375	\$138,786
4	2008-2009	Fournier	4	375	\$137,872
5	2009-2010	Fournier	5	379	\$136,900
6	2010-2011	Fournier	6	377	\$137,878
7	2011-2012	Fournier	-	-	\$79,439
8	2012-2013	COMB	-	-	\$101,431
9	2013-2014	COMB	-	-	\$48,097
10	2014-2015	COMB	7	909	\$134,054
11	2015-2016	COMB	8	824	\$128,241
12	2016-2017	COMB	9	301	\$101,227
13	2005-2018	COMB	DT	124	\$128,752
14	2018-2019	COMB	10	300	\$120,573
15	2019-2020	COMB	11	311	\$140,775
16	2020-2021	COMB	12	325	\$119,113
17	2021-2022	COMB	13	384	\$135,594
			<b>Total:</b>	<b>5734</b>	<b>\$2,023,084</b>

**Table 4:** Labor costs for the Lake Cachuma Oak Tree Program during FY20/21.

	Total
<b>COMB Staff (hours):</b>	
Seasonal Biologist Aide A	305.5
Seasonal Biologist Aide B	451.25
Seasonal Biologist Aide C	90.5
Seasonal Biologist Aide D	62.5
Water Service Worker II	45
Water Service Worker II	32
Administrative Analyst	27
System Analyst	81
Biologist Assistant	1078.75
Project Biologist A	178.5
Project Biologist B	251.75
Senior Resource Scientist	111
<b>Total Staff Hours:</b>	<b>2714.75</b>
<b>Cost - Labor plus burden</b>	<b>113,908.03</b>
<b>Consultant Service Hours (Ken Knight):</b>	<b>10</b>
<b>Consultant Cost</b>	<b>\$1,000.00</b>
<b>Total Personnel /Consultant Cost</b>	<b>\$114,908.03</b>



**Table 5:** Total expenses (labor, materials and supplies) for the Lake Cachuma Oak Tree Program during FY20/21.

	Total
<b>Materials and Supplies:</b>	
Oak trees	\$7,899.32
Tree stakes	\$1,892.92
Tree tags	\$0.00
Mulch	\$890.48
Compost	\$50.01
Fertilizer	\$135.64
Gopher baskets	\$2,505.17
Protective deer caging/netting	\$0.00
Hand tools	\$0.00
Hoses	\$110.32
PPE	\$79.48
Cable ties	\$10.31
Equipment mobilization	\$1,914.00
<b>Vehicle Fuel Cost</b>	\$1,992.68
<b>Equipment Fuel Cost (incl. diesel H2O truck)</b>	\$3,205.18
<b>Total Materials and Supplies</b>	<b>\$20,685.50</b>
<b>TOTAL EXPENSES (labor, materials + supplies)</b>	<b>\$135,593.53</b>

The total cost of the Lake Cachuma Oak Tree Restoration Program in FY20/21 was \$135,594 which includes any replanting and mapping costs of the Year 12 trees. Again, the total reflects personnel cost (labor plus burden), materials, supplies, expenses (vehicle and equipment fuel), and consultant fees. For comparison, during the first six years of the project annual consultant costs were approximately \$136,000 to plant approximately 375 and maintain the previously planted trees. In FY16/17, COMB staff planted 301 trees and maintained all previously planted trees (4,290 trees) at a cost of \$101,227. The ability to keep costs down is attributed to multiple factors, which include but are not limited to:

- Relying on the COMB Fisheries Division seasonal staff to conduct the bulk of field activities.
- Minimizing the amount of full-time staff being used.
- Reduced equipment needs as the bulk of purchases occurred during the fiscal year when COMB took over the project.
- Reduced consultant hours due to staff gaining more tree care experience.
- Reduced equipment (generator/pumps) gas consumption from more efficient irrigation hosing and better delivery technique for extracting water from Lake Cachuma.
- Repurposed salvaged deer cages and stakes from Program trees over 6 feet in height.

### Summary and Recommendations for Program Improvements

There are 4,712 (including Year 13 trees) alive oak trees attributed to the mitigation effort of the Program. The survival rate to date is 81.37% (Years 1-13 and DT trees) which would be considered very respectful in any open range oak tree planting effort in a similar climate. The number of mitigation trees still to be planted is 9 trees to meet the mitigation target of 4,721 trees by 2025. It is

recommended to replant approximately 50 oak trees that had perished in favorable established planting locations. This will get the Program to the mitigation target with a margin and will allow for several years before those trees need to be self-sustaining by 2025.

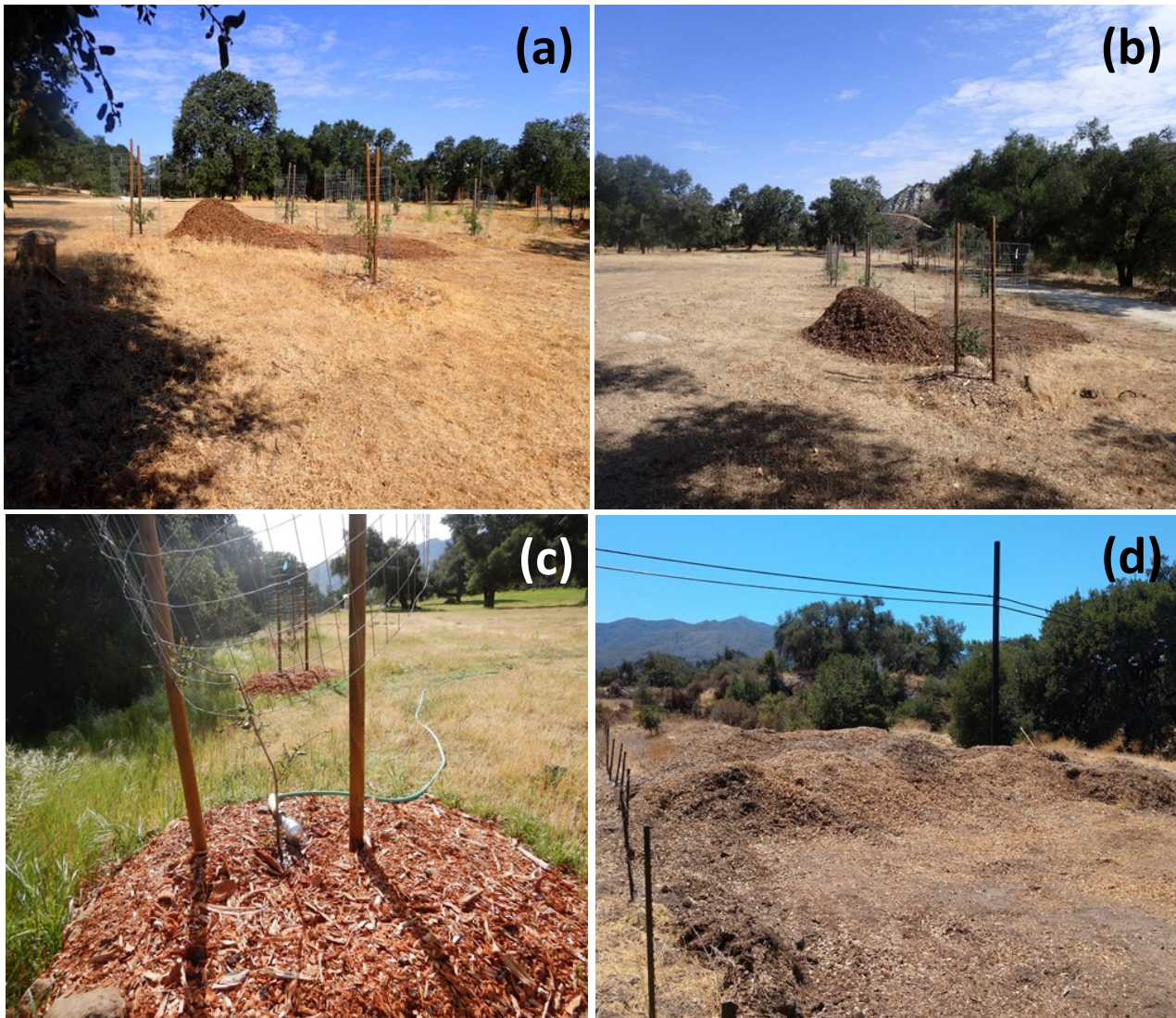
Challenges for the Program, specifically tree survival, are seven of the last ten years of the Program experienced extraordinary drought conditions (WY2012-WY2021, except WY2017, WY2019, and WY2020), inadequate initial planting methodologies during the first six years (compromised gopher wire baskets, trees planted too low, deer cages removed too soon, auger hole planting, etc.), and a limited staff to take care of an extensive number of trees. Some planting areas have better soils and topography than others, for example the Year 3 planting area has shallow soils with southern exposure whereas the Year 7 planting area for the most part is just the opposite.

Lessons learned by the COMB staff from many years of conducting this Program have been put into practice and are recommended for future work, specifically:

- Start the annual tree inventory as soon as possible in the fall and swap out unreadable tags with new ones.
- Continue to carefully conduct the tree inventory to maximize accuracy, efficiency, and results. Provide sufficient time to properly train new staff on all elements of the Program.
- Systematically mulch all trees once a year, particularly newly planted trees, and obtain as clean a mulch as possible. Obtain local mulch whenever possible from the County Park or Lucidity as it is often free and free of trash (Figure 19).
- Maintain deer cages for all trees below deer browsing level (approximately 6 feet).
- Clear the dirt away from the tree trunk base.
- Expose the top of gopher wire baskets at the surface wherever possible to prohibit gopher travel over the top of the wire basket. Also, fill gopher and ground squirrel holes while watering to discourage habitation.
- Plant new trees in professional gopher wire baskets using backhoe dug holes (no auger holes that limit the spread of tree roots) (Figure 20); plant the trees slightly above grade to accommodate subsidence; and use sturdy wire deer cages instead of netting or chicken wire.
- Plant well established trees from the nursery (at least a foot tall) instead of acorns as they have a better success rate.
- Conduct structural pruning of planted trees so that they can grow larger, taller, and faster than unpruned trees, thus becoming more likely to survive and be self-sustaining. The pruning should take place in the late fall or early winter when the trees are growing very little.
- Map all replacement trees by adding a column into the inventory field sheets to facilitate work flow.
- Collaborate with willing partners to reduce cost and increase efficiency (i.e., the County, Lucidity, and Your Children's Trees), as an example working with the County and local tree trimming companies to place logs in front of our planted trees for protection against parked vehicles and work with the County to enhance the environment by installing owl boxes (Figure 21).
- Budget time for deer cage and stake removal once the oak trees are over 6 feet tall as this will need to be done as the Program sunsets.
- Carefully mow and/or weed-whack around trees for weed control and grade access roads to facilitate egress for all maintenance tasks.
- Continue to use Grow-Tubes as they appear to be quite successful particularly in areas with poor soils and where surface rodent impacts are noticed, such as near brushy natural vegetation

found along the margins of planting areas. Remove the Grow-Tubes once the trees are taller than the tube.

- Clear brush near any planted trees to discourage herbivory of Program trees.
- Wrap the bottom of deer cages with fine mesh shade cloth to prohibit surface rodents from accessing planted trees in areas near the margins of planting areas.
- Gather acorns from the local area in August for Valley Oaks and September for Coast Live Oaks to be germinated and grown at a nursery for future plantings. Look for acorns being set on our planted trees that suggest tree maturity and planting success (Figure 22).
- Survey all planted oak trees for mistletoe and remediate as quickly as possible being careful to not leave any cuttings behind (Figure 23).
- Educate the public about the Oak Tree Program to create appreciation and stewardship, and work with the County Park managers to best protect newly planted trees.
- Have the water truck and water trailer taken in for annual maintenance during the winter when they are not in use.



**Figure 19:** Collaboration with the County and Lucidity to supply mulch for planting trees at Lake Cachuma Park (a, b, and c) and use local County supplied mulch.



**Figure 20:** Planting oak trees at Live Oak Camp showing (a) the use of the COMB backhoe, (b) assembling professional gopher cages, (c) planted trees at the entrance to Live Oak Camp, and (d) planted trees at the entrance kiosk to the backcountry trail at the lower lot of Live Oak Camp.



**Figure 21:** Live Oak Camp lower lot: (a+b) logs placed to protect planted trees and (c+d) owl boxes installed in collaboration with the County to enhance the environmental condition.



**Figure 22:** Setting acorns on our planted trees (for example, Year 9 trees at the County Park) (a+b).



**Figure 23:** Mistletoe identification and removal (a+b).

## References

COMB, 2016. 2015 Lakeshore Survey Report. Cachuma Operation and Maintenance Board (COMB).

COMB, 2017a. 2015 Annual Report for the Lake Cachuma Oak Tree Restoration Program. Cachuma Operation and Maintenance Board (COMB).

COMB, 2017b. 2016 Annual Report for the Lake Cachuma Oak Tree Restoration Program. Cachuma Operation and Maintenance Board.

COMB, 2018. 2017 Annual Report for the Lake Cachuma Oak Tree Restoration Program. Cachuma Operation and Maintenance Board.

COMB, 2019. 2018 Annual Report for the Lake Cachuma Oak Tree Restoration Program. Cachuma Operation and Maintenance Board (COMB).

COMB, 2020. 2019 Annual Report for the Lake Cachuma Oak Tree Restoration Program. Cachuma Operation and Maintenance Board (COMB).

COMB, 2021. 2020 Annual Report for the Lake Cachuma Oak Tree Restoration Program. Cachuma Operation and Maintenance Board (COMB).

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2022
Submitted by:	Joel Degner
Approved by:	Janet Gingras

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**SUBJECT:** Lake Cachuma Emergency Pumping Facility Secured Pipeline Project - Status Report

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**RECOMMENDATION:**

The Board receive and file a preliminary status report on the Lake Cachuma Emergency Pumping Facility Secured Pipeline Project.

**SUMMARY:**

***Project Description:*** This project is the installation of a water pipeline secured to the bottom of Lake Cachuma (lake) that will connect to the Tecolote Tunnel Intake Tower (intake tower) located on the south side and towards the eastern end of the lake. The intake tower normally operates as part of a gravity-fed system to provide water to COMB's Member Agencies. During drought conditions, water levels can fall below the lowest operational drafting gate, which then requires the installation of the pipeline and floating pumping system to maintain deliveries. The project involves securing the pipeline to the bottom of the lake from the intake tower to Site 1 (approximately 3,600 linear feet) with pre-cast concrete anchor weights and installing an intake screen at the lake terminus of the pipeline at the same elevation as Gate 5 on the intake tower (660 to 664 feet) to be used under normal operations. During severe droughts a floating pump system would be installed and connected to the secured pipeline. All funding for the project has been secured through a Bureau of Reclamation Drought Resiliency Project grant (\$750,000), a DWR Urban and Multi-benefit Drought Relief Program grant (\$2,250,000), and through COMB's Member Agency budget assessments (\$1,752,000). The funding and project were accepted and adopted by the COMB Board through Resolution No. 751 on May 23, 2022. The resolution was ratified by all of COMB's Member Agencies in June 2022. COMB issued a construction contract to the lowest responsive and responsible bidding contractor, Cushman Contracting Corporation. The Bureau of Reclamation has provided COMB with an MP-620 permit for design modifications of the Cachuma Project. All permits for the project have been secured. COMB contracted with Flowers and Associates, Inc. to provide construction management services during construction and Makai Ocean Engineering to provide design support during construction.

***Project Location:*** The project is located in Lake Cachuma on lands owned by the Bureau of Reclamation for the Cachuma Project. The project will start from the Tecolote Tunnel Intake Tower which is located mid-reservoir and extend 3,600 feet to the west.

***Contractor:*** Cushman Contracting Corporation (CCC) is the construction contractor who was awarded the competitive bid for \$4,158,035 and was issued a Notice to Proceed on August 15, 2022.

***Design Engineer:*** Makai Ocean Engineering, Inc.

***Construction Management Services:*** Flowers and Associates, Inc.

**COMB Engineer:** Joel Degner, P.E.

**Project Status and Timetable (as of Board Meeting Date):**

Status	Time
Notice to Proceed	8/15/2022
Construction Start	9/6/2022
Contract Time (WD*)	120
Estimated Completion Date	2/9/2023
Elapsed Time (WD* to Board Mtg)	28
Remaining Time (WDs to complete all work)	92
Time Elapsed (WD) to Date (%)	23%
*WD: Working Days	

**Work Performed to Date:** All permits were obtained and all initial biological surveys were completed for the project and submitted to the regulatory agencies. Submittals for the project components have been provided by Cushman and reviewed by Makai, Flowers, and COMB. Project components are currently being manufactured. CCC has mobilized to the Boat Ramp 3 parking area (which was previously utilized in the last EPFP deployment). CCC constructed two working barges and launched from the Boat Ramp 3 parking area. One crane work barge and one additional work barge will allow for dredging, pipe tow, concrete weight transport, and other deployment support. All 36" HPDE pipeline segments have been delivered on site (81 - 50' lengths of pipe have been delivered). Concrete anchor fabrication was initiated following the completion and verification of a prototype. Anchors are being manufactured by Universal Precast Concrete, with rebar and concrete inspected on site in Redding, CA by Materials Testing, Inc./KC Engineering Company. To date, 16 of the 162 anchor weights have been delivered on site. CCC installed a silt screen around the active drafting gate of the intake tower. Dredging around the tower has commenced and there have been no issues with water quality to date. Careful and routine collaboration and communication with the water treatment operators is occurring during dredging activities, as well as increased turbidity monitoring using the existing monitoring buoy, water quality sonde, north portal insertion sensor, and water treatment facility monitoring. COMB and Flowers and Associates staff have been overseeing all phases of construction. Makai Ocean Engineering has been providing design support by reviewing submittals and requests for information. Photos of the current construction efforts are provided as exhibits.

**Work Projected for Next Month:** Dredging around the intake tower and the tunnel construction dike will continue and should be completed by the end of September. The fusion and pressure testing of the HDPE pipeline will be initiated and likely completed in October. Concrete anchor weights fabrication and delivery will continue and likely completed in October.

**FINANCIAL IMPACT:**

The COMB FY 2022-23 budget provides \$4,400,000 for the Secured Pipeline Project for this fiscal year of which \$3,000,000 will be offset by grant funding. A summary of the revenues and expenditures are presented below in Table 2. There have been no change orders thus far requested for the project. Overall, 24.9% of the budget has been expended.

**LEGAL CONCURRENCE:**

COMB legal counsel has reviewed all contract documents related to the project.

**ENVIRONMENTAL COMPLIANCE:**

All permits have been obtained and are being followed.



**LIST OF EXHIBITS:**

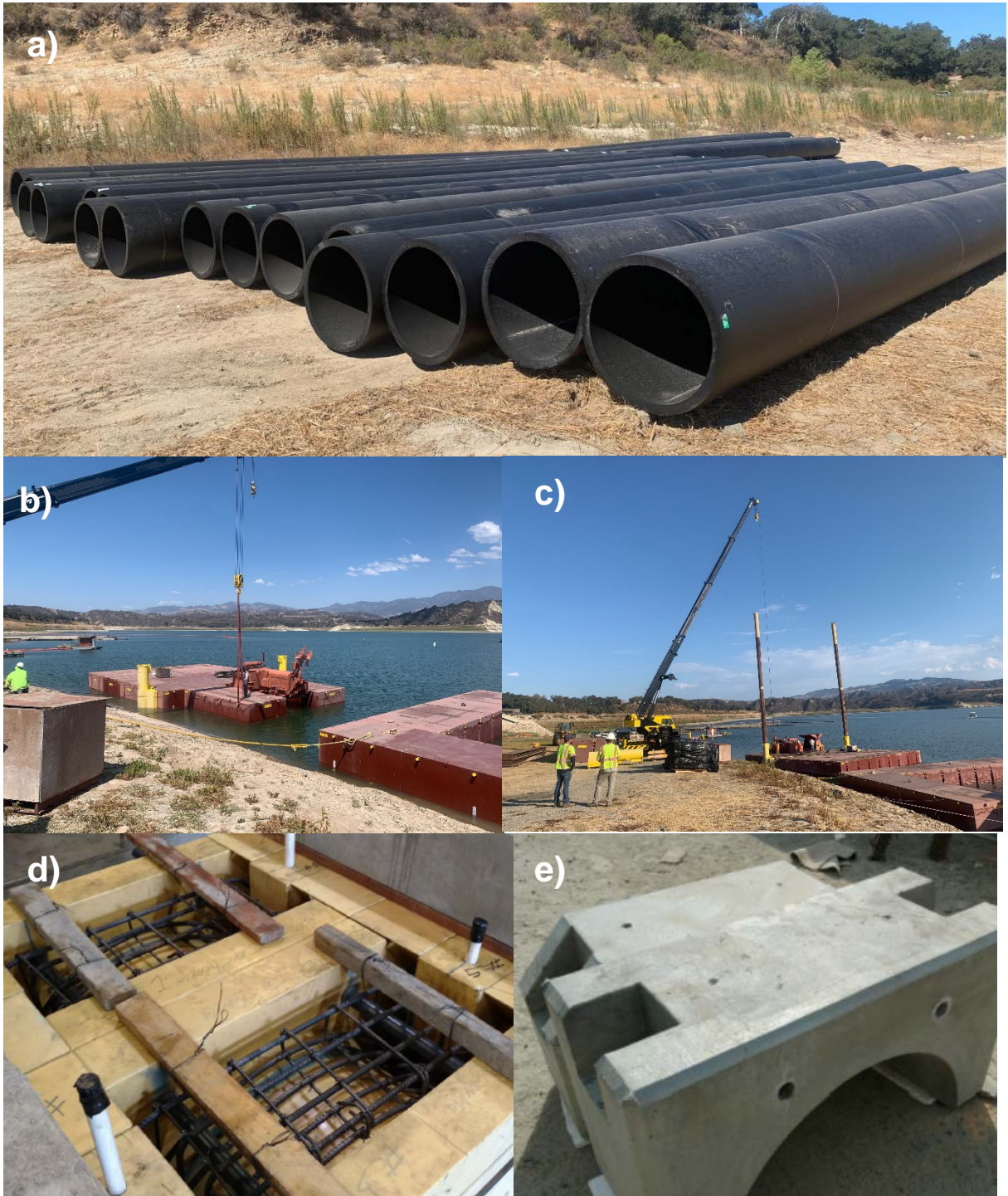
**Table 1:** Estimated project cost and available funds for the project.

	<b>FY 2021-2022</b>	<b>FY 2022-2023</b>	<b>Total</b>
<b>Revenues</b>			
Bureau of Reclamation Drought Resiliency Grant		\$750,000	\$750,000
DWR Urban Multi-Benefit Grant		\$2,250,000	\$2,250,000
Budget Assessments*	\$352,000	\$1,400,000	\$1,752,000
<b>Total</b>	<b>\$352,000</b>	<b>\$4,400,000</b>	<b>\$4,752,000</b>
<b>Expenditures</b>			
CCC Construction	\$154,560	\$4,003,475	\$4,158,035
Flowers and Associates Construction Management	\$6,806	\$123,525	\$130,330
Makai Ocean Engineering Design Support	\$88,000	\$90,000	\$178,000
EPFP Storage Costs	\$42,000	\$42,000	\$84,000
Operating Expenses (permits, inspections, surveys)	\$39,798	\$50,000	\$89,798
<b>Total</b>	<b>\$331,163</b>	<b>\$4,309,000</b>	<b>\$4,640,163</b>
<b>Differential</b>	<b>\$20,837</b>	<b>\$91,001</b>	<b>\$111,837</b>

**Table 2:** Expenditures to date for the project.

<b>Estimated Project Costs/Available Funds*</b>			<b>\$4,731,163</b>
<b>Total Expenditures to Date</b>	<b>FY 2021-2022</b>	<b>FY 2022-2023</b>	<b>Total</b>
CCC Construction	\$154,560	\$824,827	\$979,387
Flowers and Associates Construction Management	\$6,806	\$21,870	\$28,675
Makai Ocean Engineering Design Support	\$88,000	\$0	\$88,000
EPFP Storage Costs	\$42,000	\$7,000	\$49,000
Operating Expenses (permits, inspections, surveys)	\$39,798	\$708	\$40,506
<b>Total</b>	<b>\$331,163</b>	<b>\$854,405</b>	<b>\$1,185,568</b>
<b>Summary:</b>			
% Expenditures through 8/31/22			24.9%
Funds Remaining (Est. Costs minus Total Expenditures)*			\$3,545,595
*Available Funds remaining were reduced by FY 2021-2022 differential as COMB Board has not approved the carryover FY 2021-22 funds.			

**Figure 1:** a) 36" HDPE pipe delivered to boat ramp staging area; b,c) construction of Flexifloat working barges; d) concrete anchor weights form; e) concrete anchor weight prototype.



**Figure 2:** a) work barge dredging around the intake tower (J.Waller); b) HDPE pipeline stored at boat ramp staging area (J. Waller); c) concrete anchor weights delivered to site.



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Mission Statement:

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

September 26, 2022

## **General Manager Report**

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

### Administration / Staff Training

- **California Special Districts Association (CSDA)**

COMB Administrative staff attended the 2022 CSDA Annual Conference during the week of August 22-25, 2022. Staff attended educational sessions on various topics including: Bond Market and Debt Financing, GASB Principles for Retirement Benefits, Contracting for Indemnification, Prevailing Wage Compliance, Cybersecurity Best Practices and the Legislative Update for 2022.

- **ACWA JPIA Sexual Harassment Prevention Training for Staff**

COMB staff virtually participated in required biennial Sexual Harassment Prevention training sponsored by ACWA/JPIA in compliance with California AB 1825, AB 2053 and AB 1661. The course covers the impact of harassment and importance of creating a safe work environment where employees can report sexual harassment violations without fear of shame or retaliation. The program also guides managers through the sexual harassment investigative process including interviewing the complainant, alleged harasser, and witnesses.

- **American Water Works Association (AWWA) and Cybersecurity and Infrastructure Security Agency (CISA)**

COMB Administrative staff participated in a security advisory call hosted by AWWA and CISA. The purpose of the call was to provide information regarding a recent ransomware attack that affected healthcare and water sectors in the United Kingdom. CISA's Cybersecurity Division also discussed what organizations can do to better protect themselves and prepare for a ransomware threat more effectively. COMB staff had a follow up conversation with its external IT consultant to discuss the briefing.

- **ACWA JPIA Employee Benefits 2023 Renewal Webinar**

COMB Administrative staff participated in the ACWA/JPIA Employee Benefits 2023 Renewal Webinar. Participants received additional information for 2023 health insurance rates, benefit enhancements and open enrollment information. For 2023, two notable benefit changes include: (1) Anthem PPO will be introducing a fertility and family building benefit and up to \$20K in adoption and surrogacy assistance through Progyny Health, and (2) UHC Medicare Advantage PPO will be increasing the hearing aid allowance from \$500 to \$2,500. The open enrollment period will run from October 3 – November 10, 2022.

Virtual Meetings

- **Santa Barbara County Office of Emergency Management (OEM) Meeting**

On September 7, 2022, COMB staff participated in the Santa Barbara County Operational Area (OA) Emergency Managers Committee meeting. The OA partners received an update on the recent heatwave and power conservation information messaging. The OA partners received a presentation from Vance Taylor, Office of Access and Functional Needs Chief, and Angel Perez, Digital Accessibility Coordinator, California Governor's Office of Emergency Services. The presentation focused on accessibility and ADA considerations in social media and digital platforms. The OA partners also received a presentation from Sarah York Rubin, Executive Director, Santa Barbara County Office of Arts and Culture. The presentation provided safety tips and disaster relief information for the arts and culture sector. The next OEM meeting is scheduled for Wednesday, October 12, 2022.

Respectfully submitted,

*Janet Gingras*  
General Manager

# CACHUMA OPERATION AND MAINTENANCE BOARD

## MEMORANDUM

**DATE:** September 26, 2022  
**TO:** Janet Gingras, General Manager  
**FROM:** Joel Degner, Engineer/Operations Division Manager  
**RE: MONTHLY ENGINEERING REPORT**

The following summary provides the Board with information and an overview of progress by engineering staff related to on-going studies and infrastructure improvement projects.

### CLIMATE CONDITIONS

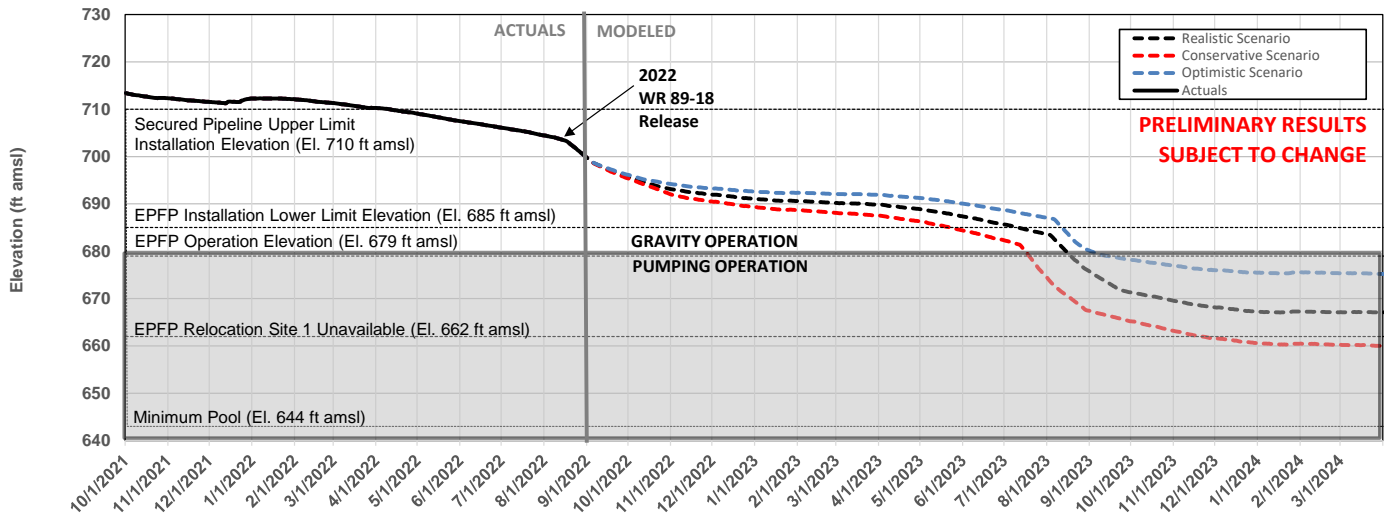
September 2022 thus far has been an unusual month with a record-breaking heat wave and two unusual early storms affecting California. Portions of the County of Santa Barbara have unusually high rainfall totals for September, especially the western portion of the county (Salsipuedes Creek watershed). Eastern portion of the county and the watershed for Lake Cachuma, however, has received minimal rain in the September events. The average live fuel moisture index is 57% for the County which is below the critical threshold for extreme fire behavior of 60 percent. The climate prediction center forecasts that La Niña is favored to continue through Northern Hemisphere winter 2022-23, with a 91% chance in September-November, decreasing to a 54% chance in January-March 2023. The ocean conditions are similar to the initial La Nina ocean conditions that resulted in drier than normal conditions in Water Year 2021 and 2022. The National Weather Service seasonal precipitation outlooks are leaning below normal. Most of Santa Barbara County continues to be classified in extreme drought by the U.S Drought Monitor. For Water Year 2021-2022, Cachuma Reservoir inflow through August 31, 2022 was 4,655 acre-feet which would moves it from Critical ( $\leq 4,550$ ) to Dry year category (4,550 to 15,366). With one month of inflow remaining Water Year 2022 is likely to be classified as a Dry year based on the inflow totals.

### LAKE ELEVATION PROJECTION

The elevation at Lake Cachuma is currently at 696.83' (34.3% capacity, 66,272 AF). Table 1 provides the modeling assumptions for three modeling scenarios (optimistic, realistic, and conservative). Figure 1 provides the lake elevation projection if dry conditions continue for the remainder of the water year and for water year 2022-23. In the conservative scenario the installation of the pumping facility would need to be approved by the Board in February 2023 for operation in July 2023. In the realistic scenario, the Board would need to approve the installation in March 2023 for operation in early September 2023. The contractor needs 120 days to install the pumping facility per the existing contract. The need to operate the pumping barge will likely coincide with the initiation of the downstream release in 2023.

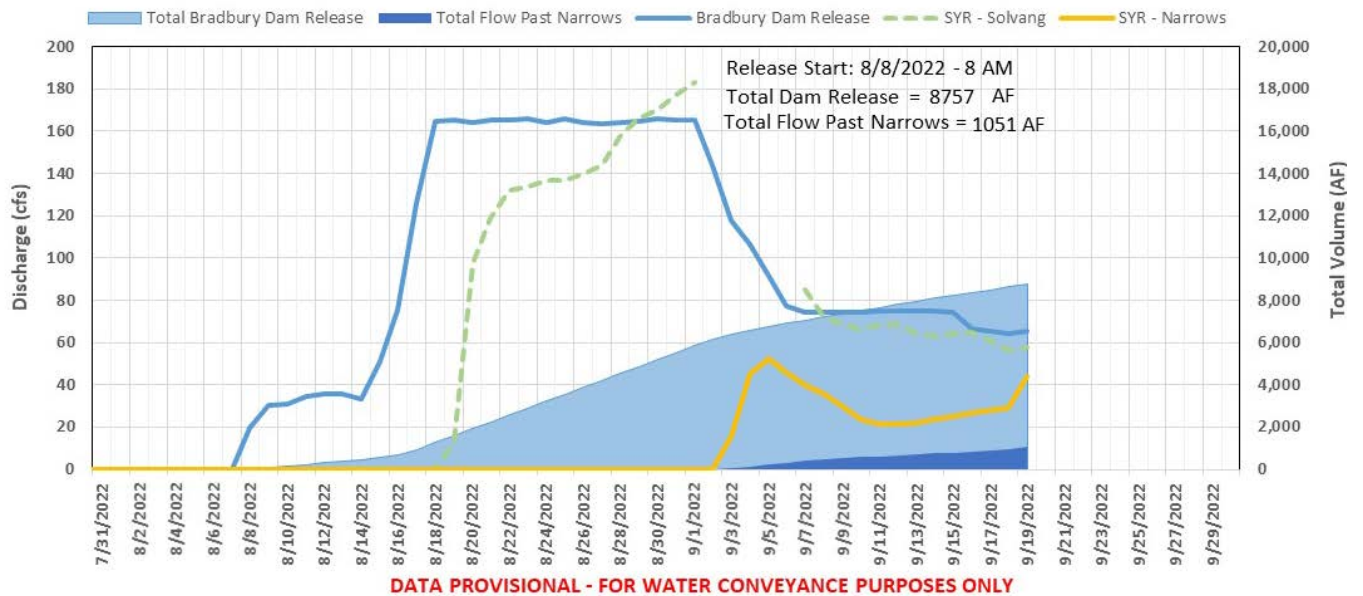
**Table 1.** Modeling Scenario Assumptions

Parameter	Optimistic	Realistic	Conservative
SCC Exports	80% Forecast	Forecast	120% of Forecast
CCWA Inflow	120% Forecast	Forecast	80% of Forecast
WR 89-18 Release (2022)	10,000 AF	11,000 AF	12,000 AF
WR 89-18 Release (2023)	8000 AF	10,000 AF	12,000 AF



**Figure 1.** Projected Lake Cachuma Elevation assuming Continued Dry Conditions

Santa Ynez River Water Conservation District (SYRWCD) has released approximately 8,800 acre-feet through September 19 starting on August 8, 2022. Provisionally measured flows past the Santa Ynez River Narrows have been 1,050 acre-feet. SYRWCD projected a release of 8,000 to 12,000 acre-feet prior to the start of the release and are trending towards the higher end of the range. These data, based on preliminary measurements by the USGS and Reclamation, are subject to revision.



**Figure 2.** Provisional Flow Measurements for the 2022 Downstream Release (as of 9/19/2022)



## INFRASTRUCTURE IMPROVEMENT PROJECTS

Table 1 provides the status of Fiscal Year 2022-23 infrastructure improvement and special projects.

**Table 1. Fiscal Year 2022-2023 Infrastructure Improvement Projects**

Infrastructure Improvement Projects	Status / Phase	Complexity / Challenges	Estimated Completion Date
<b>Infrastructure Improvement Projects</b>			
SCC Line Valves for Shutdown	COMB has completed Phase 1 work and CVWD is in progress on Phase 1 lateral work as part of the cooperative agreement. Once CVWD completes Phase 1, Phase 2 for COMB (Lillingston valve) will be brought to the COMB Board to review.	Additional line valve(s) are needed in Carpinteria to facilitate shutdown work. A Cooperative Agreement between CVWD and COMB has been approved by COMB and CVWD to facilitate the work.	January to April 2023
SCC Structure Rehabilitation : Lower Reach Laterals	CVWD contractor successfully completed rehabilitated Laterals 1R,1L, 2R, 3L,4L in August. Laterals 5R and 6R will be completed as part of the SCC shutdown for the AVAR-BO project.	In order to facilitate shutdowns on the Lower Reach of the SCC, lateral valves need replacement. COMB is collaborating with CVWD on this project.	CVWD construction on Phase 1 will likely be completed in November 2022.
SCC Structure Rehabilitation : AVAR/BO Valves	The shutdown is tentatively scheduled for November 2023. Timing may need adjustment depending on parts for CVWD to temporary bypass to the laterals during the proposed shutdown.	The remaining structures to be rehabilitated are the most difficult access-wise (with several in Highway 192) and with difficult shutdowns to schedule in the Carpinteria area.	Shutdown and construction is planned for mid-November 2022.
<b>Special Projects</b>			
Emergency Pumping Facility - Secured Pipeline Project	A Notice to Proceed has been issued for the contractor. Contractor has provided submittals for materials which are currently being fabricated. In lake construction commenced in September. All the HDPE pipeline needed for the project has been delivered to the lake. Custom parts and components are under fabrication. Concrete anchors are being fabricated daily at five a day.	The Secured Pipeline Project needs to be installed when the lake is between 690' and 710' in elevation. The lake elevation is projected to remain above 685' until Spring 2023. Installation of the EPF (floating pump station) is needed when the elevation is projected to fall below 685'.	Secured Pipeline is planned for construction from September 2022 to early February 2023. The Emergency Pumping Facility would need to be installed approved for installation in February/March timeframe for operation in July/August if dry conditions continue in Water Year 2023.
Lake Cachuma Water Quality and Sediment Management Study	COMB staff release the RFP for the for the Phase 2 phosphorous/TOC source study in August 2022 and proposals are due at the end of September. The project will likely be brought to the board for approval in October.	Additional sampling is needed to better understand nutrient and total organic sources prior to determining if additional larger actions at the lake would make sense from a cost-benefit stand point.	A focused phosphorous and TOC sourcing study by COMB is planned for FY 2022/2023.

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## CACHUMA OPERATION AND MAINTENANCE BOARD

**DATE:** September 26, 2022  
**TO:** Janet Gingras, General Manager  
**FROM:** Shane King, Operations Supervisor  
**RE:** **MONTHLY REPORT OF OPERATIONS – August 2022**

The total flow from Lake Cachuma into the Tecolote Tunnel for August was 1,782.4 acre-feet, for an average daily flow of 57.49 acre-feet. Lake elevation was 704.44 feet at the beginning of August and 699.93 feet at the end of August. Lake storage decreased by 7,464 acre-feet. There was 331.0 acre-feet of inflow from CCWA into Cachuma Project facilities this month. The City of Santa Barbara wheeled 435.94 acre-feet of water from the Gibraltar Penstock through Lauro Reservoir. The Hilton Creek Watering System was utilized and delivered 120.9 acre-feet of water to Hilton Creek for the month of August. The year 2022 downstream release (WR 89-18) into the Santa Ynez River began on August 8<sup>th</sup>, and through September 19<sup>th</sup> has released ~8,800 acre feet of water from Lake Cachuma.

The Operations Division of the Cachuma Operation and Maintenance Board has the responsibility to operate, repair and maintain all Cachuma Project facilities from the Intake Tower at Lake Cachuma to the Carpinteria Reservoir. The Annual Work Plan sets forth all activities necessary to ensure system reliability. Consistent with the Plan, Operation and Maintenance staff performs routine maintenance on the distribution and storage system. Staff continues to improve the system, address deficiencies and identify items to be included in the Infrastructure Improvement Program of work. Operations Division is responsible for:

- Adequately regulating and maintaining the conveyance of water from Lake Cachuma to the South Coast via the Tecolote Tunnel as the primary water source for 5 communities.
- Operation and maintenance of the South Coast Conduit pipeline, which consist of 26.5 miles of pipeline with a combined 124 blow off and air vent structures, 43 turnout structures and 20 meters.
- Operation and maintenance of four regulating reservoirs.

South Coast Conduit - Structure Inventory													
Reach	Endpoints	Linear Length (ft)	Pipe Diameter	Regulating Storage Reservoirs	Meters	Air Vents	Blow-Offs	Turnouts	Open Air Vents	Valves	Valve Size	Slide Gates	Capacity / Volume (gal)
Upper	Glen Annie Turnout (S. Portal) - Cater Water Treatment Plant	64,050	48"	2	5	32	35	18	2	115	4" - 48"	7	6,017,421
Lower	Cater Water Treatment Plant - Carpinteria Reservoir	90,910	27" - 36"	2	15	26	31	42	4	144	4" - 36"	-	3,190,171

Routine operation and maintenance completed during the month of July were as follows:

- Staff has been on site monitoring several ongoing projects throughout the area, working closely with the construction and engineering contractors to ensure that:
  - Pipeline easements and the right-of-way remain accessible to Operations staff for possible emergencies and ongoing facility maintenance.
  - All projects are following the COMB and USBR approved plans.
  - No damage occurs to the SCC during the construction process.

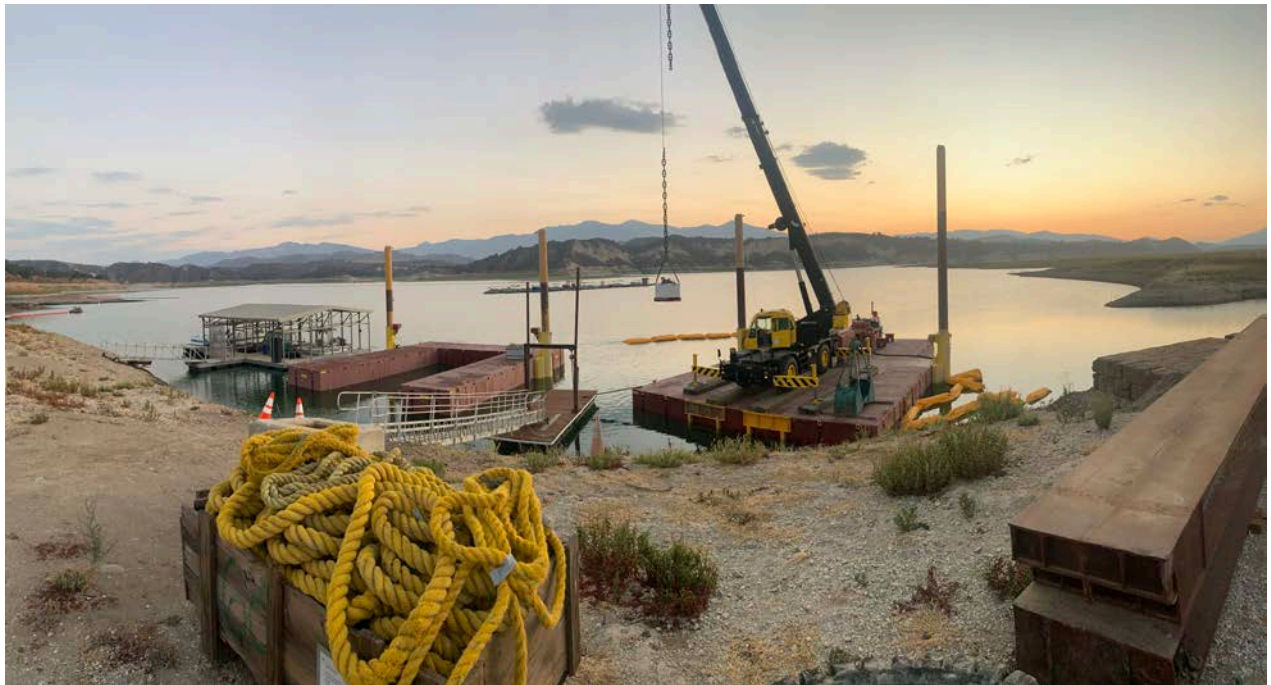
### **Ongoing Monthly Operations Items:**

- Conducted several flow changes at the North Portal during the month
- Reviewed several projects for conflicts within the SCC right of way
- Received and responded to 98 USA Dig alerts
- Performed weekly inspections of major facilities, safety meetings, rodent bait (all reservoirs), toe drain and piezometer reads at Ortega (L23)
- Performed dam inspection and instrumentation reports (all reservoirs)
- Performed equipment and yard maintenance
- Performed monthly North Portal elevator maintenance with Otis
- Performed monthly water quality sampling
- Read and document anodes and rectifier data

### **In addition regular activities described above, Operations staff performed the following:**

- The intake tower slide gates were greased and exercised.
- The insertion style turbidity meter monitoring NTU levels from Cachuma Lake was pulled, cleaned and calibrated. This monitoring device is located on the north portal Tecolote tunnel inflow bypass line.
- The State Water Resources Control Board – Department of Drinking Water conducted a sanitary survey of COMB's facilities. No major issues were found during this survey.
- Operations staff has been cleaning and organizing the upper storage area at the COMB yard. Staff has been hauling away trash and materials that are no longer needed, and moving all other equipment and supplies off of the paved area. This work is in preparation for asphalt work being completed in the coming weeks. COMB plans to have some patch work, and asphalt sealing done throughout the paved area of the COMB yard and parking lot.
- Staff installed a fine mesh screen around the open air vent stack near the Lauro reservoir. This work was recommended by the Department of Drinking water.
- COMB staff has been continually and closely monitoring the secured pipeline work being conducted by Cushman Construction Company. To date, COMB has received all of the HDPE pipe needed to complete the project, and several concrete anchors have been delivered. Cushman has assembled the barge and has completed the dredging work around the intake structure at Lake Cachuma. (See photos)
- COMB staff continues to work through the annual structure maintenance program. Staff has completed maintenance on the lower section of the SCC (Lauro reservoir to Carpinteria reservoir). This work includes visiting each air vent, blow off, lateral, and meter structures and performing annual maintenance. Staff has visited ~20 structures this month. Work completed at these structures include:
  - Pump out any water that may have accumulated since last visit
  - Remove any debris/dirt
  - Re-paint confined space signage as needed
  - Re-paint station number as needed
  - Exercise valves and AVAR's
  - Clear any vegetation from around structure
  - Document any assets that may need replacement/repairs

Secured pipeline photos





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

**DATE:** September 26, 2022  
**TO:** Janet Gingras, General Manager  
**FROM:** Tim Robinson, Fisheries Division Manager  
**RE: MONTHLY FISHERIES DIVISION REPORT**

**HIGHLIGHTS:**

- USBR is delivering 2000 Biological Opinion (BiOp) target flows to Hilton Creek partly by gravity through the Hilton Creek Emergency Backup System (HCEBS) and partly by pumped flow from the Hilton Creek Watering System (HCWS) to the Lower Release Point (LRP) and Upper Release Point (URP), respectively, which is sustaining the *O. mykiss* population in the creek. Currently, the lake is too low for gravity flow delivery through the HCWS. BiOp compliance releases to Hilton Creek are a minimum of 2 cfs. USBR was delivering less than 2 cfs prior to 8/12/22 (approximately 1 cfs) then more than 2 cfs from that date forward when the parallel delivery system was activated. Since the last COMB Board meeting, there have been three short duration interruption of flow events to the creek due to a PG&E unexpected power outage and operational challenges while switching from generator to grid power during an extended heat wave at the beginning of September. USBR and NMFS have been in close communication regarding all events on the creek over the last month.
- The 2000 BiOp and Order WR 2019-0148 target flows to the Hwy 154 Bridge (2.5 cfs) are being met by USBR for the current lake level through releases from Hilton Creek, the Outlet Works, and spillway to the Lower Santa Ynez River (LSYR) mainstem.
- The 2022 WR 89-18 release started on 8/8/22 with a slow ramp up to the maximum release rate as of 8/18/22 of approximately 160 cfs. This maximum release rate was maintained for approximately 16 days until being ramped down to an equilibrium flow rate between 50 to 65 cfs that will continue well into the fall. The release is projected to end sometime in November.

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

**LSYR Steelhead Monitoring Elements:**

***Thermograph Network:*** The thermograph network is deployed at the beginning of April and picked up at the end of December to record water temperatures at all designated locations within the LSYR mainstem and several tributaries. The thermograph network has been deployed in the LSYR mainstem and its tributaries. Thermographs are downloaded monthly and the results are summarized in the Annual Monitoring Report.

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

**Snorkel surveys:** Snorkel surveys for *O. mykiss* and non-native fish in the LSYR mainstem and tributaries are conducted two times a year (Spring and Fall). The Spring Snorkel Survey has been completed. The results are presented in the annual monitoring report.

**Monitoring Target Flows:** Monitoring for the required 2000 BiOp and WR 2019-0148 target flows are conducted by USGS and USBR for Hilton Creek, and COMB-FD and USBR for the LSYR at the Hwy 154 Bridge. The minimum target flow of 2 cfs to Hilton Creek was not being met with HCEBS gravity flow to the URP and LRP (approximately 0.75 cfs) up until 8/2/22 when the HCWS pump was activated and 2 cfs or more was being discharged to the creek. Although USBR was reluctant to run any level of pumps to deliver water to the creek given past operational issues and recent power outages at Bradbury Dam, USBR felt they had no choice given the up and coming 2022 WR 89-18 releases that would rapidly reduce the potential for gravity flow. USBR has discussed the situation with NMFS when it initially occurred and as the situation has evolved.

Documenting compliance in meeting target flows at the Hwy 154 Bridge (2.5 cfs) cannot be done at that specific location due to the channel configuration and landowner access limitations. USBR established a low-flow river discharge monitoring location approximately 1 mile downstream of the Hwy 154 Bridge where access is available. USBR has been taking a discharge measurement approximately once a month and the COMB-FD staff are taking a discharge measurement once a week; we also maintain a pressure transducer at that location to record river stage every 15 minutes. This is part of a compliance measure within WR 2019-0148, specifically the Plan required in Term 18 and Term 25. The objective is to maintain a river discharge at that monitoring location of 2.5 cfs or greater (at the current lake elevation) which follows Reclamations established operational protocols for meeting required target flows at the Hwy 154 Bridge upstream. The objective was challenging to meet at all times in May, June, and July of 2021 due to many factors influencing streamflow between the release point at Bradbury Dam and the monitoring location (i.e., weather changes, varying riparian corridor vegetation and substrate composition, land use practices, alluvial groundwater extraction, etc.). Reclamation is operating within acceptable discharge parameters to meet target flows given the challenging factors and access barriers. COMB-FD continues to take weekly measurements as requested by USBR except during high flow periods when stream access isn't possible, for example during WR 89-18 peak releases. As the flow rates drop down to approximately 60 cfs, river discharge measurements will resume. COMB continues to maintain our pressure transducer throughout the WR 89-18 release.

The installation of the new USGS gage just upstream of the Highway 154 Bridge started this month. We hope the site and equipment will be fully operational at the beginning of next month.

**WR 89-18 Release Monitoring:** BiOp required monitoring for the WR 89-18 releases (RPM 6) will be conducted as requested by USBR for the 2022 WR 89-18 release that started on



8/8/22 at approximately 8:00 AM. The release ramped up slowly during the first week from 20 cfs to 35 cfs then on 8/15/22 from 50 cfs to approximately 160 cfs on 8/18/22 that was sustained for 16 days before being ramped down to equilibrium flow of approximately 50-65 cfs. The release will continue at that rate until well into the fall. The release is projected to be completed in November and is expected to have a cumulative release amount of approximately 10,000 acre-feet.

The Study Plan for RPM 6 was submitted to USBR on 8/3/22 and the required monitoring began that week. The during-snorkel surveys will be done within the next two weeks. The Santa Ynez River Water Conservation District in collaboration with USBR conducts WR 89-18 releases.

**Tributary Project Updates:**

All planned projects have been successfully completed.

**Hilton Creek Watering System (HCWS) and Emergency Backup System (HCEBS) Operation and Repairs:**

**HCWS and HCEBS:** The HCWS and HCEBS are owned, operated, and maintained by USBR. The HCEBS was completed at the end of January 2016. USBR technical staff continues to consider improvement options for the HCWS. Currently USBR is delivering water to Hilton Creek through the HCEBS by gravity flow to the URP and LRP.

The HCEBS delivery floating pipeline across the Stilling Basin was removed on 2/5/20 and then reinstalled between 3/2/21 and 3/4/21. USBR successfully replaced two malfunctioning valves associated with the HCEBS on 5/12/21.

After observing water leaking out of the HCEBS floating pipeline, USBR with assistance from COMB-FD on 9/30/21 and 11/18/21 tightened the flanges on all pipe segment connections and the leaking appeared to stop resulting in more water delivery to Hilton Creek. No further maintenance is planned for the floating pipeline.

On 6/8/21, USBR activated the HCEBS on gravity flow to the URP. For a time, both the HCWS and HCEBS provided gravity flow to the URP. As the lake level dropped, more water came from the HCEBS until the HCWS stopped flowing water approximately at the end of July that year. Then all release water to Hilton Creek came through the HCEBS by gravity flow to the URP and LRP.

After several discussions between USBR and NMFS, USBR decided to activate the HCWS pump on 8/2/22 to deliver water to Hilton Creek with the objective of setting the HCEBS to standby mode in the event that the pump turned off. Late that day the programmed linkages for that automated transfer of flow from the HCWS to the HCEBS were found to be inoperable, so USBR reconfigured part of the system for HCEBS gravity flow with HCWS pumped flow from the lake based system. That night at 8:04 PM an email alert from PG&E was received regarding a unplanned power outage in the area of Bradbury Dam and Lake Cachuma. The HCWS pumps shut off and HCEBS gravity flow to the creek did not occur resulting in no water being delivered to Hilton Creek for approximately 2 hours. Both USBR and COMB-FD staff mobilized to the area. USBR attempted to activate the HCWS pumps without success and then started the HCEBS pumps which restored flow to the creek. COMB-FD staff conducted fish rescue and relocation efforts until flows were reestablished to the creek.

Multiple meetings were held after that incident with NMFS, USBR, and CDFW where it was concluded that the delivery system of water to Hilton Creek by pumped flow was not reliable, all fish should be relocated downstream from the reach between the LRP and the URP (Reach 5), and that reach should be blocked off to upstream fish movement. This would allow for HCEBS gravity flow to the LRP and HCWS pumped flow to the URP. If the HCWS pump turned off, then the fishery would be sustained by the HCEBS gravity flow to the LRP and downstream of the blocking seine. Fish rescue and relocation was conducted by CDFW and approved by NMFS with assistance from COMB-FD on 8/8/22 through 8/10/22. On 8/11/22, USBR turned off the HCEBS pump, reestablished HCEBS gravity flow to the LRP, and activated the HCWS pump to the URP. The parallel delivery systems (gravity and pump) have been functioning since then with a few exceptions. USBR is investigating ways to improve their water delivery systems to Hilton Creek.

There were 3 interruption of flow events to the URP during the first week of September when the region was experiencing an intensive heat wave. The first event occurred on 9/2/22 at approximately 7:45 AM that was associated with an unexpected PG&E power outage. USBR dam tenders were on site, started the onsite generator, and reestablished HCWS pump flow to the URP. The event duration was so short and no fisheries issues were found within Reach 5. USBR was concerned about potential future power outages during the ongoing heat wave and opted to switch to a procedure of going to generator power at the end of the day when the dam tender staff would not be on site and back on grid power in the morning when staff were on site until the heat wave passed.

On 9/3/22 in the morning, USBR was in the process of switching from generator to grid power when the HCWS pump shut off. They were not able to reactivate the HCWS pump from the land-based controllers and had to boat to the pumping barge to start up the backup pump to reestablish flow to the URP. The interruption of flow to the URP continued for approximately 4 hours during which time some *O. mykiss* were rescued/relocated and some mortalities were found.

Another short duration interruption of flow at the URP occurred on 9/5/22 in the morning at approximately 9:00 AM that was associated with USBR switching from generator to grid power. USBR was able to quickly restart the HCWS pump from the land-based controllers and reestablish flow to the URP, a duration of approximately 15 to 30 minutes. Due to the brevity of the event, no COMB-FD staff were deployed to the creek.

### **Surcharge Water Accounting:**

The following table summarizes the amount of surcharge water used to date from each of the three accounts plus unallocated project water at the end of last month (Table 1). All numbers are from the USBR's Daily Operations Report. The start time for the use of the Surcharge Water Accounts and Project Yield was 5/27/11, or the day following the last day of full surcharge and end of the last spill event. As of May 2012, all of the fish rearing account has been used and USBR is now using Unallocated Project Water to meet BiOp target flows. Water Right (WR 89-18) release durations since 2013 are noted as follows: 7/15/13 - 12/2/13, 8/18/14 - 11/11/14, 8/3/15 - 9/26/15, 7/12/16 - 8/29/16, 8/21/17 - 11/8/17, 8/6/18 - 9/12/18, 8/31/20 - 11/30/20, 8/2/21 - 10/22/21, and 8/8/22 - ?/?/22. There were no WR 89-18 releases in 2019. During these releases, no fish rearing releases are debited as WR 89-18 releases are used conjunctively with fish flows under the Cachuma Project Settlement Agreement. The Adaptive Management Committee (AMC) called for two releases from the Adaptive Management Account (AMA), 35 acre-feet in October 2012 and 114 acre-feet in June 2013. The remaining amount in the AMA is 351 acre-feet. All of the Fish Passage

Supplementation Account (FPSA) has been used as of WY2019; all additional releases for fish passage are from Unallocated Project Water as determined by USBR.

**Table 1:** Summary of the surcharge water accounting and use of Project Yield as of the day after the end of the last spill event and full surcharge (5/27/11).

Accounts*	Allocation	Amount Used**	Amount Remaining
Units:	(acre-feet)	(acre-feet)	(acre-feet)
<b>Fish Passage Supplementation</b>			
WY2019	3,200	3,307	-107
WY2020	0	2,558	-2,558
<b>Adaptive Management</b>	500	149	351
<b>Fish Rearing***</b>	8,684	8,684	0
<b>Unallocated Project Water</b>		29,283	
<b>Total:</b>	9,184	43,981	-2,314
* Originally was 9,200 af, 8,942 af in 2008 and 9,184 af in 2013.			
** Values as of 8/31/22.			
*** This water is for meeting required target flows. This is not an official account and is what remains after subtracting the other two accounts.			

**AVIRIS Overflight Collaboration:**

On 9/14/22 and 9/15/22, an AVIRIS (Airborne Visible / Infrared Imaging Spectrometer) overflight occurred in several regions of Santa Barbara County that included Lake Cachuma. Due to COMB’s ongoing water quality monitoring, we were asked to collaborate with researchers from NOAA-NASA, JPL, and UCSB to gather surface reflectance with a radiometer and water quality data during the overflights. AVIRIS is a plane based remote sensing scanner that collects 224 contiguous spectral channels (bands) with wavelengths from 400 to 2500 nanometers and a pixel resolution that depends on the height of the overflight. That number of bands provides a rich data source for Earth surface and ecosystem observations. A critical part of the overflight is to collect on the ground data for imagery calibration. COMB worked with the AVIRIS team to collect that calibration data on Lake Cachuma that will be very useful for our ongoing water quality monitoring efforts. A summary of the results will be presented to the Board during the next meeting.

**Reporting / Outreach / Training:**

**Reporting:** Staff has been assisting USBR upon request in reviewing draft sections and conducting data analyses for their preparation of the new draft Biological Assessment and WR 2019-0148 required Plans.

Staff has started working on the WY2022 Annual Monitoring Report and WY2022 Annual Monitoring Summary, specifically data entry and analyses.

**Outreach and Training:** Outreach continues with Lower Santa Ynez River landowners (specifically in the Quiota Creek and Salsipuedes Creek watersheds), interested parties within the Santa Ynez Valley, and the County on a variety of fisheries related issues.

**Consultant Activity Summary:**

**HDR Fisheries Design Center** (Mike Garello and Shaun Bevan) – No work was performed during this time period on established SOW tasks.

**Kenneth A. Knight Consulting** (Ken Knight) – No work was performed during this time period on established SOW tasks.

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# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	September 26, 2022
Submitted by:	Tim Robinson and Scott Volan
Approved by:	Janet Gingras

**SUBJECT:**     **Progress Report on the Lake Cachuma Oak Tree Restoration Program**

**RECOMMENDATION:**

For Board information only.

**SUMMARY:**

This memorandum on the Lake Cachuma Oak Tree Restoration Program reflects maintenance completed since November, 2021 to the present (11/1/21 – 8/22/22, Table 1). Labor and expenses for the entire fiscal year (July 2021 - June 2022) as well as water usage is tracked separately and reported as necessary as recommended by the Lake Cachuma Oak Tree Committee. COMB staff continues to rely on the Fisheries Division seasonal employees to conduct the majority of oak tree work in the field. The 2015 Lakeshore Inventory was completed and reviewed by the Lake Cachuma Oak Tree Committee on 2/25/16 which set the mitigation numbers for the Program. The 2021 Annual Report with the annual inventory and Fiscal Year 2021-22 financials was completed and reviewed by the Lake Cachuma Oak Tree Committee on 9/16/22 and provided to the COMB Board on 9/26/22 under separate cover that recommended going forward with replacing 50 dead oak trees during the wet season of this water year.

**Table 1: Cachuma Oak Tree Program completed tasks since November, 2021.**

	Nov 2021	Dec 2021 <sup>1</sup>	Jan 2022	Feb 2022 <sup>2</sup>	Mar 2022 <sup>2</sup>	Apr 2022 <sup>2</sup>	May 2022 <sup>2</sup>	June 2022 <sup>2</sup>	July 2022 <sup>2</sup>	August 2022	Sept 2022
<b>Year 13 Oaks</b> <b>(2021-2022)</b>	New Trees	New Trees	New Trees	New Trees	Irrigated	Irrigated		Irrigated	Irrigated	Irrigated	Irrigated
	Gopher Baskets	QA/QC	QA/QC	QA/QC	Weeded	Weeded		Weeded	Weeded	Weeded	Weeded
	Fert/Comp	Tree Tags	Tree Tags	Tree Tags							
	Deer Cages		Deer Cages	Deer Cages							
	Mulch/Irrigated		Mulch/Irrigated	Mulch/Irrigated							
<b>Year 12 Oaks</b> <b>(2020-2021)</b>				Irrigated	Irrigated		Irrigated	Irrigated	Irrigated	Irrigated	Irrigated
				Weeded	Weeded		Weeded	Weeded	Weeded	Weeded	Weeded
<b>Year 11 Oaks</b> <b>(2019-2020)</b>						Irrigated	Irrigated		Irrigated		
						Weeded	Weeded		Weeded		
<b>Year 10 Oaks</b> <b>(2018-2019)</b>											
<b>Year 9 Oaks</b> <b>(2016-2017)</b>		Irrigated									
		Weeded									
<b>Year 8 Oaks</b> <b>(2015-2016)</b>											
<b>Year 7 Oaks</b> <b>(2014-2015)</b>											
<b>Year 6 Oaks</b> <b>(2005-2011)</b>											
<sup>1</sup> Dead trees replaced.											
<sup>2</sup> Oak tree inventory.											

***Maintenance***

Watering crews continued their focus on the newer Year 12 and Year 13 trees in August and September. These trees with smaller root zones are susceptible to desiccation and drying during the peak summer heat. Despite several early season storms impacting the watershed (tropical depression Kay and an early season

Gulf of Alaska low in mid-September), unfortunately no rainfall was recorded at Bradbury Dam during these two events.

**Acorns**

Both coast live and valley oak trees are producing acorns in the Santa Ynez Valley (Exhibit 1). The COMB-FD will be collecting acorns a final time this fall for propagation at Manzanita Nursery, primarily as insurance in the event more replacement trees are needed in the future.

**Annual Inventory**

The 2022 Annual Inventory of all year classes (COMB planted trees 2005 through 2022 and Dam Tender trees) will be started in the late fall and be included in the 2022 Annual Report.

**LIST OF EXHIBITS:**



**Exhibit 1:** Mature oak trees in the Santa Ynez Valley showing (a) coast live and (b) valley oak acorns.

**CACHUMA OPERATION AND MAINTENANCE BOARD**  
**METERED USE REPORT FOR AUGUST 2022**

LATERAL/ STATION	NAME	ACRE FEET METERED	LATERAL/ STATION	NAME	ACRE FEET METERED
<b>CARPINTERIA WATER DISTRICT</b>			<b>GOLETA WATER DISTRICT</b>		
Boundary Meter - East		239.37	18+62	G. WEST	152.04
Boundary Meter - West		(0.14)	78+00	Corona Del Mar FILTER Plant	640.25
			122+20	STOW RANCH	0.00
				SWP CREDIT (Warren Act Contract)	(269.00)
				Raytheon (SWP) (Warren Act Contract)	0.00
				Morehart (SWP) (Warren Act Contract)	(7.00)
			<b>TOTAL</b>		<b>516.29</b>
			<b>MONTECITO WATER DISTRICT</b>		
			260+79	BARKER PASS	69.32
			386+65	MWD YARD	23.48
			487+07	VALLEY CLUB	10.66
			499+65	E. VALLEY-ROMERO PUMP	275.07
			510+95	MWD PUMP (SWD)	16.75
			510+95	ORTEGA CONTROL	19.08
			526+43	ASEGRA RD	0.73
			555+80	CO. YARD	0.00
			583+00	LAMBERT RD	0.18
			599+27	TORO CANYON	8.83
				SWP CREDIT (Warren Act Contract)	0.00
				City of SB / MWD WSA ("Desal")	(117.38)
			<b>TOTAL</b>		<b>306.74</b>
			<b>CITY OF SANTA BARBARA</b>		
			CATER	INFLOW	1,460.92
			Gibraltar	PENSTOCK	(435.94)
			CATER	SO. FLOW	(882.67)
			Sheffield	SHEF.LIFT	189.87
				SWP CREDIT (Warren Act Contract)	0.00
				La Cumbre (SWP) (Warren Act Contract)	(91.07)
				City of SB / MWD WSA ("Desal")	117.38
			<b>TOTAL</b>		<b>358.49</b>
			<b>SANTA YNEZ RIVER WATER CONSERVATION DISTRICT, ID#1</b>		
			COUNTY PARK, ETC		3.01
			<b>TOTAL</b>		<b>3.01</b>
			<b>BREAKDOWN OF DELIVERIES BY TYPE:</b>		
			STATE WATER DELIVERED TO LAKE		322.00
			STATE WATER TO SOUTH COAST including from stored		367.07
			<b>METERED DIVERSION</b>		<b>1,423.77</b>
			<b>TOTAL</b>		
			SWP CREDIT (Warren Act Contract)		0.00
			<b>TOTAL</b>		<b>239.24</b>
Note: Meter reads were taken on: 8/31/2022					

**WATER YEAR 21-22 CACHUMA PROJECT ALLOCATION**

**CACHUMA OPERATION AND MAINTENANCE BOARD  
WATER PRODUCTION AND WATER USE REPORT  
FOR THE MONTH OF AUGUST 2022 AND THE WATER YEAR TO DATE (WYTD) <sup>(1)</sup>**

(All in rounded Acre Feet)

<b>CACHUMA PROJECT</b>		
<b>WATER PRODUCTION:</b>	<b>MONTH</b>	<b>WYTD</b>
Cachuma Lake (Tec. Diversion)	1,727.3	18,213.3
Tecolote Tunnel Infiltration	67.6	833.1
Cachuma Lake (County Park)	3.0	19.8
<b>Subtotal - Water Production</b>	<b>1,797.9</b>	<b>19,066.2</b>
<b>WATER DELIVERIES:</b>		
State Water Diversion	367.1	6,017.8
Cachuma Diversion	1,423.8	12,783.8
Storage gain/(loss) <sup>(2)</sup>	(48.1)	12.3
<b>Subtotal - Water Deliveries</b>	<b>1,742.7</b>	<b>18,813.9</b>
<b>Total Water Production</b>	<b>1,797.9</b>	<b>19,066.2</b>
<b>Total Water Deliveries</b>	<b>1,742.7</b>	<b>18,813.9</b>
<b>Difference = Apparent Water Loss</b>	<b>55.2</b>	<b>252.3</b>
<b>% Apparent Water Loss</b>	<b>3.07%</b>	<b>1.32%</b>

**SCC APPARENT WATER LOSS ALLOCATION (AWL) <sup>(3)</sup>**

	<b>GWD</b>	<b>SB CITY</b>	<b>MWD</b>	<b>CVWD</b>	<b>TOTAL</b>
<b><u>CURRENT MONTH CHARGE / (ADJUSTMENT)</u></b>					
M&I	0.0	0.0	0.0	0.0	0.0
Agriculture	0.0	0.0	0.0	0.0	0.0
Subtotal Cachuma Project	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
(+) State Water Project	0.0	0.0	0.0	0.0	0.0
<b>Total Current Month</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b><u>WATER YEAR-TO-DATE CHARGE / (ADJUSTMENT)</u></b>					
M&I	0.0	0.0	0.0	0.0	0.0
Agriculture	0.0	0.0	0.0	0.0	0.0
Subtotal Cachuma Project	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
(+) State Water Project	0.0	0.0	0.0	0.0	0.0
<b>Total AWL Charged (WYTD)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total AWL Not Charged (WYTD)</b>					<b>252.3</b>
<b>Total AWL Incurred (WYTD)</b>					<b>252.3</b>

**CACHUMA PROJECT WATER CHARGE**

	<b>GWD</b>	<b>SB CITY</b>	<b>MWD</b>	<b>CVWD</b>	<b>SYRID #1</b>	<b>TOTAL</b>
<b><u>CURRENT MONTH</u></b>						
Water Usage						
M&I	373.3	358.5	280.8	96.8	3.0	1,112.4
Agricultural	143.0	0.0	26.0	142.4	N/A	311.4
<b>Subtotal Project Water Use</b>	<b>516.3</b>	<b>358.5</b>	<b>306.7</b>	<b>239.2</b>	<b>3.0</b>	<b>1,423.8</b>
(+) Apparent Water Loss	0.0	0.0	0.0	0.0	N/A	0.0
(+) Evaporative Loss <sup>(4)</sup>	43.2	266.9	16.0	26.3	40.5	392.9
<b>Total Project Water Charge</b>	<b>559.5</b>	<b>625.3</b>	<b>322.8</b>	<b>265.5</b>	<b>43.5</b>	<b>1,816.7</b>
<b><u>WATER YEAR-TO-DATE</u></b>						
Water Usage						
M&I	3,743.2	5,094.0	1,966.2	272.5	19.8	11,095.7
Agricultural	1,140.1	0.0	163.5	384.6	N/A	1,688.1
<b>Subtotal Project Water Use</b>	<b>4,883.2</b>	<b>5,094.0</b>	<b>2,129.7</b>	<b>657.1</b>	<b>19.8</b>	<b>12,783.8</b>
(+) Apparent Water Loss	0.0	0.0	0.0	0.0	N/A	0.0
(+) Evaporative Loss <sup>(4)</sup>	474.8	1,898.1	194.2	216.0	262.5	3,045.5
<b>Total Project Water Charge (*)</b>	<b>5,358.0</b>	<b>6,992.1</b>	<b>2,323.9</b>	<b>873.2</b>	<b>282.2</b>	<b>15,829.4</b>

(\*) Project Water Charge is applied first to Carryover Water balance and then to Current Year Water Allocation



**WATER YEAR 21-22 CACHUMA PROJECT ALLOCATION**  
**CACHUMA OPERATION AND MAINTENANCE BOARD**  
**WATER PRODUCTION AND WATER USE REPORT**  
**FOR THE MONTH OF AUGUST 2022 AND THE WATER YEAR TO DATE (WYTD) <sup>(1)</sup>**

(All in rounded Acre Feet)

**CACHUMA PROJECT WATER BALANCE**

	<b>GWD</b>	<b>SB CITY</b>	<b>MWD</b>	<b>CVWD</b>	<b>SYRID #1</b>	<b>TOTAL</b>
<b>Project Water Carryover - 10/1/2021</b>	7,321.6	20,525.9	2,994.6	2,103.3	2,361.5	35,307.0
Transfers/Adjustment	0.0	0.0	0.0	0.0	0.0	0.0
<b>(-) Project Water Charge (WYTD)</b>	<b>5,358.0</b>	<b>6,992.1</b>	<b>2,323.9</b>	<b>873.2</b>	<b>282.2</b>	<b>15,829.4</b>
<b>Balance Carryover Water</b>	<b>1,963.6</b>	<b>13,533.8</b>	<b>670.7</b>	<b>1,230.2</b>	<b>2,079.3</b>	<b>19,477.6</b>
<b>Current Year Allocation <sup>(5)</sup></b>	<b>6,525.0</b>	<b>5,794.0</b>	<b>1,856.0</b>	<b>1,969.0</b>	<b>1,856.0</b>	<b>18,000.0</b>
<b>(-) Balance of Project Water Charge (WYTD)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Net Allocation Available Before Adjustments</b>	<b>6,525.0</b>	<b>5,794.0</b>	<b>1,856.0</b>	<b>1,969.0</b>	<b>1,856.0</b>	<b>18,000.0</b>
<b><u>Adjustments to Net Allocation (WYTD)</u></b>						
Carryover Balances Spilled	0.0	0.0	0.0	0.0	0.0	0.0
Surplus	0.0	0.0	0.0	0.0	0.0	0.0
State Water Exchange <sup>(6)</sup>	96.0	65.0	24.0	43.0	(228.0)	0.0
Transfers/Adjustment - SB/La Cumbre	0.0	0.0	0.0	0.0	0.0	0.0
Transfers/Adjustment - Bishop Ranch <sup>(7)</sup>	100.0	0.0	0.0	0.0	0.0	100.0
Transfers/Adjustment - Juncal Transfer	0.0	0.0	0.0	0.0	0.0	0.0
Transfers/Adjustment - GWD/SB Overlap	0.0	0.0	0.0	0.0	0.0	0.0
<b>Balance Current Year Allocation</b>	<b>6,721.0</b>	<b>5,859.0</b>	<b>1,880.0</b>	<b>2,012.0</b>	<b>1,628.0</b>	<b>18,100.0</b>
<b>Total Cachuma Project Water Available</b>	<b>8,684.6</b>	<b>19,392.8</b>	<b>2,550.7</b>	<b>3,242.2</b>	<b>3,707.3</b>	<b>37,577.6</b>

**Footnotes**

- (1) Water Year = October 1 through September 30; WYTD = Water Year to Date
- (2) Includes Lauro and Ortega Reservoirs only
- (3) Based on correspondence from Michael Jackson, dated 09/15/17, which revised the approach to the assessment for unaccounted for water loss based on lake conditions
- (4) Per USBR, evaporation is applied to Cachuma Carryover and SWP water through standard contract formula effective April 1, 2017
- (5) Per USBR, 70% allocation to Member Agencies, effective 10/1/21
- (6) Per SWP Exchange Agrmt GWD received 35 AF; City of SB received 24 AF; MWD received 24 AF; and CVWD received 16 AF from ID#1 in August 2022.
- (7) Transfer per Contract for Exchange Water with Thomas B. Bishop Company and GWD (100 AF)
- (8) Memo only - State Water Deliveries to Lake Cachuma for August was 322 AF.
- (9) Memo only - MWD has received 234.76 AF under the City of SB / MWD WSA ("Desal") for this Contract Year (July 1 - June 30)

**CACHUMA OPERATION AND MAINTENANCE BOARD**  
**WATER STORAGE REPORT**

MONTH: **AUGUST 2022**

**GLEN ANNIE RESERVOIR <sup>(1)</sup>**

Capacity at 385' elevation:	335	AF
Capacity at sill of intake at 334' elevation:	21	AF
Stage of Reservoir Elevation	<b>333.0</b>	Feet
Water in Storage	21.04	AF

**LAURO RESERVOIR**

Capacity at 549' elevation:	503	AF
Capacity at top of intake screen, 520' elevation:	106.05	AF
Stage of Reservoir Elevation	<b>545.7</b>	Feet
Water in Storage	439.92	AF

**ORTEGA RESERVOIR**

Capacity at 460' elevation:	65	AF
Capacity at outlet at elevation 440':	0	AF
Stage of Reservoir Elevation	<b>447.9</b>	Feet
Water in Storage	22.39	AF

**CARPINTERIA RESERVOIR**

Capacity at 384' elevation:	45	AF
Capacity at outlet elevation 362':	0	AF
Stage of Reservoir Elevation	<b>375.7</b>	Feet
Water in Storage	25.03	AF

**TOTAL STORAGE IN RESERVOIRS <sup>(1)</sup>**

Change in Storage	-48.77	AF
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**CACHUMA RESERVOIR**

Capacity at 750' elevation: <sup>(2)</sup>	184,121	AF
Capacity at sill of tunnel 660' elevation:	24,281	AF

Stage of Reservoir Elevation	<b>699.93</b>	Feet
Water in Storage	<b>72,077</b>	AF
Surface Area	<b>1,595</b>	Acres
Evaporation	<b>1,002.3</b>	AF
Inflow	<b>274.6</b>	AF
Downstream Release WR8918	<b>4,975.4</b>	AF
Fish Release (Hilton Creek)	<b>120.9</b>	AF
Outlet	<b>173.0</b>	AF
Spill/Seismic Release	<b>13</b>	AF
State Water Project Water	<b>331.0</b>	AF
Change in Storage	<b>-7,464</b>	AF
Tecolote Diversion	<b>1,782.4</b>	AF

**Rainfall:    Month:    0.00                      Season:    0.00                      Percent of Normal:    0%**

(1) Glen Annie Reservoir is currently offline and excluded from Total Storage in Reservoirs amount.

(2) In 2004, flashboard installation raised Cachuma Reservoir max elevation to 753' (193,305 AF); surcharge water reserved for fish releases.



**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #I75R-1802**

Contract Year: 10/1/21 to: 9/30/22

Contract Entity: **Goleta Water District**  
 Update by COMB 8/31/2022

Month	Carryover Balance Prior Yr	Approved Allocation Curr Yr
Oct	7,321.6	6,525.0
Nov	-	-
Dec	-	-
Jan	-	-
Feb	-	-
Mar	-	-
Apr	-	-
May	-	-
Jun	-	-
Jul	-	-
Aug	-	-
Sep	-	-
Total	7,321.6	6,525.0

TOTAL WATER USED			WATER USE CHARGED				WATER USE CHARGED			
Acre-feet			Allocation				Allocation			
M & I	Agr	Total	Evap	Used	Total	M & I	Agr	M & I	Agr	Total
412.3	130.2	542.4	62.9	542.4	605.3	456.3	149.0	-	-	-
376.0	97.0	472.9	28.3	472.9	501.2	395.7	105.6	-	-	-
111.7	26.5	138.2	12.3	138.2	150.5	120.2	30.4	-	-	-
88.8	7.9	96.7	16.2	96.7	112.9	99.9	13.0	-	-	-
321.1	82.4	403.5	31.5	403.5	435.0	342.6	92.4	-	-	-
489.4	146.2	635.5	41.1	635.5	676.6	517.0	159.6	-	-	-
428.6	115.3	543.9	52.8	543.9	596.8	463.5	133.2	-	-	-
472.6	162.8	635.4	64.2	635.4	699.6	514.0	185.6	-	-	-
249.7	82.8	332.5	67.3	332.5	399.8	291.9	107.9	-	-	-
419.8	146.0	565.8	55.0	565.8	620.8	453.5	167.3	-	-	-
373.3	143.0	516.3	43.2	516.3	559.5	398.6	161.0	-	-	-
-	-	-	-	-	-	-	-	-	-	-
3,743.2	1,140.1	4,883.2	474.8	4,883.2	5,358.0	4,053.1	1,304.9	-	-	-

CONVERSIONS (M&I AND AG SPLIT)			
CARRYOVER WATER		CURR YR ALLOCATION	
M & I	Agr	M & I	Agr
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
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Month  
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SCHEDULE AND REVISIONS			SCHEDULE AND REVISIONS			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
Begin Bal	7,321.6	5,130.0	2,191.7	5,073.5	1,451.5	6,525.0
ID#1 Exch (+61AF)	-	-	-	40.9	20.1	61.0
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
Bishop Ranch Exch (+100AF)	-	-	-	100.0	-	100.0
-	-	-	-	-	-	-
-	-	-	-	-	-	-
ID#1 Exch (+35AF)	-	-	-	17.5	17.5	35.0
-	-	-	-	-	-	-

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BALANCE - CARRYOVER WATER			BALANCE - CURR YR ALLOC			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
6,716.3	4,673.6	2,042.7	5,114.4	1,471.6	6,586.0	
6,215.1	4,278.0	1,937.1	5,114.4	1,471.6	6,586.0	
6,064.6	4,157.8	1,906.8	5,114.4	1,471.6	6,586.0	
5,951.7	4,057.9	1,893.8	5,114.4	1,471.6	6,586.0	
5,516.7	3,715.3	1,801.3	5,114.4	1,471.6	6,586.0	
4,840.1	3,198.3	1,641.8	5,114.4	1,471.6	6,586.0	
4,243.3	2,734.8	1,508.5	5,214.4	1,471.6	6,686.0	
3,543.7	2,220.8	1,322.9	5,214.4	1,471.6	6,686.0	
3,143.9	1,928.9	1,215.0	5,214.4	1,471.6	6,686.0	
2,523.1	1,475.4	1,047.7	5,214.4	1,471.6	6,686.0	
1,963.6	1,076.8	886.7	5,231.9	1,489.1	6,721.0	
-	-	-	-	-	-	

TOTAL CACHUMA PROJECT BALANCE (CARRYOVER + CURRENT YR ALLOCATION) **8,684.6**

**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #I75R-1802**

Contract Year: 10/1/21 to: 9/30/22

Contract Entity: **City of Santa Barbara**  
 Update by COMB 8/31/2022

Month	Carryover Balance Prior Yr	Approved Allocation Curr Yr
Oct	20,525.9	5,794.0
Nov	-	-
Dec	-	-
Jan	-	-
Feb	-	-
Mar	-	-
Apr	-	-
May	-	-
Jun	-	-
Jul	-	-
Aug	-	-
Sep	-	-
Total	20,525.9	5,794.0

TOTAL WATER USED			WATER USE CHARGED				WATER USE CHARGED			
Acre-feet			Allocation				Allocation			
M & I	Agr	Total	Evap	Used	Total	M & I	-----	M & I	-----	Total
639.1	-	639.1	180.2	639.1	819.3	819.3	-	-	-	-
517.5	-	517.5	84.9	517.5	602.4	602.4	-	-	-	-
379.4	-	379.4	38.0	379.4	417.4	417.4	-	-	-	-
430.9	-	430.9	49.6	430.9	480.5	480.5	-	-	-	-
540.2	-	540.2	98.2	540.2	638.4	638.4	-	-	-	-
474.6	-	474.6	136.9	474.6	611.5	611.5	-	-	-	-
383.8	-	383.8	193.9	383.8	577.7	577.7	-	-	-	-
646.5	-	646.5	262.6	646.5	909.1	909.1	-	-	-	-
302.5	-	302.5	305.1	302.5	607.7	607.7	-	-	-	-
421.0	-	421.0	281.8	421.0	702.7	702.7	-	-	-	-
358.5	-	358.5	266.9	358.5	625.3	625.3	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
5,094.0	-	5,094.0	1,898.1	5,094.0	6,992.1	6,992.1	-	-	-	-

CONVERSIONS (M&I AND AG SPLIT)				
CARRYOVER WATER		CURR YR ALLOCATION		
M & I	Agr	M & I	Agr	
Oct	-	-	-	
Nov	-	-	-	
Dec	-	-	-	
Jan	-	-	-	
Feb	-	-	-	
Mar	-	-	-	
Apr	-	-	-	
May	-	-	-	
Jun	-	-	-	
Jul	-	-	-	
Aug	-	-	-	
Sep	-	-	-	

SCHEDULE AND REVISIONS			SCHEDULE AND REVISIONS		
	Total	Allocation		Allocation	
		M & I	-----	M & I	-----
Begin Bal	20,525.9	20,525.9	-	5,794.0	-
ID#1 Exch (+41AF)	-	-	-	41.0	-
Oct	-	-	-	-	-
Nov	-	-	-	-	-
Dec	-	-	-	-	-
Jan	-	-	-	-	-
Feb	-	-	-	-	-
Mar	-	-	-	-	-
Apr	-	-	-	-	-
May	-	-	-	-	-
Jun	-	-	-	-	-
Jul	-	-	-	-	-
Aug	-	-	-	24.0	-
ID#1 Exch (+24AF)	-	-	-	-	-
Sep	-	-	-	-	-

BALANCE - CARRYOVER WATER			BALANCE - CURR YR ALLOC		
	Total	Allocation		Allocation	
		M & I	-----	M & I	-----
Oct	19,706.7	19,706.7	-	5,835.0	-
Nov	19,104.3	19,104.3	-	5,835.0	-
Dec	18,686.9	18,686.9	-	5,835.0	-
Jan	18,206.4	18,206.4	-	5,835.0	-
Feb	17,568.0	17,568.0	-	5,835.0	-
Mar	16,956.4	16,956.4	-	5,835.0	-
Apr	16,378.7	16,378.7	-	5,835.0	-
May	15,469.6	15,469.6	-	5,835.0	-
Jun	14,861.9	14,861.9	-	5,835.0	-
Jul	14,159.2	14,159.2	-	5,835.0	-
Aug	13,533.8	13,533.8	-	5,859.0	-
Sep	-	-	-	-	-

TOTAL CACHUMA PROJECT BALANCE (CARRYOVER + CURRENT YR ALLOCATION) 19,392.8

**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #I75R-1802**

Contract Year: 10/1/21 to: 9/30/22

Contract Entity: **Montecito Water District**  
 Update by COMB 8/31/2022

Month	Carryover Balance Prior Yr	Approved Allocation Curr Yr
Oct	2,994.6	1,856.0
Nov	-	-
Dec	-	-
Jan	-	-
Feb	-	-
Mar	-	-
Apr	-	-
May	-	-
Jun	-	-
Jul	-	-
Aug	-	-
Sep	-	-
Total	2,994.6	1,856.0

TOTAL WATER USED			WATER USE CHARGED				WATER USE CHARGED			
Acre-feet			Allocation				Allocation			
M & I	Agr	Total	Evap	Used	Total	M & I	Agr	M & I	Agr	Total
237.2	20.0	257.2	25.6	257.2	282.8	255.1	27.6	-	-	-
211.0	15.9	226.9	11.3	226.9	238.2	218.7	19.5	-	-	-
106.2	7.4	113.6	4.9	113.6	118.5	109.4	9.1	-	-	-
35.8	1.0	36.8	6.3	36.8	43.1	39.8	3.3	-	-	-
133.8	12.8	146.6	12.3	146.6	158.9	141.6	17.3	-	-	-
143.0	14.5	157.5	16.4	157.5	173.9	153.2	20.7	-	-	-
119.5	9.0	128.5	22.2	128.5	150.6	132.7	17.9	-	-	-
210.3	19.4	229.7	28.0	229.7	257.7	226.3	31.4	-	-	-
218.5	17.2	235.7	28.9	235.7	264.7	233.6	31.1	-	-	-
270.1	20.3	290.4	22.3	290.4	312.8	280.2	32.6	-	-	-
280.8	26.0	306.7	16.0	306.7	322.8	285.7	37.1	-	-	-
-	-	-	-	-	-	-	-	-	-	-
1,966.2	163.5	2,129.7	194.2	2,129.7	2,323.9	2,076.3	247.6	-	-	-

CONVERSIONS (M&I AND AG SPLIT)				
CARRYOVER WATER		CURR YR ALLOCATION		
M & I	Agr	M & I	Agr	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
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SCHEDULE AND REVISIONS			SCHEDULE AND REVISIONS			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
Begin Bal	2,994.6	2,096.5	898.0	1,571.0	285.0	1,856.0
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	ID#1 Exch (+24AF)	-	-	12.0	12.0	24.0
Sep	-	-	-	-	-	-

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BALANCE - CARRYOVER WATER			BALANCE - CURR YR ALLOC			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
Oct	2,711.8	1,841.4	870.4	1,571.0	285.0	1,856.0
Nov	2,473.6	1,622.7	850.9	1,571.0	285.0	1,856.0
Dec	2,355.1	1,513.3	841.8	1,571.0	285.0	1,856.0
Jan	2,312.0	1,473.5	838.5	1,571.0	285.0	1,856.0
Feb	2,153.2	1,331.9	821.3	1,571.0	285.0	1,856.0
Mar	1,979.3	1,178.7	800.5	1,571.0	285.0	1,856.0
Apr	1,828.7	1,046.0	782.6	1,571.0	285.0	1,856.0
May	1,570.9	819.7	751.2	1,571.0	285.0	1,856.0
Jun	1,306.2	586.1	720.1	1,571.0	285.0	1,856.0
Jul	993.5	306.0	687.5	1,571.0	285.0	1,856.0
Aug	670.7	20.3	650.4	1,583.0	297.0	1,880.0
Sep	-	-	-	-	-	-

TOTAL CACHUMA PROJECT BALANCE (CARRYOVER + CURRENT YR ALLOCATION) 2,550.7

**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #I75R-1802**

Contract Year: 10/1/21 to: 9/30/22

Contract Entity: **Carpinteria Valley Water District**  
 Update by COMB 8/31/2022

Month	Carryover Balance Prior Yr	Approved Allocation Curr Yr
Oct	2,103.3	1,969.0
Nov	-	-
Dec	-	-
Jan	-	-
Feb	-	-
Mar	-	-
Apr	-	-
May	-	-
Jun	-	-
Jul	-	-
Aug	-	-
Sep	-	-
Total	2,103.3	1,969.0

TOTAL WATER USED				WATER USE CHARGED			WATER USE CHARGED			
Acre-feet				Allocation			Allocation			
M & I	Agr	Total	Evap	Used	Total	M & I	Agr	M & I	Agr	Total
-	-	-	18.8	-	18.8	9.7	9.1	-	-	-
-	-	-	9.1	-	9.1	4.8	4.3	-	-	-
-	-	-	4.2	-	4.2	2.1	2.1	-	-	-
-	-	-	5.6	-	5.6	3.5	2.0	-	-	-
-	-	-	11.3	-	11.3	5.3	6.0	-	-	-
-	-	-	16.2	-	16.2	7.2	9.0	-	-	-
-	-	-	23.6	-	23.6	11.4	12.2	-	-	-
15.1	18.7	33.8	32.7	33.8	66.5	32.0	34.5	-	-	-
78.4	98.9	177.4	37.0	177.4	214.4	97.6	116.8	-	-	-
82.2	124.5	206.7	31.4	206.7	238.1	98.7	139.4	-	-	-
96.8	142.4	239.2	26.3	239.2	265.5	111.1	154.4	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
272.5	384.6	657.1	216.0	657.1	873.2	383.4	489.7	-	-	-

CONVERSIONS (M&I AND AG SPLIT)			
CARRYOVER WATER		CURR YR ALLOCATION	
M & I	Agr	M & I	Agr
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
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-	-	-	-
-	-	-	-
-	-	-	-
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SCHEDULE AND REVISIONS			SCHEDULE AND REVISIONS			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
Begin Bal	2,103.3	1,085.4	1,017.9	984.5	984.5	1,969.0
ID#1 Exch (+27AF)	-	-	-	18.1	8.9	27.0
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
ID#1 Exch (+16AF)	-	-	-	8.0	8.0	16.0
	-	-	-	-	-	-

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BALANCE - CARRYOVER WATER			BALANCE - CURR YR ALLOC			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
	2,084.6	1,075.7	1,008.8	1,002.6	993.4	1,996.0
	2,075.5	1,070.9	1,004.5	1,002.6	993.4	1,996.0
	2,071.3	1,068.9	1,002.5	1,002.6	993.4	1,996.0
	2,065.8	1,065.3	1,000.4	1,002.6	993.4	1,996.0
	2,054.4	1,060.0	994.4	1,002.6	993.4	1,996.0
	2,038.2	1,052.8	985.4	1,002.6	993.4	1,996.0
	2,014.6	1,041.4	973.2	1,002.6	993.4	1,996.0
	1,948.2	1,009.4	938.8	1,002.6	993.4	1,996.0
	1,733.7	911.8	822.0	1,002.6	993.4	1,996.0
	1,495.7	813.1	682.6	1,002.6	993.4	1,996.0
	1,230.2	702.0	528.2	1,010.6	1,001.4	2,012.0
	-	-	-	-	-	-

TOTAL CACHUMA PROJECT BALANCE (CARRYOVER + CURRENT YR ALLOCATION) 3,242.2

**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #I75R-1802**

Contract Year: 10/1/21 to: 9/30/22

Contract Entity: **Santa Ynez River Water Conservation District, ID#1**  
 Update by COMB 8/31/2022

CARRYOVER WATER	CURRENT YEAR ALLOCATION
-----------------	-------------------------

Month	Carryover Balance Prior Yr	Approved Allocation Curr Yr
Oct	2,361.5	1,856.0
Nov	-	-
Dec	-	-
Jan	-	-
Feb	-	-
Mar	-	-
Apr	-	-
May	-	-
Jun	-	-
Jul	-	-
Aug	-	-
Sep	-	-
Total	2,361.5	1,856.0

TOTAL WATER USED			WATER USE CHARGED			WATER USE CHARGED		
Acre-feet			Allocation			Allocation		
M & I	Agr	Total	Evap	Used	Total	M & I	Agr	Total
1.4	-	1.4	21.1	1.4	22.4	3.7	18.8	-
1.3	-	1.3	10.2	1.3	11.5	2.4	9.1	-
1.1	-	1.1	4.7	1.1	5.8	1.6	4.2	-
0.7	-	0.7	6.2	0.7	6.9	1.4	5.6	-
1.2	-	1.2	12.7	1.2	13.9	2.5	11.3	-
1.5	-	1.5	18.2	1.5	19.6	3.4	16.3	-
1.9	-	1.9	26.4	1.9	28.2	4.6	23.6	-
1.8	-	1.8	36.8	1.8	38.6	5.6	33.0	-
2.9	-	2.9	44.1	2.9	46.9	7.4	39.5	-
3.1	-	3.1	41.7	3.1	44.7	7.3	37.4	-
3.0	-	3.0	40.5	3.0	43.5	7.1	36.4	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
19.8	-	19.8	262.5	19.8	282.2	47.1	235.1	-

CONVERSIONS (M&I AND AG SPLIT)			
CARRYOVER WATER		CURR YR ALLOCATION	
M & I	Agr	M & I	Agr
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
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SCHEDULE AND REVISIONS			SCHEDULE AND REVISIONS			
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
Begin Bal	2,361.5	254.5	2,107.0	965.0	891.0	1,856.0
ID#1 Exch (-129AF)	-	-	-	(86.4)	(42.6)	(129.0)
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	-	-	-
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	(49.5)	(49.5)	(99.0)
ID#1 Exch (-99AF)	-	-	-	-	-	-
Sep	-	-	-	-	-	-

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BALANCE - CARRYOVER WATER			BALANCE - CURR YR ALLOC			
County Parks Usage (AF)	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
1.4	2,339.1	250.9	2,088.2	878.6	848.4	1,727.0
1.3	2,327.6	248.5	2,079.1	878.6	848.4	1,727.0
1.1	2,321.8	246.8	2,074.9	878.6	848.4	1,727.0
0.7	2,314.8	245.5	2,069.4	878.6	848.4	1,727.0
1.2	2,301.0	242.9	2,058.0	878.6	848.4	1,727.0
1.5	2,281.3	239.5	2,041.8	878.6	848.4	1,727.0
1.9	2,253.1	234.9	2,018.2	878.6	848.4	1,727.0
1.8	2,214.5	229.3	1,985.2	878.6	848.4	1,727.0
2.9	2,167.5	221.9	1,945.7	878.6	848.4	1,727.0
3.1	2,122.8	214.5	1,908.3	878.6	848.4	1,727.0
3.0	2,079.3	207.4	1,871.9	829.1	798.9	1,628.0
-	-	-	-	-	-	-

TOTAL CACHUMA PROJECT BALANCE (CARRYOVER + CURRENT YR ALLOCATION) 3,707.3



**SUMMARY OF WATER USED**  
**CACHUMA PROJECT - CONTRACT #I75R-1802**

Contract Year: 10/1/21 to: 9/30/22

Contract Entity: **Santa Barbara Co. Water Agency**  
 Update by COMB 8/31/2022

Month	Carryover Balance Prior Yr	Approved Allocation Curr Yr	TOTAL WATER USED				WATER USE CHARGED			WATER USE CHARGED				
			Acre-feet				Allocation			Allocation				
			Use %	M & I	Agr	Total	Evap	Div	Total	M & I	Agr	M & I	Agr	Total
Oct	35,307.0	18,000.0	0.0	1,290.0	150.2	1,440.2	308.4	1,440.2	1,748.6	1,544.1	204.5	-	-	-
Nov	-	-	0.0	1,105.8	112.8	1,218.6	143.9	1,218.6	1,362.5	1,224.0	138.5	-	-	-
Dec	-	-	0.0	598.4	33.9	632.3	64.0	632.3	696.3	650.6	45.7	-	-	-
Jan	-	-	0.0	556.2	9.0	565.2	83.8	565.2	649.0	625.1	23.9	-	-	-
Feb	-	-	0.0	996.3	95.2	1,091.5	165.9	1,091.5	1,257.4	1,130.4	127.0	-	-	-
Mar	-	-	0.0	1,108.5	160.6	1,269.2	228.7	1,269.2	1,497.9	1,292.3	205.5	-	-	-
Apr	-	-	0.0	933.8	124.3	1,058.1	318.9	1,058.1	1,376.9	1,190.0	187.0	-	-	-
May	-	-	0.0	1,346.2	200.9	1,547.1	424.4	1,547.1	1,971.6	1,687.0	284.5	-	-	-
Jun	-	-	0.0	852.0	199.0	1,051.0	482.4	1,051.0	1,533.4	1,238.2	295.3	-	-	-
Jul	-	-	0.0	1,196.1	290.8	1,487.0	432.1	1,487.0	1,919.1	1,542.4	376.7	-	-	-
Aug	-	-	0.0	1,112.4	311.4	1,423.8	392.9	1,423.8	1,816.7	1,427.8	388.9	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	35,307.0	18,000.0	0.3	11,095.7	1,688.1	12,783.8	3,045.5	12,783.8	15,829.4	13,552.0	2,277.4	-	-	-

Month	CONVERSIONS (M&I AND AG SPLIT)			
	CARRYOVER WATER		CURR YR ALLOCATION	
	M & I	Agr	M & I	Agr
Oct	-	-	-	-
Nov	-	-	-	-
Dec	-	-	-	-
Jan	-	-	-	-
Feb	-	-	-	-
Mar	-	-	-	-
Apr	-	-	-	-
May	-	-	-	-
Jun	-	-	-	-
Jul	-	-	-	-
Aug	-	-	-	-
Sep	-	-	-	-

Month	SCHEDULE AND REVISIONS			SCHEDULE AND REVISIONS		
	Total	Allocation		Allocation		Total
		M & I	Agr	M & I	Agr	
Begin Bal	35,307.0	29,092.4	6,214.7	14,388.0	3,612.0	18,000.0
Oct	-	-	-	13.5	(13.5)	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
Jan	-	-	-	-	-	-
Feb	-	-	-	-	-	-
Mar	-	-	-	-	-	-
Apr	-	-	-	100.0	-	100.0
May	-	-	-	-	-	-
Jun	-	-	-	-	-	-
Jul	-	-	-	-	-	-
Aug	-	-	-	12.0	(12.0)	-
Sep	-	-	-	-	-	-

Month	BALANCE - CARRYOVER WATER			BALANCE - CURR YR ALLOC			
	County Parks Usage (AF)	Allocation		Allocation		Total	
		M & I	Agr	M & I	Agr		
Oct	1.4	33,558.4	27,548.3	6,010.1	14,401.5	3,598.5	18,000.0
Nov	1.3	32,196.0	26,324.3	5,871.7	14,401.5	3,598.5	18,000.0
Dec	1.1	31,499.6	25,673.7	5,826.0	14,401.5	3,598.5	18,000.0
Jan	0.7	30,850.6	25,048.6	5,802.1	14,401.5	3,598.5	18,000.0
Feb	1.2	29,593.2	23,918.1	5,675.1	14,401.5	3,598.5	18,000.0
Mar	1.5	28,095.3	22,625.8	5,469.5	14,401.5	3,598.5	18,000.0
Apr	1.9	26,718.4	21,435.8	5,282.6	14,501.5	3,598.5	18,100.0
May	1.8	24,746.8	19,748.8	4,998.1	14,501.5	3,598.5	18,100.0
Jun	2.9	23,213.4	18,510.6	4,702.8	14,501.5	3,598.5	18,100.0
Jul	3.1	21,294.3	16,968.2	4,326.1	14,501.5	3,598.5	18,100.0
Aug	3.0	19,477.6	15,540.4	3,937.2	14,513.5	3,586.5	18,100.0
Sep	-	-	-	-	-	-	-

TOTAL CACHUMA PROJECT BALANCE (CARRYOVER + CURRENT YR ALLOCATION) 37,577.6

# CACHUMA DAILY OPERATIONS

Month & Year: **Septembe2022**

Time of Observations: **0830**

Evaporation Pan Factor: **76%**

Day	Beginning Storage: 72,077			Surface Area	Rainfall		Evaporation		CCWA Inflow	Releases					Computed Inflow	
	Elevation	Storage	Change		inches	acre-feet	inches	acre-feet		Park Diversion	South Coast	Hilton Creek	WR 89-18	Outlet		Spillway
	ft	acre-feet	acre-feet	acres	inches	acre-feet	inches	acre-feet	acre-feet	acre-feet	acre-feet	acre-feet	acre-feet	acre-feet	acre-feet	
1	699.67	71,662	(415)	1,590	-		0.260	26.2	-		76.3	5.8	316.6	-	0.6	10.5
2	699.42	71,266	(396)	1,585	-		0.330	33.1	-		75.0	5.8	316.7	-	0.6	35.2
3	699.18	70,887	(379)	1,580	-		0.340	34.0	-		76.6	6.0	273.3	-		10.9
4	699.00	70,602	(285)	1,576	-		0.350	34.9	-		62.0	4.0	225.0	-		40.9
5	698.85	70,365	(237)	1,573	-		0.410	40.9	-		43.2	5.1	200.7	-		52.8
6	698.70	70,128	(237)	1,570	-		0.360	35.8	-		42.2	5.7	169.9	-	0.6	17.2
7	698.57	69,924	(204)	1,567	-		0.390	38.7	-		54.6	6.6	139.7	-	0.6	36.2
8	698.43	69,706	(218)	1,564	-		0.350	34.7	-		66.9	6.7	134.6	-	0.6	25.5
9	698.28	69,472	(234)	1,561	-		0.280	27.7	-		73.9	6.6	134.7	-	0.6	9.5
10	698.13	69,238	(234)	1,558	0.01	1.3	0.220	21.7	-		73.4	6.7	133.7	-	0.6	0.8
11	697.99	69,020	(218)	1,555	-		0.180	17.7	7.4		71.5	6.7	134.7	-	0.6	5.8
12	697.87	68,833	(187)	1,552	-		0.180	17.7	12.3		55.2	6.8	134.7	-	0.6	15.7
13	697.74	68,630	(203)	1,550	-		0.250	24.5	12.3		55.4	6.9	134.6	-	0.6	6.7
14	697.60	68,413	(217)	1,547	-		0.260	25.5	2.0		37.5	6.8	134.7	-	0.6	(14.0)
15	697.45	68,182	(231)	1,543	-		0.220	21.5	-		53.2	6.8	134.7	-	0.6	(14.2)
16	697.33	67,998	(184)	1,541	-		0.230	22.4	-		55.3	6.7	133.8	-	0.6	34.9
17	697.18	67,767	(231)	1,538	-		0.210	20.5	4.6		54.9	6.9	118.6	-	0.6	(34.1)
18	697.07	67,583	(184)	1,535	-		0.200	19.4	9.4		59.3	6.8	115.7	-	0.6	8.4
19	696.95	67,414	(169)	1,533	-		0.200	19.4	11.3		48.8	6.9	113.6	-	0.6	9.0
20	696.83	67,229	(185)	1,530	-		0.080	7.8	9.5		43.4	6.8	115.7	-	0.6	(20.2)
21	696.72	67,060	(169)	1,528	-		0.230	22.3	8.0		43.4	6.8	114.7	-	0.6	10.8
22																
23																
24																
25																
26																
27																
28																
29																
30																

<b>TOTALS</b>		-5017		0.01	1.3	5.530	546.4	-	76.8	-	1,222.0	133.8	3,430.4	-	10.8	248.4
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Park Usage

Rain

Yr. Total



**Santa Barbara County Parks Division,  
Cachuma Lake Recreation Area  
Summary of Aquatic Invasive Species Vessel Inspection Program  
and Early Detection Monitoring Program: August 2022**



<b>Cachuma Lake Recreation Area Launch Data -- August 2022</b>		
<b>Inspection Data</b>		
Total Vessels Entering Park	459	
Total Vessels Launched	453	
Total Vessels Quarantined	6	
Returning (Tagged) Boats Launched	314	69%
Kayak/Canoe: Inspected, launched	139	31%
4-stroke Engines	*	
2-strokes, w/CARB star ratings	*	
2-strokes, NO emissions ratings	*	
<b>Quarantine Data</b>		
Total Vessels Quarantined	6	
Quarantined 14 days	*	
Quarantined 30 days	6	
<b>Quarantine Cause</b>		
Water on vessel*	*	
Debris on hull*	*	
Plug installed*	*	
From infected county	0	
Ballast tanks*	*	
Boat longer than 24 feet*	*	
Out-of-state	0	
Unspecified*	*	
Mandatory Quarantine All Untagged Boats	6	
<b>Demographic Data</b>		
Quarantined from infected county	0	
Quarantined from SB County	5	
Quarantined from uninfected co	1	

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

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

\* These conditions are no longer being tracked.

**EARLY DETECTION MONITORING PROGRAM SUMMARY**

Summary: No Dreissenid Mussels were detected, nor Aquatic Invasive Species of any kind.

Inspection Site: Cachuma Lake Reservoir, Santa Barbara County, California.

Plankton Tow Inspection Dates and Times: 2022.08.14 and 2022.08.27; 10 a.m. to 12 p.m. PDT.

Method: 8 Sampling Locations; Vertical Tows. Samples sent to Bodega Marine Laboratory (CDFW).

Artificial Substrate & Surface Survey Date and Time: 2022.08.26 and 08.05; 10 a.m. to 12 p.m. PDT.

Method: 6 Sampling Stations; 34 meters/111.55 linear feet of line as well as ramp, dock, anchor, etc.

Surveyors: COSB, Parks Division Staff (R. Bishop, P. Good, P. Medel).

Lake elevation: Max feet: 753.00, current 701.16; Max acre-feet: 192,978, current: 73,053;

Current capacity: 37.9%