

**SPECIAL MEETING  
OF THE  
CACHUMA OPERATION AND MAINTENANCE BOARD**  
at Cachuma Operation and Maintenance Board Office

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

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**Wednesday, June 11, 2014**

*Start Time*  
**10:00 a.m.**

**AGENDA**

*Note: This is a special meeting of the Governing Board called in accordance with Government Code Section 54956. Other than the listed agenda items, no other business will be conducted by the Governing Board.*

1. **COMB CALL TO ORDER, ROLL CALL** (COMB Board of Directors.)
2. **PUBLIC COMMENT** (In accordance with Government Code Section 54954.3, every notice for a special meeting shall provide an opportunity for members of the public to directly address the legislative body concerning any item that has been described in the notice for the meeting before or during consideration of that item.)
3. **CONSIDER APPROVAL OF CONTRACT WITH RMC FOR PREPARATION OF PROPOSITION 84, PART 1, IMPLEMENTATION GRANT APPLICATION**  
Action: Recommend approval by motion and roll call vote of the Board:
4. **VERBAL REPORTS FROM BOARD COMMITTEES**  
Receive verbal information regarding the following committee meetings:
  - a. Administrative Committee Meeting – June 5, 2014
5. **DRAFT FISCAL YEAR 2014-15 BUDGET**  
Receive information regarding the FY 2014-15 Budget for discussion and staff direction:
  - a. Draft Fiscal Year 2014-15 COMB Operating Budget
  - b. Draft Operations Division IIP
  - c. Draft Fisheries Division HIP
6. **COMB ADJOURNMENT**

NOTICE TO PUBLIC

**Public Comment:** Any member of the public may address the Board on any item in the noticed agenda, as set forth in Item 2. The total time for this item will be limited by the President of the Board. If you wish to address the Board under this item, please complete and deliver to the Secretary of the Board before the meeting is convened, a "Request to Speak" form including a description of the subject you wish to address.

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

[This Agenda was Posted at 3301 Laurel Canyon Road, Santa Barbara, CA  
at Santa Barbara City Hall, Santa Barbara, CA and at Member District Offices and Noticed and Delivered in Accordance  
with Section 54956 of the Government Code.]

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	June 11, 2014
Submitted by:	Randall Ward

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**SUBJECT:** Professional Services Agreement and Proposal for Consulting Services – Round 3, Part 1, Prop 84 Implementation IRWMP Grant Application - RMC

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**SUMMARY:**

As a cooperating partner in the Santa Barbara County Integrated Regional Water Management Plan (IRWMP) process, COMB submitted the Emergency Pumping Facilities Project (EPFP) to the evaluation group in consideration for Proposition 84, Round 3, Part 1, Implementation Grant Funding. Pursuant to the criteria and process outlined in the Santa Barbara County IRWM Plan, the EPFP ranked number one in projects submitted to the evaluation group. Per the Santa Barbara County list of preliminary projects recommended for funding, the grant requested amount for this project is approximately \$1,938,000.

The critical path for this process is a narrow timeframe for preparation and submittal of a detailed application to the Department of Water Resources. Attached for Board consideration is a proposal from RMC outlining consulting services for completion and submittal of COMB's application for Proposition 84 grant funding.

**FISCAL IMPACTS:**

If grant is awarded to COMB, projected offset of \$1,938,000 for expenditures on the EPFP.

**LEGAL CONCURRENCE:**

N/A

**ENVIRONMENTAL COMPLIANCE:**

N/A

**COMMITTEE STATUS:**

The Administrative Committee reviewed the RMC proposal and recommends Board approve expenditure up to \$33,000 for Prop 84 Grant Application consulting services.

**RECOMMENDATION:**

Board authorize General Manager to enter into Professional Services Agreement with RMC and to expend up to \$33,000 for Prop 84 Grant Application consulting services.

**LIST OF EXHIBITS:**

1. RMC proposal

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May 27, 2014

Randy Ward  
General Manager  
Cachuma Operations & Maintenance Board  
3301 Laurel Canyon Rd.  
Santa Barbara, CA 93105

**Subject: Proposal for Preparation of Proposition 84, Round 3, Part 1 Implementation Grant Application**

Dear Mr. Ward:

RMC is pleased to present this letter proposal to assist the Cachuma Operations & Maintenance Board (COMB) in preparing a Round 3, Part 1 Proposition (Prop) 84 Implementation Grant application for funding for the Emergency Pumping Project under the California Department of Water Resources' (DWR's) IRWM Program.

**BACKGROUND**

The Governor and Legislature have directed DWR to expedite the solicitation and award of \$200 million in IRWM funding to support projects and programs that provide immediate drought relief and local supply reliability. The Central Coast Funding Area that Santa Barbara County is a part of has over \$19.7 million remaining in Prop 84 IRWM funds.

**PROJECT TEAM**

The project team that will be responsible for the preparation of the Santa Barbara County IRWM Round 3, Part 1 Implementation Grant application includes Kathy Caldwell as Project Manager and several members of our support staff who are familiar with grant preparation. Our team brings history and experience with the Santa Barbara County IRWM Region with our previous work on the Santa Barbara County 2013 IRWM Plan Update, South Coast Recycled Water Development Plan, and various propositions 84 and 1E grant applications. RMC as a company has worked on numerous Prop 84 grant applications throughout the State.



The scope of work is provided as Attachment A, the fee estimate is provided as Attachment B, and the project schedule is provided as Attachment C. These documents reflect our most recent understanding of the tasks to be completed and our anticipated level of effort to assist COMB in achieving its objectives. Please do not hesitate to contact Kathy Caldwell at 310.600.8215 or [kcaldwell@rmcwater.com](mailto:kcaldwell@rmcwater.com) with any questions you may have. We look forward to the opportunity to work with you on this exciting project.

Sincerely,



Persephene St. Charles  
Vice President and Principal in Charge

## ATTACHMENT A: SCOPE OF WORK

This scope of work describes the work items to be performed by RMC in preparing a Round 3, Part 1 Prop 84 Implementation Grant application for the COMB Emergency Pumping Project. It is important to note that this scope and associated budget have been developed based on the Draft Prop 84 Implementation Grant Proposal Solicitation Package (PSP), released by DWR in April of 2014. It is possible that the application requirements may change with DWR's release of the Final PSP, presently scheduled for June 2014. If there are changes, RMC will coordinate with COMB to determine if adjustments to the contract, scope of work, etc. are necessary.

### Task 1 – Authorization, Eligibility, and Drought Impacts

#### Attachment 1

RMC will compile the authorization and eligibility requirements needed for Attachment 1. COMB will be responsible for obtaining the documents, with signatures as appropriate, and forwarding to RMC in a timely manner. These documents include:

- Authorizing Resolution
- Eligible Applicant Documentation
- Acknowledgement Form – Submittal of Additional Information
- Adopted IRWM Plan and Proof of Formal Adoption
- Project Consistency with an Adopted IRWM Plan
- Urban Water Management Compliance
- Agricultural Water Management Compliance
- Surface Water Diverter Compliance
- GW Management Compliance
- CASGEM Compliance
- Water Conservation Programs and Measures

#### Attachment 2

RMC will develop language for the Drought Impacts and Funding Need and Water Conservation Measures sub-sections for Attachment 2 based on the DWR Guidelines and PSP. Each of these two sub-sections will be 500 words or less. RMC will work collaboratively with COMB to produce drafts of these sub-sections, and COMB will be responsible for reviewing the draft versions and returning comments to RMC in a timely manner. The final versions of these sub-sections will be included in the final grant application package.

#### Task 1 Deliverables:

- Electronic copy of Attachment 1 submitted as part of Final Application Package
- Electronic copy of Draft Attachment 2 (Final version submitted as part of the Final Application Package)



## **Task 2 – Individual Project Attachments**

RMC will complete Attachments 3, 4, 5, and 6 for the project, as well as the relevant portions of Attachments 7 and 8 for the project. COMB is responsible for providing completed templates for the project and all supporting documentation as reflected on the Checklist of Required Documents (see Task 1). This proposal assumes that COMB will be submitting one project for the grant application in the project selection process.

COMB will be responsible for reviewing the draft versions of each attachment and returning comments to RMC in a timely manner. The final versions of each attachment will be included in the final grant application package.

RMC will prepare a draft Project Justification, Work Summary, Budget Summary, and Schedule based on documentation provided by COMB.

### **Task 2 Deliverables:**

- Electronic copies of Draft Attachments 3-8 (Final versions submitted as part of the Final Application Package)

## **Task 3 – Final Application Package**

RMC will compile and incorporate comments on all Attachments from Tasks 3 and 4 into the Final Application Package.

### **Task 3 Deliverable:**

- Electronic copy of Final Application Package uploaded to Grants.gov

## **Task 4 – COMB Meeting Support**

RMC will provide support for two (2) meetings, including attendance, participation, meeting agendas, meeting notes, and any required slides. One or both of these meetings may be conducted by conference call.

### **Task 4 Deliverables:**

- Electronic copies of two (2) Meeting Agendas
- Electronic copies of two (2) Meeting Summaries

## **Optional Tasks**

### **Task O-1 - Follow-up Support for Conditional Acceptance**

If conditionally awarded funding for project(s), the applicant must submit additional materials to DWR within thirty days of written notification. Support for this task will be the subject of a subsequent contract, budget, and schedule. RMC will provide follow-up support by developing a detailed Work Plan, detailed Monitoring Plan, and detailed Budget for the

project contained in the Proposal. Support for this task will be the subject of a subsequent contract, budget, and schedule. COMB is responsible for providing the following items along with any additional materials that DWR details in the award notification:

- Documentation to support Project Justification claims contained in the Proposal
- Audited Financial Statements for the Grantee and the individual project proponents whose project(s) is/are about to begin construction/implementation
- CEQA/NEPA documentation for those projects that are about to begin construction/implementation
- Additional work plan details
- Additional monitoring plan details

**Task O-1 Deliverables:**

- Electronic copies of two (2) Detailed Work Plan
- Electronic copies of two (2) Monitoring Plan
- Electronic copies of two (2) Detailed Budget

**Budget**

The scope of work, as outlined herein, can be completed for an estimated budget of \$24,868 for the project. The attached table in Attachment B provides a detailed breakdown of this budget by task.

Task O-1 is an optional task for follow-up support after conditional acceptance with a budget of \$8,132. This amount will be the subject of a subsequent contract, budget, and schedule.

**Schedule**

Attachment C illustrates our proposed schedule for completing the tasks outlined in this proposal. Project proponents will review Attachments and return with comments to RMC for revision.

Schedule assumes that the final PSP will be released in early June 2014 with applications due during the first week of July 2014 (i.e., 30-day grant production period).





# Fee Estimate

## Cachuma Operations & Maintenance Board Emergency Pumping Project Proposition 84, Round 3, Part 1 Implementation Grant Application

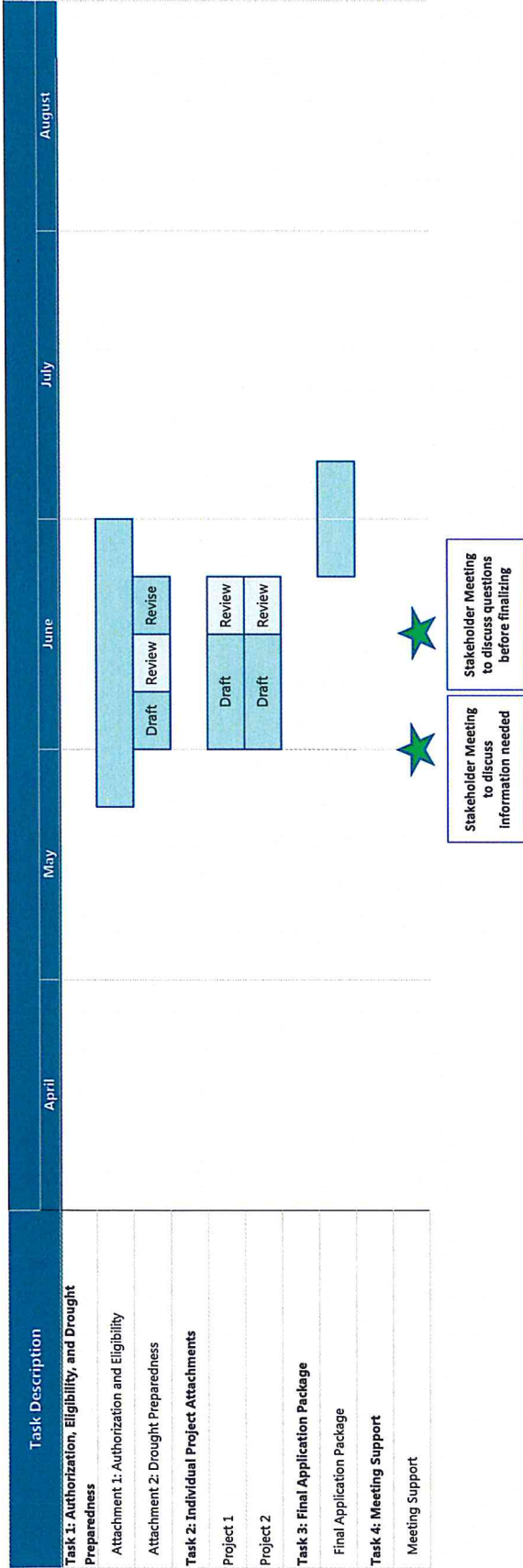
Tasks	Labor					Total Hours	Total Labor Costs (1)	ODCs		Total Fee
	Project Manager	Project Planner	MM	QA/QC	Administrative Support			ODCs	Total ODCs (3)	
<b>Task 1: Authorization, Eligibility, and Drought Impacts</b>										
Authorization, Eligibility, and Drought Impacts (Attachments 1 and 2)	KC	DF	MM	QA/QC	CM					
	\$226	\$194	\$184	\$276	\$110					
Subtotal Task 1:	4	5	5	0	1	15	\$2,904	\$0	\$0	\$2,904
<b>Task 2: Individual Project Attachments</b>										
Emergency Pumping Project										
Draft Revised Attachments 3-8	12	27	29	2	0	70	\$13,838	\$0	\$0	\$13,838
Subtotal Task 2:	12	27	29	2	0	70	\$13,838	\$0	\$0	\$13,838
<b>Task 3: Final Application Package</b>										
Final Application Package	5	9	12	2	0	28	\$5,636	\$0	\$0	\$5,636
Subtotal Task 3:	5	9	12	2	0	28	\$5,636	\$0	\$0	\$5,636
<b>Task 4: Meeting Support</b>										
Meeting Support	6	3	3	0	0	12	\$2,490	\$0	\$0	\$2,490
Subtotal Task 4:	6	3	3	0	0	12	\$2,490	\$0	\$0	\$2,490
<b>Task O-1: Follow-up Support for Conditional Acceptance</b>										
Follow-up Support for Conditional Acceptance	27	44	49	4	1	125	\$24,868	\$0	\$0	\$24,868
Subtotal Task O-1:	27	44	49	4	1	125	\$24,868	\$0	\$0	\$24,868
<b>GRAND TOTAL (includign optional Tasks)</b>	35	60	65	5	1	166	\$33,000	\$0	\$0	\$33,000

1. The individual hourly rates include salary, overhead and profit.
2. Subconsultants will be billed at actual cost plus 10%.
3. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%.
4. RMC reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.



# Cachuma Operations & Maintenance Board Emergency Pumping Project

## Proposition 84, Round 3, Part 1 Implementation Grant Application



# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	June 11, 2014
Submitted by:	Randall Ward

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**SUBJECT:** FY 2014-15 Draft COMB Operating Budget

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**SUMMARY:**

Attached for Board review is the FY 2014-15 Draft COMB Operating Budget. This budget reflects the projected operating costs for the Operations Division, the Fisheries Division as well as the General and Administrative Expenses for fiscal year 2014-15. These projected expenditures have been refined through creation and development of an annual work plan and the Infrastructure and Habitat Improvement Plans. This budget includes projected benefits and salaries for all positions which contain a 1.2% COLA per the attached historical annual calculation. The calculation is obtained by averaging the prior thirteen months indexes for all urban consumers and comparing that average to the previous year averaged data. The U.S. City and the Los Angeles-Riverside data is then averaged together to obtain the percentage COLA for the period. The April data indicates a 1.2% increase for the COLA calculation during this timeframe.

Outlined below are the variances to the budget as compared to the previous fiscal year.

***Operations Division***

*Operations and Maintenance Expenses*

The Operations Division labor line item shows a slight decrease overall as compared to the previous fiscal year. The field crew line item indicates a slight increase primarily due to COLA adjustments. However, the affiliated PERS and health insurance costs have decreased due to the implemented change in benefits for new hires. The fixed capital line item has increased due to the projected purchase of a field crew vehicle. Five crew vehicles have been identified to be sold which will partially offset this expenditure. Contract labor for the Operations Division has increased to provide funding to effectuate a contract with the California Conservation Corp. to provide system wide weed abatement tasks and oak tree maintenance program work.

*General and Administrative Expenses*

Under the General and Administrative portion of the Operations Division budget, a decrease in unemployment insurance costs is projected due to the anticipation of diminishing claims on that account. The increase in health insurance, workers compensation insurance, and retiree benefits is attributable to the projected addition of one COMB retiree and a projected ten percent increase in health premiums starting in January 2015. CalPERs employer costs will increase slightly due to a small increase in rates. Administrative salaries increased due to regular administrative staff step increases, the General Managers' projected salary adjustment, COLA adjustments, and a proposed shift in personnel structure. Proposed is the creation of an Administrative Assistant I position which is outlined specifically in the Budget Change memo. This position will support the expanded duties of the proposed combined Assistant General Manager / Administrative Manager position. This position has been created to assist the General Manager with ongoing drought contingency planning, long range planning such as the

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Infrastructure Improvement Plan and Habitat Improvement Plans, annual work plans, water supply resource planning, contract management and administration, public policy issues, creation and implementation of Board policies and programs, business systems issues including IT, facilities and personnel, and internal organization activities. The addition of an administrative support position will allow re-distribution of the workload presently assigned to the Administrative Manager thus allowing time to devote appropriate attention to those areas of importance.

The increase to the ACWA membership dues supports the projected slight increase in cost of annual membership. Computer consultant costs have increased slightly due to an expansion of our IT service needs. All other line items in the General and Administrative category have remained stable. Overall, the Operations Division General and Administrative Expenses increased slightly over eight percent.

Under Special G & A expenses, the Proposition 84 administrative costs have been increased in connection with consulting costs anticipated for the grant application follow-up support. The OPEB actuarial is evaluated every three years and is not included in the FY 2014-15 budget.

#### *Infrastructure Improvement Plan Projects*

The Infrastructure Improvement Plan (IIP) Projects proposed in the Operations Division budget reflect a significant increase as compared to the prior fiscal year due to the identification of top priority projects through development of the IIP. The budget includes only the high priority infrastructure improvement projects proposed. Projects presented in the IIP outline a background of each project with descriptions and projected costs. Staff is in the process of developing the five-year infrastructure improvement plan for both the Operations Division and the Fisheries Division that propose to outline critical infrastructure needs over a 60 month period.

#### *Special Projects*

The Emergency Pumping Facilities Project has been budgeted for implementation in phases – a design and site mobilization phase and a construction phase. The design and site mobilization phase was secured by a Board approved budget augmentation during FY 2013-14 in the amount of \$904,000. The construction phase of the project will commence during FY 2014-15 as outlined in the budget. The intake tower stems and guides will be repaired in conjunction with the Emergency Pumping Facilities Project.

#### ***Fisheries Division***

##### *Operation and Maintenance Expenses*

The Fisheries Division Labor line item shows an overall slight increase compared to the prior year primarily due to the COLA adjustment and affiliated payroll expenses. The fixed capital line item has decreased substantially due to the previous years' purchase of water quality monitoring equipment. The Fisheries Division is planning to purchase a new vehicle during this fiscal year. Contract labor has increased with the expectation of utilizing the California Conservation Corp. for assistance with ongoing maintenance projects. Miscellaneous materials and supplies have been reduced to a normal operating level as the previous fiscal year contained funding for extraordinary expenditures. Overall the operation and maintenance expenses for the Fisheries Division have slightly decreased.

##### *General and Administrative Expenses*

Costs affiliated with administrative salaries and benefits have increased slightly due to the proposed change in staff structure as outlined in the Operations Division G & A section. Computer consultant costs have increased marginally because of an expansion of IT service needs. Overall, the Fisheries Division General and Administrative Expenses have increased by approximately eleven percent.



### *Special Projects*

Special Projects within the Fisheries Division incorporate all monitoring, mapping, data analyses and reporting tasks required in the implementation of the 2000 Cachuma Project Biological Opinion (BO) and 2000 Lower Santa Ynez River (LSYR) Fisheries Management Plan (FMP). All of the Special Projects line item amounts have remained the same or decreased as compared to last year, except for USGS Stream Gauging due to a mandated 0.9% increase in their costs. Due to limitations in the trapping program from adherence to the BO Incidental Take Statement, a new BO/FMP Implementation task is needed to analyze the potential risk of exceeding take and propose revisions to the trapping program that would optimize the level of effort while remaining below the established take limits as well as advance our database structure. This is a complex task given the intra- and inter-annual variability in the LSYR basin.

### *Habitat Improvement Plan Projects*

***Fish Passage Project:*** Increased requirements by granting agencies and Santa Barbara County are necessitating additional engineering design for tributary projects that are currently focused on Quiota Creek. The funds requested will allow for timely design work with sufficient completion to apply for grant and permit applications and to prepare for construction in the next fiscal year upon receiving grant funding.

***Oak Tree Restoration Program:*** This is an ongoing program that was underfunded last year given the actual required level of effort. Hence, the program budget includes the resources necessary to conduct program activities made difficult by the three year drought. Further, additional funds are needed in preparation for the potential of planting more oak trees to meet mitigation requirements.

### **General Comments**

Overall, the Fisheries Division Budget decreased approximately twenty-eight percent.

In summary, the COMB proposed FY 2014-15 Gross Draft Budget totals \$9,615,327. Overall, as indicated on page 4 of the budget, COMB will manage over \$12 million in revenues during this fiscal year. These revenues include the COMB Operating Budget, the Renewal / Trust Fund expenditures, the Santa Barbara County \$100,000 annual contribution, Cachuma Project Water Entitlement payments, Bradbury and Lauro Dam SOD Act repayments, and the SWRCB Water Rights fee. With projected offsetting revenues of \$363,321, the net FY 2014-15 COMB Proposed Draft Budget totals \$9,252,006.

### **RECOMMENDATION:**

Board consideration for review and discussion the FY 2014-15 COMB Draft budget as presented.

### **LIST OF EXHIBITS:**

- 1) FY 2014-15 Draft COMB Operating Budget
- 2) FY 2014-15 Draft COMB Allocation Worksheet
- 3) FY 2014-15 COLA Calculation
- 4) FY 2014-19 Excerpt from Draft Infrastructure Improvement Plan
- 5) FY 2014-19 Excerpt from Draft Habitat Improvement Plan

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	June 11, 2014
Submitted by:	Randall Ward

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**SUBJECT:** Budget Change Proposal – Personnel structure change  
Administrative Assistant I  
Assistant General Manager / Administrative Manager

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**SUMMARY:**

The COMB Draft Fiscal Year 2014-15 Operating Budget includes a proposed new Administrative Assistant I position who, under general supervision, will report to the Administrative Manager. This position is being proposed as a change in staff structure to disseminate more effectively the recurring bookkeeping and ministerial portion of the Administrative Manager workload. With this new position available for analysis and support, identified programs of work and agency objectives which have not been achieved due to unavailable resources will be developed and implemented in a timely, professional manner.

The Administrative Manager position is proposed to change to become the Assistant General Manager (AGM)/Administrative Manager classification which will focus on several specific activities beyond routine management functions. These activities include ongoing drought contingency planning, asset inventory, long range planning such as the Infrastructure Improvement Plan (IIP) and Habitat Improvement Plans (HIP), annual work plans, water supply resource planning, contract management and administration, risk management, public policy issues, creation and implementation of Board policies and programs, business system issues including technology, facilities, personnel and internal organization activities. It is highly expected that other administrative, operational, engineering and political issues will arise frequently thereby requiring additional time and attention on the part of the General Manager. Creating the AGM/Administrative Manager position will enable the agency to effectively address current and ongoing oversight and development of Board policies in a timely manner and will ensure the General Manager has more time available to dedicate to ongoing and unexpected matters.

**BACKGROUND:**

The development and implementation of Board policies, goals, objectives and substantial programs of work has not met current and professional work expectations. Considerable work remains to develop the Infrastructure Improvement Plan. Underlying the importance of the IIP is the recognition the SCC, extending from the Tecolote Tunnel to Carpinteria, is the primary source of water conveyance to the south coast. The structural integrity of the SCC is critical because no other means of water conveyance from Lake Cachuma exists. Therefore COMB, as the agency responsible for ensuring the operation of the SCC as a lifeline water conveyance system, is responsible for developing and maintaining a system inventory data base that is subjected to an ongoing asset performance analysis. The development of an inventory of assets is primary to any asset management plan. The inventory is the basis for assigning factors of risk, life cycle analysis and critical system impacts to incremental components of the SCC and importantly to keep Board Directors up-to-date on the capital investment needs.



The Assistant General Manager (AGM) will assume the responsibility for IIP development, among many other programs of work, which will enable the Board to avoid the more costly option of seeking outside contractor assistance. The AGM will supervise the activities of existing COMB staff assigned to asset management tasks and potentially interns that may be utilized as another cost effective option to completing defined tasks. Without the addition of the requested additional clerical position the existing Administrative Manager will have limited time to oversee the development of the IIP. This alternative to contractual IIP development has been determined to be the least cost and most efficient course of meeting the obligation to develop system knowledge to enable a reasoned analysis for regular asset evaluation and decision-making by the Board.

**FISCAL IMPACT:**

The draft budget includes a proposed salary rate with corresponding tier two new hire benefits for the Administrative Assistant I position. There is no change to the proposed AGM / Administrative Manager salary at this time.

**ALTERNATIVES:**

- 1) Retain outside consulting firm to perform work associated with the IIP
- 2) Create new employment position to perform work associated with program planning
- 3) Expand duties of Administrative Manager and hire clerical staff to assist

**RECOMMENDATION:**

Expand duties of Administrative Manager; retitle to Assistant GM/Administrative Manager; and hire clerical staff to assist with routine administrative duties.





# Cachuma Operation & Maintenance Board

*Santa Barbara, California*

## Draft Operating Budget

July 1, 2014 – June 30, 2015



**CACHUMA OPERATION AND MAINTENANCE BOARD**

3301 Laurel Canyon Road

Santa Barbara, California 93105-2017

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

[www.cachuma-board.org](http://www.cachuma-board.org)

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## Mission

To provide a reliable source of water  
to our member agencies in an efficient manner  
for the betterment of life in our communities.



## **Cachuma Operation & Maintenance Board**

### **Board of Directors**

Lauren Hanson, Goleta Water District  
President

W. Douglas Morgan, Montecito Water District  
Vice-President

Alonzo Orozco, Carpinteria Valley Water District

Dale Francisco, City of Santa Barbara

Dennis Beebe, Santa Ynez River Water Conservation District,  
Improvement District No. 1

### **General Manager**

Randall M. Ward

### **Staff Contributors**

Janet Gingras, Administrative Manager

Dave Stewart, Operations Division Manager

Tim Robinson, Fisheries Division Manager



## Overview

### General Manager's Message

This budget document provides detailed information about the Cachuma Operation and Maintenance Board's (COMB) revenue and expenditure forecast in the coming year and addresses the main points and major decisions made in compiling the budget. The budget provides the financial plan required to implement our mission and will enable our employees to utilize the resources needed to achieve our goals.

Adoption of the budget is one of the most important aspects taken by the Board of Directors. This budget is COMB's financial work plan, translated in expenditures, supported by revenues. It establishes the direction for the near term, and to the extent the decisions have continuing implications, it establishes a long term course as well. The Budget is a projection of revenues and expenditures needed for operation, maintenance, administration, habitat and infrastructure improvements associated with providing an essential water supply to our Member Units.

While the FY 2013-14 budget was difficult to achieve, it funded the highest priority projects and activities necessary to achieve our goals while keeping our costs as low as possible. Significant fiscal challenges continue to face the Member Units who fund COMB in FY 2014-15. Rising costs for essential materials and supplies, pressure on our Members Units budgets from reduced customer water demand, the ongoing drought conditions, and other factors make financial projections more difficult than normal. From the onset of this budget process, we scrutinized our budget planning assumptions, established prudent budget targets and set priorities with careful consideration.

The Proposed Fiscal Year 2014-15 Net Operating Budget totals \$9.6 million, representing a significant increase as compared to the FY 2013-14 Net Operating Budget. This increase is primarily due to the creation and implementation of the Emergency Pumping Facilities Project. The development of the 5-year Infrastructure and Habitat Improvement Plans are underway and will reveal the validity and basis for improvement projects scheduled for fiscal year 2014-15 and beyond. Staff has worked aggressively to maintain costs in all areas of the budget by improving operating efficiencies and effectively utilizing internal resources to achieve our objectives.

### Summary

In this dynamic financial environment, monitoring the budget and responding to changes or unanticipated events is a continuing process. COMB will continue to report financial activity in a timely and transparent manner to the Board and Member Agencies. Cost management will remain a key objective in light of ongoing pressures on water rates and financial reserves at the Member Unit level. The following is a summary of the Fiscal Year 2014-15 Budget and provides and outline of key objectives to be implemented over the next fiscal year.

**Cachuma Operation & Maintenance Board**  
**Consolidated Overview**  
**Proposed Draft Budget**

Fiscal Year 2014 - 2015

6/11/2014

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No.	<u>SALARIES &amp; BENEFITS</u>	<u>FY 2013-14</u>	<u>FY 2014-15</u>	<u>Change</u>
7	Operations Division	\$ 821,947	\$ 818,736	\$ (3,211)
3	Fisheries Division	533,909	543,641	\$ 9,732
6	Administration	821,215	935,461	\$ 114,246
16	<b>TOTAL</b>	<b>\$ 2,177,071</b>	<b>\$ 2,297,838</b>	<b>\$ 120,767</b>
<b><u>OPERATIONS and MAINTENANCE EXPENSES</u></b>				
	Operations Division	\$ 211,000	\$ 241,000	\$ 30,000
	Fisheries Division	101,650	91,000	\$ (10,650)
	<b>TOTAL</b>	<b>\$ 312,650</b>	<b>\$ 332,000</b>	<b>\$ 19,350</b>
<b><u>GENERAL AND ADMINISTRATIVE EXPENSES</u></b>				
	Operation Division	\$ 276,768	\$ 270,718	\$ (6,050)
	Fisheries Division	107,771	109,271	\$ 1,500
	<b>TOTAL</b>	<b>\$ 384,539</b>	<b>\$ 379,989</b>	<b>\$ (4,550)</b>
<b>Total Operating Budget</b>		<b>\$ 2,874,260</b>	<b>\$ 3,009,827</b>	<b>\$ 135,567</b>

<b>INFRASTRUCTURE IMPROVEMENT, HABITAT IMPROVEMENT and SPECIAL PROJECTS</b>
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**Operations Division**

Infrastructure Improvement Projects	\$ 481,270	\$ 1,195,500	\$ 714,230
Special Projects	\$ 904,000	\$ 4,958,000	\$ 4,054,000

**Fisheries Division**

Habitat Improvement Projects	\$ 868,000	\$ 235,000	\$ (633,000)
Special Projects	\$ 220,000	\$ 217,000	\$ (3,000)

<b>Total Budget</b>	<b>\$ 5,347,530</b>	<b>\$ 9,615,327</b>	<b>\$ 4,267,797</b>
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## Cachuma Operation & Maintenance Board

### Proposed Draft Budget

Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name	FY 2013 - 2014 Approved Budget	FY 2014 - 2015 Proposed Draft Budget	Dollar Change	Percentage Change
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### OPERATIONS DIVISION

#### OPERATION & MAINTENANCE EXPENSES

<b>LABOR</b>					
3100	LABOR - Operations Field Crew	\$ 497,218	\$ 507,169	\$ 9,951	
3155	CALPERS	90,035	80,344	(9,691)	
3150	HEALTH INSURANCE	172,032	167,313	(4,719)	
3150	WORKERS COMPENSATION INSURANCE	24,625	25,112	487	
3160	FICA	38,037	38,798	761	
	<b>TOTAL</b>	<b>\$ 821,947</b>	<b>\$ 818,736</b>	<b>\$ (3,211)</b>	<b>-0.39%</b>
<b>VEHICLES &amp; EQUIPMENT</b>					
3201	VEHICLE/EQUIP MTCE	\$ 30,000	\$ 30,000	\$ -	
3202	FIXED CAPITAL	15,000	35,000	20,000	
3203	EQUIPMENT RENTAL	5,000	5,000	-	
3204	MISC	5,000	5,000	-	
	<b>TOTAL</b>	<b>\$ 55,000</b>	<b>\$ 75,000</b>	<b>\$ 20,000</b>	<b>36.36%</b>
<b>CONTRACT LABOR</b>					
3301	CONDUIT, METER, VALVE	\$ 20,000	\$ 20,000	\$ -	
3302	BUILDINGS & ROADS	20,000	20,000	-	
3303	RESERVOIRS	10,000	20,000	10,000	
3304	ENGINEERING, MISC SVCS	10,000	10,000	-	
	<b>TOTAL</b>	<b>\$ 60,000</b>	<b>\$ 70,000</b>	<b>\$ 10,000</b>	<b>16.67%</b>
<b>MATERIALS &amp; SUPPLIES</b>					
3401	CONDUIT, METER, VALVE & MISC	\$ 25,000	\$ 25,000	\$ -	
3402	BUILDINGS & ROADS	15,000	15,000	-	
3403	RESERVOIRS	10,000	10,000	-	
	<b>TOTAL</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>OTHER EXPENSES</b>					
3501	UTILITIES	\$ 7,000	\$ 7,000	\$ -	
3502	UNIFORMS	6,000	6,000	-	
3503	COMMUNICATIONS	18,000	18,000	-	
3504	USA & OTHER SERVICES	4,000	4,000	-	
3505	MISC	8,000	8,000	-	
3506	TRAINING	3,000	3,000	-	
	<b>TOTAL</b>	<b>\$ 46,000</b>	<b>\$ 46,000</b>	<b>\$ -</b>	<b>0.00%</b>
	<b>TOTAL O &amp; M EXPENSE</b>	<b>\$ 1,032,947</b>	<b>\$ 1,059,736</b>	<b>\$ 26,789</b>	<b>2.59%</b>



**Cachuma Operation & Maintenance Board**  
**Proposed Draft Budget**  
 Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name	FY 2013 - 2014 Approved Budget	FY 2014 - 2015 Proposed Draft Budget	Dollar Change	Percentage Change
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**OPERATIONS DIVISION**

**GENERAL AND ADMINSTRATIVE EXPENSES**

5000	DIRECTORS FEES	\$ 13,000	\$ 13,000	\$ -	
5100	AUDIT	11,700	11,700	0	
5101	LEGAL	100,000	100,000	0	
5150	UNEMPLOYMENT INSURANCE	25,000	15,000	(10,000)	
5200	LIABILITY & PROPERTY INSURANCE	42,705	42,705	0	
5201	HEALTH insurance, W/C, Retirees medical	178,241	197,658	19,417	
5250	PERS	59,642	70,574	10,932	
5339	FICA/MEDICARE	23,398	26,648	3,250	
5300-5307	ADMINISTRATIVE SALARIES	305,857	348,344	42,487	
5310	POSTAGE / OFFICE SUPPLIES	9,100	9,100	0	
5311	OFFICE EQUIPMENT / LEASES	9,691	9,691	0	
5312	MISC. ADMIN. EXP.	10,790	10,790	0	
5313	COMMUNICATIONS	7,995	7,995	0	
5314	UTILITIES	9,737	9,737	0	
5315	MEMBERSHIP DUES	6,425	7,000	575	
5316	ADMIN. FIXED ASSETS	4,000	4,000	0	
5318	COMPUTER CONSULTANT	16,625	20,000	3,375	
5325	EMPLOYEE EDUCATION/TRAINING	2,000	2,000	0	
5330	ADMIN TRAV & CONFERENCES	2,000	2,000	0	
5331	PUBLIC INFO	1,000	1,000	0	
<b>TOTAL GENERAL &amp; ADMINISTRATIVE</b>		<b>\$ 838,906</b>	<b>\$ 908,943</b>	<b>\$ 70,037</b>	<b>8.35%</b>

**SPECIAL G & A EXPENSES**

5510	Integrated Regional Water Mgmt Plan	\$ 5,000	\$ 5,000	\$ -	
<b>TOTAL SPECIAL G &amp; A EXPENSES</b>		<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ -</b>	<b>0.00%</b>

**OPERATIONS DIVISION**

**INFRASTRUCTURE IMPROVEMENT PROJECTS**

6062	SCADA	\$ 30,000	\$ 50,000	\$ 20,000	
6090	COMB Bldg/Grounds Repair	20,000	254,000	234,000	
6097	GIS and Mapping	10,000	10,000	-	
6096	SCC Structure Rehabilitation (AVAR / BO Valves)	111,270	150,000	38,730	
6105	ROW Identification Program	10,000	10,000	-	
6107	North Portal Elevator Rehabilitation	300,000	0	(300,000)	
6109	North Portal Jet Flow Control Valve	0	150,000	150,000	
6111	Mission Creek Crossing - Phase I	0	400,000	400,000	
6112	Open Air Vent Structure	0	70,000	70,000	
6116	V-Ditch clean up Project - Upper Reach	0	30,000	30,000	
6117	Sheffield Paving Project	0	30,000	30,000	
6118	Carpinteria Reservoir Fence Replacement	0	41,500	41,500	
<b>TOTALS</b>		<b>\$ 481,270</b>	<b>\$ 1,195,500</b>	<b>\$ 714,230</b>	<b>148.41%</b>

**SPECIAL PROJECTS**

6119	Intake Tower Stems & Guides	204,000	250,000	46,000	
6120	Emergency Pumping Facilities Project	700,000	4,708,000	4,008,000	
<b>TOTALS</b>		<b>\$ 904,000</b>	<b>\$ 4,958,000</b>	<b>\$ 4,054,000</b>	

<b>TOTAL IIP and SPECIAL PROJECTS</b>		<b>\$ 1,385,270</b>	<b>\$ 6,153,500</b>	<b>\$ 4,768,230</b>	
<b>TOTAL OPERATIONS DIVISION BUDGET</b>		<b>\$ 3,262,123</b>	<b>\$ 8,127,179</b>	<b>\$ 4,865,056</b>	<b>149.14%</b>

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## Cachuma Operation & Maintenance Board

### Proposed Draft Budget

Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name	FY 2013 - 2014 Approved Budget	FY 2014 - 2015 Proposed Draft Budget	Dollar Change	Percentage Change
<b>FISHERIES DIVISION</b>					
<b>OPERATION &amp; MAINTENANCE EXPENSES</b>					
<b>LABOR</b>					
4100	LABOR - Biology Field Crew	\$ 276,758	\$ 278,245	\$ 1,487	
4114	LABOR - Seasonal Field Crew	83,520	82,500	(1,020)	
4151	CALPERS	53,968	56,361	2,393	
4150	HEALTH INSURANCE	73,728	80,539	6,811	
4150	WORKERS COMPENSATION	18,374	18,398	24	
4152	FICA	27,561	27,597	36	
	<b>TOTAL</b>	<b>\$ 533,909</b>	<b>\$ 543,641</b>	<b>\$ 9,732</b>	<b>1.82%</b>
<b>VEHICLES &amp; EQUIPMENT</b>					
4270	VEHICLE/EQUIP MTCE	\$ 13,000	\$ 13,000	\$ -	
4280	FIXED CAPITAL	52,300	35,000	(17,300)	
4290	MISCELLANEOUS	2,500	2,500	-	
	<b>TOTAL</b>	<b>\$ 67,800</b>	<b>\$ 50,500</b>	<b>\$ (17,300)</b>	<b>-25.52%</b>
<b>CONTRACT LABOR</b>					
4220	METERS & VALVES	\$ 3,000	\$ 3,000	\$ -	
4222	PROJECTS MAINTENANCE	13,000	28,000	15,000	
	<b>TOTAL</b>	<b>\$ 16,000</b>	<b>\$ 31,000</b>	<b>\$ 15,000</b>	<b>93.75%</b>
<b>MATERIALS &amp; SUPPLIES</b>					
4390	MISCELLANEOUS	\$ 15,350	\$ 7,000	\$ (8,350)	
	<b>TOTAL</b>	<b>\$ 15,350</b>	<b>\$ 7,000</b>	<b>\$ (8,350)</b>	<b>-54.40%</b>
<b>OTHER EXPENSES</b>					
4502	UNIFORMS	\$ 2,500	\$ 2,500	\$ -	
	<b>TOTAL</b>	<b>\$ 2,500</b>	<b>\$ 2,500</b>	<b>\$ -</b>	<b>0.00%</b>
	<b>TOTAL O &amp; M EXPENSE</b>	<b>\$ 635,559</b>	<b>\$ 634,641</b>	<b>\$ (918)</b>	<b>-0.14%</b>

## FISHERIES DIVISION

### GENERAL AND ADMINISTRATIVE EXPENSES

5407	DIRECTORS FEES	\$ 7,000	\$ 7,000	\$0	
5407	LEGAL	25,000	25,000	0	
5441	AUDIT	6,300	6,300	0	
5443	LIABILITY & PROPERTY INSURANCE	21,595	21,595	0	
5401	HEALTH BENEFITS & W/C	44,671	52,316	7,645	
5402	PERS	32,115	38,002	5,887	
5403	FICA/MEDICARE	12,599	14,349	1,750	
5404-09	ADMINISTRATIVE SALARIES	164,692	187,570	22,878	
5410	POSTAGE / OFFICE SUPPLIES	4,900	4,900	0	
5411	OFFICE EQUIPMENT / LEASES	5,218	5,218	0	
5412	MISC. ADMIN. EXP.	5,810	5,810	0	
5413	COMMUNICATIONS	4,305	4,305	0	
5414	UTILITIES	5,243	5,243	0	
5415	MEMBERSHIP DUES	2,900	2,900	0	
5416	ADMIN. FIXED ASSETS	4,000	4,000	0	
5418	COMPUTER CONSULTANT	9,000	10,500	1,500	
5425	EMPLOYEE EDUCATION/SUBSCRIPTIONS	2,500	2,500	0	
5430	ADMIN TRAV & CONFERENCES	2,500	2,500	0	
5431	PUBLIC INFO	1,500	1,500	0	
	<b>TOTAL GENERAL &amp; ADMINISTRATIVE</b>	<b>\$ 361,848</b>	<b>\$ 401,507</b>	<b>\$ 39,659</b>	<b>10.96%</b>

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**Cachuma Operation & Maintenance Board**  
**Proposed Draft Budget**  
 Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name	FY 2013 - 2014 Approved Budget	FY 2014 - 2015 Proposed Draft Budget	Dollar Change	Percentage Change
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**FISHERIES DIVISION**

**SPECIAL PROJECTS**

6201	BO/FMP Implementation	\$ 105,000	\$ 100,000	\$ (5,000)	
6202	GIS and Mapping	10,000	10,000	0	
6203	Grants Technical Support	10,000	10,000	0	
6204	SYR Hydrology Technical Support	10,000	10,000	0	
6205	USGS Stream Gauge Program	75,000	77,000	2,000	
6206	Tri County Fish Team Funding	5,000	5,000	0	
6210	SYR Riverware Model Use	5,000	5,000	0	
<b>TOTALS</b>		<b>\$ 220,000</b>	<b>\$ 217,000</b>	<b>\$ (3,000)</b>	<b>-1.36%</b>

**HABITAT IMPROVEMENT PLAN PROJECTS**

6303	Tributary Projects Support	\$ 3,000	\$ 5,000	\$ 2,000	
6304	Quiota Creek Engineering Designs	70,000	0	(70,000)	
6207	Oak Tree Restoration Program	25,000	100,000	75,000	
6309	Quiota Creek Crossing 1	770,000	0	(770,000)	
6312	Quiota Creek Crossing 0 (a&b)	0	40,000	40,000	
6313	Quiota Creek Crossing 3	0	30,000	30,000	
6314	Quiota Creek Crossing 5	0	30,000	30,000	
6315	Quiota Creek Crossing 8	0	30,000	30,000	
<b>TOTALS</b>		<b>\$ 868,000</b>	<b>\$ 235,000</b>	<b>\$ (633,000)</b>	<b>-72.93%</b>

**TOTAL HIP and SPECIAL PROJECTS**

		\$ 1,088,000	\$ 452,000	\$ (639,000)	-58.73%
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**TOTAL FISHERIES DIVISION BUDGET**

		\$ 2,085,407	\$ 1,488,148	\$ (600,259)	-28.78%
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**Total COMB Gross Budget**

		\$ 5,347,530	\$ 9,615,327	\$ 4,267,797	79.81%
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**Projected Offsetting Revenues:**

Renewal Fund	\$ (242,912)	\$ (159,887)
Trust Fund	(16,555)	(113,434)
Santa Barbara County Contribution	(90,000)	(90,000)
Grants - QC Crossing 0 (a&b)	(671,000)	-
<b>Total Offsetting Revenues</b>	<b>\$ (1,020,467)</b>	<b>\$ (363,321)</b>

**TOTAL COMB NET BUDGET**

		\$ 4,327,063	\$ 9,252,006	\$ 4,924,943	113.82%
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**Other COMB Managed Revenues:**

	Actual	Estimated
USBR Capital Repayment / O & M costs	\$ 2,418,137	\$ 2,500,000
Bradbury SOD Act Repayment	164,870	164,870
Lauro SOD Act Repayment	32,088	32,088
Water Rights Fee	35,940	36,000
<b>Totals</b>	<b>\$ 2,651,035</b>	<b>\$ 2,732,958</b>

**Notes:**

General and Administrative labor costs are allocated at 65% Operations Division and 35% Fisheries Division  
 General & Administrative Expenses are allocated at 65% Operations Division and 35% Fisheries Division with the exception of  
 Legal, Admin Fixed Assets, Education, Travel, Public Info  
 Labor costs contain 1.2% COLA increase per annual calculation

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**Cachuma Operation & Maintenance Board**  
**Proposed Draft Budget**  
 Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name	FY 2013 - 2014 Carryover Funding
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**Projected Carryover Funds from Fiscal Year 2013-14**

**OPERATIONS DIVISION**

**OPERATIONS SALARIES**

3100	Labor	70,000
	<i>(Constructive Return once audit is completed)</i>	\$ 70,000

**INFRASTRUCTURE IMPROVEMENT PROJECTS**

6096	SCC Structure Rehabilitation (AVAR / BO Valves)	108,000
6105	ROW Identification Program	10,000
	<i>(Carried over for continued Infrastructure Improvement Work)</i>	\$ 118,000

**FISHERIES DIVISION**

**SPECIAL PROJECTS**

6201	BO/FMP Implementation (consultant efforts directed toward other activities)	\$ 75,000
	<i>(Utilize Funds to pay off CalPERS side fund balance)</i>	\$ 75,000
<b>Total</b>		<b>\$ 263,000</b>



**Cachuma Operation & Maintenance Board**  
**Operations & Maintenance Expenses - Operations Division**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Description
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**OPERATIONS and MAINTENANCE EXPENSES - Operations Division**

**LABOR**

3100	LABOR OPS	\$ 507,169	Division Manager, Operations Field Crew salaries
3155	CALPERS	80,344	CalPERS pension
3150	HEALTH INSURANCE	167,313	ACWA/JPIA Blue Cross Health Plan, Delta Dental, VSP vision plan
3150	WORKERS COMPENSATION	25,112	ACWA/JPIA workers compensation program
3160	FICA	38,798	Agency payroll costs
	<b>TOTAL</b>	<b>\$ 818,736</b>	

**VEHICLES & EQUIPMENT**

3201	VEHICLE/EQUIP MTCE	\$ 30,000	Ops & mtce costs of vehicles & equip/Cat generators/fuel costs
3202	FIXED CAPITAL	35,000	New vehicle, misc replacement equipment, portable pumps, generators
3203	EQUIPMENT RENTAL	5,000	Rental equipment
3204	MISC	5,000	Small tools, supplies for tools & equipment
	<b>TOTAL</b>	<b>\$ 75,000</b>	

**CONTRACT LABOR**

3301	CONDUIT, METER, VALVE	\$ 20,000	Heavy equip operators, meter calibration, valve mtce
3302	BUILDINGS & ROADS	20,000	Elevator mtce; equip repair; heavy equip; landscape
3303	RESERVOIRS	20,000	Reservoir cleaning/weed abatement/silt vacuuming
3304	ENGINEERING, MISC SVCS	10,000	CIP consultants, engineering, design
	<b>TOTAL</b>	<b>\$ 70,000</b>	

**MATERIALS & SUPPLIES**

3401	CONDUIT, METER, VALVE & MISC	\$ 25,000	Meters, air valves, fill materials, charts, locks, signs, gate valves, air ver
3402	BUILDINGS & ROADS	15,000	Paint, windows, lights, gravel, spray, fencing, etc
3403	RESERVOIRS	10,000	Gravel, base, weed spray, fencing, cleaning, etc.
	<b>TOTAL</b>	<b>\$ 50,000</b>	

**OTHER EXPENSES**

3501	UTILITIES	\$ 7,000	Electric; gas
3502	UNIFORMS	6,000	Uniforms; boots; raingear
3503	COMMUNICATIONS	18,000	Phones at facilities/Cell Phones/Ops & Mtce/SCADA lines
3504	USA & OTHER SERVICES	4,000	Underground Service Alerts
3505	MISC	8,000	Miscellaneous operational expenses (see page 6)
3506	TRAINING	3,000	Certifications / classes
	<b>TOTAL</b>	<b>\$ 46,000</b>	

**TOTAL O & M EXPENSE** **\$ 1,059,736**

**Cachuma Operation & Maintenance Board**  
**OPERATIONS EXPENSES - OTHER**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Vendor	Totals	Detail
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**OTHER EXPENSES DETAIL**

<b>3501</b>	Utilities		<b>\$7,000</b>	
		PGE		3,500
		Southern California Edison		3,500
<b>3502</b>	Uniforms		<b>\$6,000</b>	
		ATZ Monogramming		700
		The Wharf		4,500
		Kirkwood Silkscreen		800
<b>3503</b>	Communications		<b>\$18,000</b>	
		ATT		1,000
		Verizon - Mn office, Carp, Ortga, NP		2,500
		Verizon - SCADA		8,000
		Verizon Cell		5,500
		Echo		1,000
<b>3504</b>	USA & Other Services		<b>\$4,000</b>	
		USA		1,500
		Safety-Kleen		1,500
		County of Santa Barbara		500
		Draganchuk Alarms		500
<b>3505</b>	Miscellaneous		<b>\$8,000</b>	
		Misc. non-fixed assets		1,000
		OD computer/office		2,000
		City of SB Refuse		3,000
		Marborg Industries		2,000
<b>3506</b>	Education / Training Operations		<b>\$3,000</b>	
	<b>TOTAL</b>		<b>\$46,000</b>	



**Cachuma Operation & Maintenance Board**  
**General and Administrative Expenses - Operations Division**  
**Proposed Draft Budget**  
 Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name	Description
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**GENERAL AND ADMINISTRATIVE EXPENSES**

5000	DIRECTORS FEES	\$ 13,000	Directors Fees
5100	AUDIT	11,700	Audit
5101	LEGAL	100,000	Legal
5150	UNEMPLOYMENT TAX	15,000	Unemployment tax
5200	GENERAL LIABILITY INSURANCE	42,705	General liability premiums
5201	HEALTH, WC, DC, Retirees Medical	197,658	Health, WC, DC, Retirees medical
5250	CAL-PERS	70,574	PERS employer portion increased slightly
5339	FICA / MEDICARE	26,648	Payroll driven
5300-5307	ADMINISTRATIVE SALARIES	348,344	Admin Salaries
5310	POSTAGE/OFFICE SUPPLIES	9,100	Ofc supplies/postage
5311	OFFICE EQUIP/LEASES	9,691	Copiers lease / maintenance / postage machine
5312	MISC ADMIN EXP	10,790	Janitor / psychex / misc Admin
5313	COMMUNICATIONS	7,995	COX / Verizon / ATT
5314	UTILITIES	9,737	SCE / SC Gas
5315	MEMBERSHIP DUES	7,000	ACWA / AWWA / CVWP
5316	ADMIN FIXED ASSETS	4,000	Computers / Office Furniture
5318	COMPUTER CONSULTANT	20,000	Technical Expertise
5325	EMPLOYEE EDUCATION/SUBSCRIPTIONS	2,000	Admin Expense
5330	TRAVEL & CONFERENCES	2,000	COMB travel
5331	PUBLIC INFO	1,000	Newspaper ads/public announcements
<b>TOTAL</b>		<b>\$ 908,943</b>	

Notes:

Administrative salaries/burden are allocated as 35% Fisheries Division and 65% Operations based on proportionate salary ratio.

**Cachuma Operation & Maintenance Board**  
**ADMINISTRATIVE EXPENSES - OD**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Totals	Detail
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**GENERAL AND ADMINISTRATIVE DETAIL**

5000	Directors Fees	\$13,000	
5100	Audit	\$11,700	
5101	Legal	\$100,000	
5150	Unemployment Insurance	\$15,000	
5200	Liability & Property Insurance	\$42,705	
	Property		2,925
	Crime Coverage		780
	Auto & General Liability		39,000
5310	Postage and Office Supplies	\$9,100	
5311	Office Equipment & Leases	\$9,691	
	Coastal Copy		2,800
	Culligan Water		491
	GE Capital		4,400
	Pitney Bowes		2,000
5312	Misc Admin. Expense	\$10,790	
	Office Cleaning		6,000
	Paychex		3,600
	Misc items		1,190
5313	Communications	\$7,995	
	ATT		1,500
	Nextel Communications		1,795
	Verizon		1,500
	COX Cable Online		3,200
5314	Utilities	\$9,737	
	Southern California Edison		9,337
	The Gas Company		400
5315	Membership Dues	\$7,000	
	ACWA		6,000
	AWWA		500
	Other Dues		500
5316	Admin. Fixed Assets	\$4,000	
			4,000
5318	Computer Consultant	\$20,000	
			20,000
5325	Employee Education/Subscriptions	\$2,000	
	Education		1,500
	Subscriptions		500
5330	Admin. Travel / Conferences	\$2,000	
5331	Public Information	\$1,000	
	Website Maintenance		1,000
	<b>TOTAL</b>	<b>\$265,718</b>	



**Cachuma Operation & Maintenance Board  
SPECIAL PROJECTS - Operations Division**

**Proposed Draft Budget**  
Fiscal Year 2014 - 2015

6/11/2014

Account Number	Account Name			Description
6062	<b>SCADA</b> Contractor	\$50,000	50,000	Upgrade of SCADA system (PLC replacement)
6090	<b>COMB Building/Grounds Repair</b> Structural Engineer Contractor	\$254,000	4,000 250,000	Evaluation / structural design plan Construction to stabilize Board Room
6096	<b>SCC Structure Rehabilitation</b> Contractor Contractor	\$150,000	100,000 50,000	Lower Reach AVAR Valve Replacement Program (Phase II) Lower Reach Blow Off Replacement Program (Phase II)
6097	<b>GIS and Mapping</b> Vendor	\$10,000	10,000	Software, licensing, support/additional mapping
6105	<b>ROW Identification Program</b> Contractor - survey work	\$10,000	10,000	Survey work - Phase I and Phase II development
6109	<b>North Portal Jet Flow Control Valve Rehabilitation</b> Vendor	\$150,000	150,000	North Portal Jet Flow Control Valve component purchase
6111	<b>Mission Creek Pipeline Replacement</b> Consulting Engineer	\$400,000	400,000	Evaluation, designs, structural calculations, project planning
6112	<b>Open Air Vent Structure (Station 78+00)</b> Engineer / Contractor	\$70,000	70,000	Repair / Rehab structure
6116	<b>V-Ditch Clean-Up Project Upper Reach</b> Contractor	\$30,000	30,000	Construction
6117	<b>Sheffield Paving Project</b> Contractor	\$30,000	30,000	Asphalt repaving
6118	<b>Carpinteria Reservoir Fence Replacement</b> Contractor	\$41,500	41,500	Fence replacement
6119	<b>Intake Tower Stems and Guides</b> Contractor	\$250,000	250,000	Replace guides and stems on intake tower
6120	<b>Emergency Pumping Facility Project</b> Cushman Contracting	\$4,708,000	4,708,000	Implementation and O & M
<b>TOTAL Special Projects</b>		<b>\$6,153,500</b>		

**Cachuma Operation & Maintenance Board**  
**Operations & Maintenance Expenses - Fisheries Division**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Description
----------------	--------------	-------------

**OPERATIONS and MAINTENANCE EXPENSES - Fisheries Activites**

<b><u>LABOR</u></b>		
4100	LABOR	\$ 543,641 Biology Field Crew salary/benefits
	<b>TOTAL</b>	<b>\$ 543,641</b>
 <b><u>VEHICLES &amp; EQUIPMENT</u></b>		
4270	VEHICLES MAINT	\$ 13,000 Fuel, tires, maintenance, etc.
4280	FIXED CAPITAL	35,000 New Vehicle, Thermographs, probes, etc.
4290	MISC	2,500 Miscellaneous
	<b>TOTAL</b>	<b>\$ 50,500</b>
 <b><u>CONTRACT LABOR</u></b>		
4221	METERS & VALVES	\$ 3,000 Calibration of flow meters and sonde meters
4222	FISH PROJECTS MT. WORK	28,000 Maintenance of fish passage projects, CCC
	<b>TOTAL</b>	<b>\$ 31,000</b>
 <b><u>MATERIALS &amp; SUPPLIES</u></b>		
4390	MISC	\$ 7,000 Misc supplies/additional monitoring equipment
	<b>TOTAL</b>	<b>\$ 7,000</b>
 <b><u>OTHER EXPENSES</u></b>		
4502	UNIFORMS	\$ 2,500 Biology crew gear
	<b>TOTAL</b>	<b>\$ 2,500</b>
	 <b><u>TOTAL O &amp; M EXPENSE</u></b>	 <b>\$ 634,641</b>



**Cachuma Operation & Maintenance Board**  
**General and Administrative Expenses - Fisheries Division**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Description
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**GENERAL AND ADMINISTRATIVE EXPENSES**

5400	DIRECTORS FEES	\$7,000	Directors Fees
5441	AUDIT	6,300	Annual Audit
5407	LEGAL	25,000	Legal
5443	GENERAL LIABILITY INSURANCE	21,595	General liability premiums
5401	HEALTH & Workers Comp.	52,316	Health and WC premiums
5402	CAL-PERS	38,002	PERS employer portion increased slightly
5403	FICA / MEDICARE	14,349	Payroll driven
5404-09	ADMINISTRATIVE SALARIES	187,570	Administrative Salaries
5410	POSTAGE/OFFICE SUPPLIES	4,900	Ofc supplies/postage
5411	OFFICE EQUIP/LEASES	5,218	Copiers lease / maintenance / Pitney Bowes
5412	MISC ADMIN EXP	5,810	J&C janitorial / Paychex / Website mtce & updates/misc
5413	COMMUNICATIONS	4,305	COX / Verizon / ATT
5414	UTILITIES	5,243	SCE / SC Gas
5415	MEMBERSHIP DUES	2,900	Fisheries Associations
5416	ADMIN FIXED ASSETS	4,000	Computers / Office Furniture
5418	COMPUTER CONSULTANT	10,500	Technical Expertise
5425	EMPLOYEE EDUCATION/SUBSCRIPTIONS	2,500	Admin Expense
5430	TRAVEL & CONF.	2,500	Travel Expenses
5431	PUBLIC INFO	1,500	Newspaper ads/public announcements
<b>TOTAL</b>		<b>\$ 401,507</b>	

Notes:

Administrative salaries/burden are allocated as 35% Fisheries Division and 65% Operations based on proportionate salary ratio.

**Cachuma Operation & Maintenance Board**  
**ADMINISTRATIVE EXPENSES - Fisheries Division**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Totals	Detail
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**GENERAL AND ADMINISTRATIVE DETAIL**

5400	Directors Fees	\$7,000	
5407	Legal	\$25,000	
5441	Audit	\$6,300	
5443	Liability & Property Insurance	\$21,595	
	Property		1,575
	Crime Coverage		420
	General Liability		19,600
5410	Postage and Office Supplies	\$4,900	
5411	Office Equipment & Leases	\$5,218	
	Coastal Copy		900
	Culligan Water		300
	GE Capital		3,118
	Pitney Bowes		900
5412	Misc Admin. Expense	\$5,810	
	J & C Services		3,410
	Paychex		2,000
	Misc.		400
5413	Communications	\$4,305	
	ATT		1,805
	Verizon		800
	COX Cable Online		1,700
5414	Utilities	\$5,243	
	Southern California Edison		3,943
	The Gas Company		1,300
5415	Membership Dues	\$2,900	
	American Fisheries Society		500
	ACWA		2,200
	Salmonid Restoration Federation		200
5416	Admin. Fixed Assets	\$4,000	
			4,000
5418	Computer Consultant	\$10,500	
			10,500
5425	Employee Education/Subscriptions	\$2,500	
	Education		2,000
	Subscriptions		500
5430	Admin. Travel / Conferences	\$2,500	
5431	Public Information	\$1,500	
	Public Information		500
	Website Development		1,000
	<b>TOTAL</b>	<b>\$109,271</b>	



**Cachuma Operation & Maintenance Board**  
**Special Projects - Fisheries Division**  
**Proposed Draft Budget**  
*Fiscal Year 2014 - 2015*

6/11/2014

Account Number	Account Name	Totals	Description
6201	Biological Opinion/FMP Implementation	\$100,000	66,000 BO Compliance Tasks and Support 5,000 AMC and CC participation and tech support 29,000 Fisheries monitoring program support
6202	GIS and mapping	\$10,000	10,000 GIS Tech support, materials, equip, software
6203	Grants and Workshop Technical Support	\$10,000	10,000 Technical support for grants research and management
6204	SYR Hydrology Technical Support	\$10,000	10,000 Hydrologic Modeling support
6205	USGS Stream Gauge Program*	\$77,000	77,000 USGS Stream Gauge Program
6206	Tri County Fish Team Funding	\$5,000	5,000 Tri County Fish Team participation
6211	SY Riverware Model Use	\$5,000	5,000 Riverware software use

**TOTAL Special Projects** \$217,000

\* Reimbursed through County of Santa Barbara \$100,000 Contribution Fund

**Cachuma Operation & Maintenance Board**  
**Habitat Improvements - Fisheries Division**  
**Proposed Draft Budget**  
**Fiscal Year 2014 - 2015**

6/11/2014

Account Number	Account Name	Totals	Totals	Description
6303	Tributary Projects Support HDR FishPro	\$5,000	5,000	
6207	Oak Tree Restoration Program Ken Knight Consultant Vendor	\$100,000	25,000 75,000	Oak Tree Consultant oversight Materials and supplies
6312	Quiota Creek Crossing O (a & b) HDR FishPro	\$40,000	40,000	Design support
6313	Quiota Creek Crossing 3 HDR FishPro	\$30,000	30,000	Design support, bid administration
6314	Quiota Creek Crossing 4 HDR FishPro	\$30,000	30,000	Design support
6315	Quiota Creek Crossing 8 HDR FishPro	\$30,000	30,000	Design support
<b>TOTAL Habitat Enhancements</b>		<b>\$235,000</b>		

Grants Status:



## CACHUMA OPERATION & MAINTENANCE BOARD

### Proposed Draft Budget Allocation FY 2014-15

#### OPERATIONS DIVISION

6/11/2014

ID#1 Allocated Costs (SC Ops Div)		FY 2014 -15	
Buildings / Grounds Repair	\$254,000	10.31%	\$ 26,187
<b>TOTAL</b>			<b>\$ 26,187</b>

Directors Fees (All M/U equal share)			
MEMBER UNIT			
Goleta Water District	20.00%	\$	4,000
City of Santa Barbara	20.00%	\$	4,000
Carpinteria Valley Water District	20.00%	\$	4,000
Montecito Water District	20.00%	\$	4,000
Santa Ynez River Wtr Conservation District, ID#1	20.00%	\$	4,000
<b>TOTAL</b>	<b>100.00%</b>	<b>\$</b>	<b>20,000</b>

SCMU Allocated Costs (SC Ops Div)			
MEMBER UNIT			
Goleta Water District	40.42%	\$	3,266,337
City of Santa Barbara	35.88%	\$	2,899,460
Carpinteria Valley Water District	12.20%	\$	985,881
Montecito Water District	11.50%	\$	929,314
<b>TOTAL</b>	<b>100.00%</b>	<b>\$</b>	<b>8,080,992</b>

TOTAL Operations Division Budget			
MEMBER UNIT			
Goleta Water District	40.17%	\$	3,270,337
City of Santa Barbara	35.66%	\$	2,903,460
Carpinteria Valley Water District	12.16%	\$	989,881
Montecito Water District	11.46%	\$	933,314
Santa Ynez River Wtr Conservation District, ID#1	0.56%	\$	30,187
<b>TOTAL</b>	<b>100.00%</b>	<b>\$</b>	<b>8,127,179</b>

#### FISHERIES DIVISION

Stetson, Hanson Consultants Only		FY 2014 -15	
MEMBER UNIT			
Goleta Water District	40.42%	\$	15,358
City of Santa Barbara	35.89%	\$	13,638
Carpinteria Valley Water District	12.20%	\$	4,635
Montecito Water District	11.50%	\$	4,368
<b>Total allocated costs for Stetson, Hanson only</b>	<b>100.00%</b>	<b>\$</b>	<b>38,000</b>

O & M, G & A, Special Projects			
MEMBER UNIT			
Goleta Water District	36.25%	\$	525,679
City of Santa Barbara	32.19%	\$	466,803
Carpinteria Valley Water District	10.94%	\$	158,646
Montecito Water District	10.31%	\$	149,510
Santa Ynez River Wtr Conservation District, ID#1	10.31%	\$	149,510
<b>Total allocated costs for remaining FD budget</b>	<b>100.00%</b>	<b>\$</b>	<b>1,450,148</b>

MEMBER UNIT			
Goleta Water District	10.20%	\$	541,037
City of Santa Barbara	9.06%	\$	480,441
Carpinteria Valley Water District	3.08%	\$	163,281
Montecito Water District	2.90%	\$	153,878
Santa Ynez River Wtr Conservation District, ID#1	2.82%	\$	149,510
<b>TOTAL Fisheries Division Budget</b>	<b>28.06%</b>	<b>\$</b>	<b>1,488,148</b>

MEMBER UNIT TOTALS			
Goleta Water District	39.10%	\$	3,811,374
City of Santa Barbara	34.71%	\$	3,383,901
Carpinteria Valley Water District	11.82%	\$	1,153,162
Montecito Water District	11.15%	\$	1,087,192
Santa Ynez River Wtr Conservation District, ID#1	3.22%	\$	179,699
<b>TOTAL GROSS COMB BUDGET</b>	<b>100.00%</b>	<b>\$</b>	<b>9,615,328</b>

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## CACHUMA OPERATION & MAINTENANCE BOARD

### Proposed Draft Budget Allocation FY 2014-15

		6/11/2014
<b>Renewal Fund / Trust Fund Offset</b>		<b>FY 2014 -15</b>
Goleta Water District	36.25%	(\$99,079)
City of Santa Barbara	32.19%	(\$87,982)
Carpinteria Valley Water District	10.94%	(\$29,901)
Montecito Water District	10.31%	(\$28,179)
Santa Ynez River Wtr Conservation District, ID#1	10.31%	(\$28,179)
<b>TOTAL</b>	<b>100.00%</b>	<b>(\$273,321)</b>

<b>County Betterment Fund Offset</b>		
Goleta Water District	36.25%	\$ (32,625)
City of Santa Barbara	32.19%	\$ (28,971)
Carpinteria Valley Water District	10.94%	\$ (9,846)
Montecito Water District	10.31%	\$ (9,279)
Santa Ynez River Wtr Conservation District, ID#1	10.31%	\$ (9,279)
<b>TOTAL</b>	<b>100.00%</b>	<b>(\$90,000)</b>

<b>NET TOTAL COMB BUDGET</b>		
Goleta Water District	39.38%	\$ 3,679,670
City of Santa Barbara	34.96%	\$ 3,266,948
Carpinteria Valley Water District	11.93%	\$ 1,113,415
Montecito Water District	11.25%	\$ 1,049,734
Santa Ynez River Wtr Conservation District, ID#1	2.49%	\$ 142,241
<b>TOTAL</b>		<b>\$ 9,252,007</b>

<b>EPFP financed portion</b>		
Goleta Water District	63.00%	\$ 2,016,000
City of Santa Barbara		\$ -
Carpinteria Valley Water District	19.00%	\$ 608,000
Montecito Water District	18.00%	\$ 576,000
Santa Ynez River Wtr Conservation District, ID#1		\$ -
<b>TOTAL</b>	<b>100.00%</b>	<b>\$ 3,200,000</b>

<b>Annual Assessments</b>		
Goleta Water District		\$ 1,663,670
City of Santa Barbara		\$ 3,266,948
Carpinteria Valley Water District		\$ 505,415
Montecito Water District		\$ 473,734
Santa Ynez River Wtr Conservation District, ID#1		\$ 142,241
<b>TOTAL</b>		<b>\$ 6,052,007</b>

<b>Quarterly Assessments</b>		
Goleta Water District		\$ 415,917.51
City of Santa Barbara		\$ 816,736.93
Carpinteria Valley Water District		\$ 126,353.73
Montecito Water District		\$ 118,433.51
Santa Ynez River Wtr Conservation District, ID#1		\$ 35,560.16
<b>TOTAL</b>		<b>\$ 1,513,002</b>

**Notes:**

- 1) General & Administrative Expenses are allocated at 65% Operations Division and 35% Fisheries Division with the exception of Legal Fees, Membership dues, Admin Fixed Assets, Education, Travel, Public Info
- 2) Directors fees are allocated equally among all member units using .20 as multiplier
- 3) COMB Buildings/Grounds Repair is allocated at Cachuma Entitlement Percentage
- 4) South Coast Operations Division is allocated at SCMU Entitlement Percentages
- 5) Fisheries Division is allocated at Cachuma Entitlement Percentages with the exception of Stetson and Hanson Consultants



**Cachuma Operation and Maintenance Board  
Consumer Price Index Analysis**

April-14

<b>L.A.</b>	239.90	13-14 Index
	237.81	12-13 Index
	2.10	Pts Increase
Percentage Increase Year over Year		
<b>Los Angeles</b>		<b>0.9%</b>
<b>U.S.</b>	234.03	13-14 Index
	230.70	12-13 Index
	3.32	Pts Increase
Percentage Increase Year over Year		
<b>U.S.</b>		<b>1.4%</b>
<b>Avg Increase</b>		<b>1.2%</b>

FY 2015-2019

# Infrastructure Improvement Plan



*Operations Division*



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## Executive Summary

The Cachuma Project was constructed in the early 1950's by the United States Department of the Interior, U.S. Bureau of Reclamation under contract with the Santa Barbara County Water Agency on behalf of the Cachuma Project Member Units. The Cachuma Member Units include Carpinteria Valley Water District, City of Santa Barbara, Goleta Water District, Montecito Water District, and Santa Ynez River Water Conservation District-Improvement District No. 1. The Cachuma Operation and Maintenance Board (COMB) is a California Joint Powers Agency formed in 1956 pursuant to an agreement with the U.S. Bureau of Reclamation (Reclamation). The agreement transferred to the Cachuma Member Units the responsibility to operate, repair and maintain all Cachuma Project facilities exclusive of Bradbury Dam. The Member Units entered into contracts with the Santa Barbara County Water Agency for the purpose of receiving water from the Cachuma Project for use and benefit of the Member Units. Over the past fifty years, the Project has been the principal water supply for the Santa Ynez Valley and the South Coast Communities, delivering water to approximately 200,000 people.

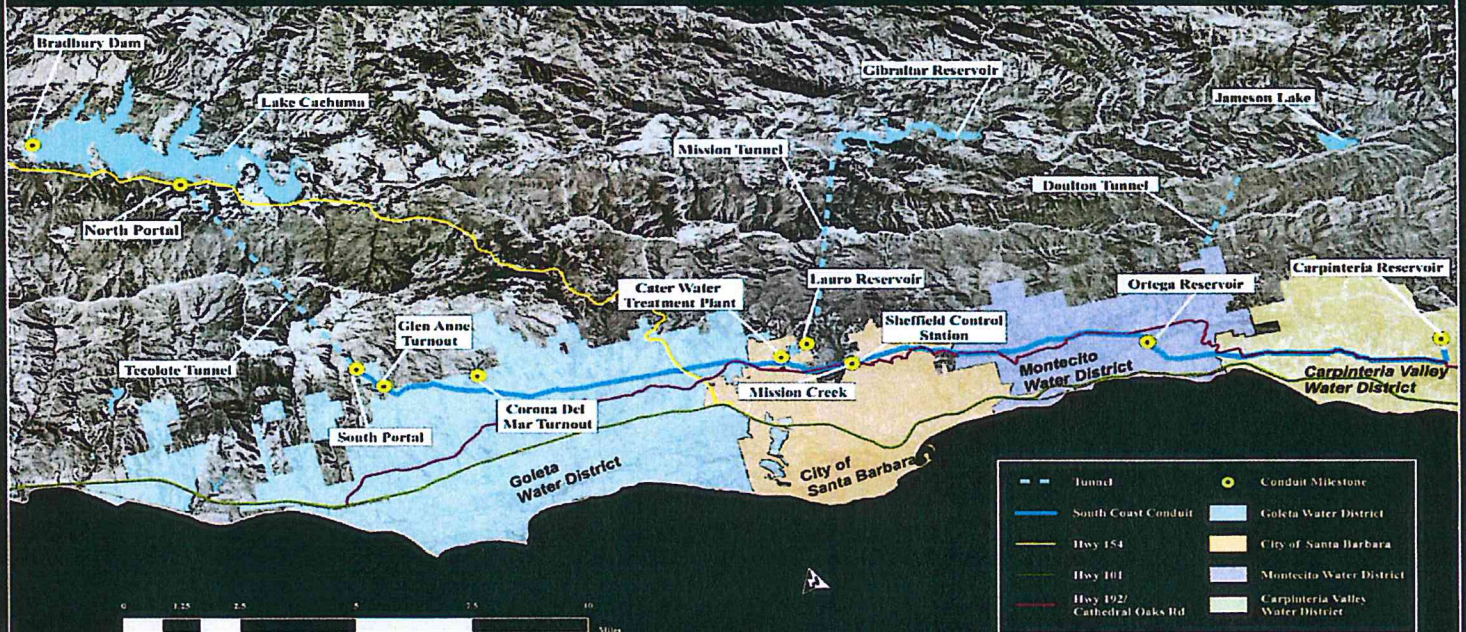
Water from Lake Cachuma is conveyed to the South Coast Member Units through an intake tower located at the east end of the reservoir, which leads into the Tecolote Tunnel. The Tecolote Tunnel extends from Lake Cachuma 6.4 miles west through the Santa Ynez Mountains to Goleta. The South Coast conduit is concrete-lined; concrete encased steel extending twenty-six miles from Goleta to Carpinteria. There are four regulating reservoirs along the South Coast Conduit: Glen Anne Reservoir (518 acre-feet), Lauro Reservoir (600 acre-feet), Ortega Reservoir (65 acre-feet), and Carpinteria Reservoir (44 acre-feet).

The COMB Infrastructure Improvement Plan (IIP) provides critical component detail of the system to be improved, repaired or replaced to ensure the reliability of service. The IIP faces the challenge of balancing resource demands with available resources and provides the asset analysis necessary. Determine project priority for budgetary decisions. The IIP guiding principal is to protect the dependent interest of the Member Units by ensuring each asset maintains regulatory compliance, reliability, and safety. The intent of the IIP is to set forth a reasoned decision-making methodology that will protect the asset to avoid increased future cost.

COMB management and staff developed this IIP to serve as the basis for the COMB Directors to make cost effective capital improvement decisions. We the Board, General Manager and COMB Staff are proud to serve as the stewards of this public asset that provides the lifeline conveyance of water necessary for the economy and quality of life on the South Coast of Santa Barbara County.



**CACHUMA OPERATION AND MAINTENANCE BOARD  
SOUTH COAST AREA POTABLE WATER SUPPLY OVERVIEW**





## Overview

### 1.1 Introduction

COMB's Five-Year Infrastructure Improvement Plan (IIP) is structured to identify and prioritize rehabilitation projects for COMB Director and Member Unit deliberation to enable budgetary decisions. The plan will facilitate the decision-making process for the allocation of resources to rehabilitate, improve and restore the Cachuma Project infrastructure to ensure the delivery of safe, reliable water to our Member Units. The IIP spans a five-year planning horizon and will be updated each year to reflect necessary changes. This dynamic document will be submitted to the Operations Committee for review of the plan development process. The plan will correspondingly be submitted to the Administration Committee for budget development. Following Committee review, the IIP will be presented to the Board for approval and included in the annual Operating Budget.

### 1.2 Background

Operation and maintenance rehabilitation projects are historically a component of the COMB annual budget. However, the comprehensive identification of near and long-term projects over a 5-year planning horizon has been largely absent as a decision-making document. Substantial asset rehabilitation planning work was accomplished through 2010, with the assistance of a contracted engineering firm. That effort developed a partial inventory of assets and prioritized those rehabilitation projects with short-term needs. The US Bureau of Reclamation (USBR) conducts site inspections every 3<sup>rd</sup> and 6<sup>th</sup> year of selected Cachuma Project facilities and components. However, the ranking categories used in their inspection reports, does not provide a comprehensive basis for short and long-term planning and budgetary decision-making. This plan will incorporate elements of the previous contractually developed product, site inspections conducted by USBR, and projects identified by COMB Staff.

### 1.3 Purpose

The initial IIP provides an inventory of those assets determined to require rehabilitation over a 5-year planning horizon. The IIP identifies the improvements needed in the Cachuma Project System and sets forth review criteria to enable the prioritization of projects for budgeting and scheduling improvements during the five-year period. The IIP is designed and scheduled to enable review by COMB Directors and the Member Agencies served by COMB prior to presentation to the COMB Board of Directors for adoption as a component of the annual Operating Budget.

Projects included in the IIP are those capital projects that exceed \$25,000 and following approval by the COMB Board will:

1. Display project ranking criteria to enable a structured analysis by each Director and Member Unit.
2. Identify infrastructure rehabilitation and improvement funding requirements for asset management planning.
3. Provide a comprehensive list of assets reviewed.
4. Serve as a strategic planning document.
5. Serve as the basis for COMB capital budget planning and development.
6. Serve as the basis for COMB Member Unit budget planning.
7. Serve as a comprehensive planning document for the Board of Directors and the public.

## 1.4 Evaluation Methodology Process

### Step 1

- Evaluation/assessment of water delivery system and components.
- Deficiencies / Projects identified through contractor review, USBR or COMB.

### Step 2

- Rating Criteria developed to quantify the level of importance of identified projects.

### Step 3

- Projects individually ranked and prioritized pursuant to rating criteria.
- Development of individual project summaries to provide information for decision-making review.



**Description of Rating Criteria**

**Table 1**

<b>32%</b>	<b>Water Supply Reliability</b>		
	3	High	Major disruption to system and prohibits ability to operate and maintain water delivery
	2	Medium	Moderate impact to system and impedes ability to operate and maintain water deliver
	1	Low	No Impact to service or operation and maintenance activities
<b>30%</b>	<b>Risk</b>		
	3	High	Major consequence to O & M of system due to significant future cost increase by delaying project
	2	Medium	Minor consequence to O & M of system and between 25-50% future cost increase due to delay of project
	1	Low	Insignificant consequence to O & M of system and up to 25% future cost increase due to delay of project
<b>18%</b>	<b>Critical Need/Life Cycle of asset</b>		
	3	High	Potential to fail within one year or less; asset has reached expected service life
	2	Medium	Potential to fail with the next three years or identified as project by outside government agency
	1	Low	Potential to fail within the next five years
<b>12%</b>	<b>Safety</b>		
	3	High	Significant failure potential which will endanger agency personnel, property or other COMB assets
	2	Medium	Moderate failure potential which will endanger agency personnel, property or other COMB assets
	1	Low	Desirable safety upgrade for ease of operation and maintenance
<b>8%</b>	<b>Service Disruption Necessary to Accomplish Project</b>		
	3	High	Less than 12 hour service disruption to accomplish project
	2	Medium	12-48 hour service disruption to accomplish project
	1	Low	Greater than 48 hour service disruption to accomplish project
<b>100%</b>	<b>The criteria percentages were established using factors deemed important specifically to the Cachuma Project System.</b>		

**1.5 Funding**

Funding of projects identified in the IIP will be determined annually by the COMB Board of Directors as a component of the development and approval of the annual budget. Fund sources for IIP implementation will be derived from either long-term or short-term financing, grants or ongoing assessments from each of the participating Member Unit Agencies.

**1.6 Cost Estimates**

The cost estimates included for each IIP project are derived from internal estimates or developed by professional engineering consultants.

**1.7 Overview of Funding**

The allocation of IIP funds is a separate component of the annual COMB Budget. Amendments to the IIP during the budget-year will be reviewed by the COMB Administrative Committee and require approval by the Board of Directors for any expenditure modification exceeding ten percent of the project amount. Expenditure authority for individual projects, unless otherwise directed, is available for three fiscal years following the date of approval.

DRAFT

# Infrastructure Improvement Plan FY 2015 - 2019

**Table: 5-year Infrastructure Improvement Plan Scoring Matrix**

Infrastructure Improvement Plan Projects	Water Supply Reliability		Risk		Critical Need		Safety		Service Disruption		Ranking
	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	
North Portal Flow Control Valve Rehabilitation	3	32%	3	30%	3	18%	2	8%	1	3%	91%
Air Vacuum Air Release (AVAR) Valve Replacement / Relocation	3	32%	3	30%	3	18%	2	8%	1	3%	91%
Blow-off Valve Replacement	3	32%	3	30%	2	12%	2	8%	3	8%	90%
Repair Intake Tower Gate Stem Guide Brackets	3	32%	3	30%	3	18%	1	4%	2	5%	89%
Mission Creek Pipeline Replacement and Fish Passage	3	32%	3	30%	2	12%	1	4%	3	8%	86%
Repair Open Air Vent Structure in Upper Reach (Station 78+00)	2	21%	3	30%	3	18%	3	12%	1	3%	84%
Repair Lateral Structures - Upper Reach	3	32%	2	20%	2	12%	2	8%	1	3%	75%
Repair/replace air valve structure at Upper Reach Sta 477+49	2	21%	3	30%	2	12%	2	8%	1	3%	74%
Rehab San Antonio Creek Blow Off - Upper Reach	2	21%	3	30%	2	12%	2	8%	1	3%	74%
Evaluate mortar joints inside the Sheffield Tunnel	3	32%	2	20%	1	6%	2	8%	3	8%	74%
Inspect interior of outlet pipe from reservoir to control building	2	21%	2	20%	2	12%	2	8%	3	8%	69%
Provide and install a second sump pump and control system in the drain sump of the lower floor of the North Portal control structure	2	21%	2	20%	2	12%	2	8%	3	8%	69%
Conduct a video inspection of the interior of the conduit through Sheffield Tunnel from the west end	3	32%	1	10%	2	12%	2	8%	2	5%	67%
Inspect interior of steel conduits at Lauro, Sheffield, Ortega, and Carpinteria Control Stations	3	32%	1	10%	2	12%	2	8%	2	5%	67%
Rebuild outflow Rip Rap	2	21%	2	20%	2	12%	2	8%	2	5%	67%
Clean and recoat exterior surface of the open air vent structure at Sta 78+00	2	21%	2	20%	2	12%	2	8%	2	5%	67%
Provide for the complete structural and/or mechanical evaluation of the concrete pipe supports and thrust blocks inside Lauro Tunnel	2	21%	2	20%	2	12%	2	8%	1	3%	64%
Clear vegetation from around the concrete encasing the SCC at the creek crossing STA 318+50, repair any concrete damage or erosion	2	21%	2	20%	2	12%	2	8%	1	3%	64%
Replace corroded and damaged air duct and supports inside the outlet works conduit on ventilation system as required	1	11%	2	20%	2	12%	3	12%	3	8%	63%
Remove Corrosion from outlet works ventilation piping, recoat and repair	1	11%	2	20%	2	12%	3	12%	3	8%	63%



# Infrastructure Improvement Plan FY 2015 - 2019

Infrastructure Improvement Plan Projects	Water Supply Reliability		Risk		Critical Need		Safety		Service Disruption		Ranking
	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	
Inspect interior of 54-inch steel pipe with video camera and generate a report	2	21%	2	20%	2	12%	1	4%	2	5%	63%
V-Ditch Clean-up - Upper Reach	1	11%	2	20%	2	12%	2	8%	3	8%	59%
Install a second sump pump and control system lower floor of North Portal	1	11%	2	20%	2	12%	2	8%	3	8%	59%
Locate discharge pipe ;outfalls at stations 227+20, 504+65, and 552+45	1	11%	2	20%	2	12%	1	4%	3	8%	55%
Replace valves with Butterfly Valves	1	11%	2	20%	2	12%	1	4%	2	5%	52%
Remove outflow Venturi with Magmeter	1	11%	2	20%	2	12%	1	4%	2	5%	52%
Replace Gate Valves with Butterfly valves	1	11%	2	20%	2	12%	1	4%	2	5%	52%
Plan and implement a program consistent with the methods presented in the "Tecolote Tunnel Concrete Deterioration Investigation Options" between Sta 160+00 and 335+40	1	11%	2	20%	2	12%	1	4%	2	5%	52%
Plan and implement a program consistent with "Tecolote Tunnel Concrete Deterioration Investigation Options"	1	11%	2	20%	2	12%	1	4%	2	5%	52%
Clean and apply grout into leaking cracks inside outlet works walls to stop water from entering onto outlet works conduit	1	11%	1	10%	2	12%	2	8%	3	8%	49%
Modify toe drain outflow pipe, add covered weir	1	11%	1	10%	1	6%	3	12%	3	8%	47%
Eliminate hydraulic limitation at CDM - Upper Reach	2	21%	1	10%	1	6%	1	4%	2	5%	47%
Remove deep-rooted woody vegetation from dam face	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Automatic Generator	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Repair deteriorating concrete along the concrete spillway chute	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Waterproof gate shaft, inspect, clean repair or replace, and paint rusted metalwork in gate chamber	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Repair and recoat all unused lateral takeoff piping from blind flange to lateral wall in Goleta & Carp. Section	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Remove trees and woody vegetation 15 feet of each side of pipe easement	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Woody vegetation, and tree encroachment violations with County of Santa Barbara along SCC easements	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Implement control measure to prevent sloughing and erosion down Glen Anne Turnout hill	1	11%	1	10%	2	12%	1	4%	3	8%	45%
Remove all calcium or mineral deposits and iron or sulfur bacteria waste blocking drainage path along Sheffield Tunnel	1	11%	1	10%	2	12%	1	4%	3	8%	45%

**North Portal Flow Control Valve Rehabilitation**

**(2013-C-5)**

**Project Ranking**

91%

**Estimated Cost**

Replacement parts plus labor: \$220,000

Valve Replacement: \$300,000



**Background**

Located at the base of the Tecolote Tunnel, the Jet Flow Control Valve is the primary flow control of water from Lake Cachuma into the South Coast Conduit. The valve was rehabilitated and installed in 1989 and, to our knowledge, has not been disassembled or evaluated per the normal two year post installation factory recommendation. Failure of this valve has the potential to disrupt the delivery of water to the South Coast. Replacement parts order and delivery requires a lead-time of approximately 6 to 8 weeks. Complete replacement of the valve would require a custom order and result in a 6 to 7 month manufacture lead-time. The critical importance of this valve to the Cachuma Project System compels the obtaining spare parts in case of failure would minimize the time needed for a shutdown of the system.

**Need for Project**

The jet flow valve, as the primary control valve from Lake Cachuma to the South Coast Conduit, is critical to system operation. The valve is the single method to remotely control the flow of water entering the South Coast Conduit. The current valve is of high quality and was put into service on March 31, 1989. Internal replacement components of the valve require an unacceptable order-to-delivery lead-time. Because the condition of the valve is unknown replacement parts should be in inventory to enable an expeditious repair.



**Description**

Purchase all spare parts necessary to completely rebuild the existing 30" Jet Flow Gate Valve. Cost to rebuild the valve, including materials and labor, would total \$220,000. Materials for the rebuild compose \$150,000 of the total amount.

**Regulatory Compliance**

N/A

**Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 2014-15	\$150,000.00
Fiscal Year 2014-15 through 2019-20	\$70,000.00

DRAFT

**Air Vacuum Air Release (AVAR) Valve Replacement/Relocation**

**(2012-1-26)**

**Project Ranking**

91%

**Estimated Cost:** Phases II through IV over 5-years - \$541,000



**Background**

Air vacuum / air release (AVAR) are float operated valves which exist on water delivery systems. The AVAR functions to allow volumes of air to be exhausted from or admitted into the pipeline. These valves protect the system from a loss of capacity and prevent the pipe from collapsing in the event of a break in the pipe. As the pipeline fills, water enters the air valve, raises the float and shuts off. When draining a pipeline, the float drops, allowing air to enter which prevents a vacuum from occurring which could cause pipeline collapse. There are 38 AVARs on the SCC.

The AVAR valves on the South Coast Conduit (SCC) exceed fifty years in age and a number of the valves current condition poses an operational risk. The project will be completed during low water demand months to reduce the impact of system shutdown. COMB staff recently performed assessments of AVARs on the Lower Reach of the SCC. Condition and location (above or below ground) of each AVAR valve was recorded. AVAR valves, gate valves, manhole covers and associated piping are showing moderate to operationally dangerous high levels of corrosion. Some of the AVARs have been submerged and are inoperable. Further, (what code?) code requires relocation above ground. Twenty-six air valves located from the City of Santa Barbara to Carpinteria are below grade and in need of near-term replacement. Structures are regularly checked for water intrusion and pumped out as necessary.

**Need for Project**

Replacement and relocation of the AVARs will ensure reliability of the over fifty-year-old system. These valves have varying degrees of corrosion and may not operate as intended for protection of the SCC. Further, below ground AVAR valves are subject to flooding and resultant corrosion. This is a USBR Category 1 recommendation. Replacement of the AVAR valves and above ground relocation will be in compliance current code requirements and USBR 2012 recommendation.



**Description**

Replace and relocate above ground (AVARs within the Lower Reach. The AVAR valve replacement and relocation project will be performed in five phases. Each phase will consist of one shutdown conducted by COMB Staff. Staff will coordinate the Blow-off Valve Replacement Project to be done during the same shutdowns. Once the SCC is taken off-line, COMB will be responsible for draining the SCC and de-chlorinating all discharge water. It is anticipated a contractor would be utilized to replace existing SCC manhole covers, gate valves, risers, laterals and AVAR valves. AVAR valves will be relocated above grade with enclosures.

Phase I (Fiscal Year 2014-15); replacement and relocation of air valves within the Montecito Water District service boundaries. Stations 352+07, 411+41, 442+50 and 495+30.

Phase II (Fiscal Year 2014-15); replacement and relocation of air valves within the City of Santa Barbara service boundaries. Stations 199+63, 225+98, 230+51, 244+30 and 254+66.

Phase III (Fiscal Year 2015-16); replacement and relocation of air valves within the Montecito Water District service boundaries. Stations 510+20, 534+92, 545+94, 518+95, 522+06, 574+33, 598+20, 598+48

Phase IV (Fiscal Year 2016-17); replacement and relocation of air valves within the Carpinteria Valley Water District service boundaries. Stations 627+75, 643+92, 676+67, 682+11, 703+00

Phase V (Fiscal Year 2017-18); replacement and relocation of air valves within the Carpinteria Valley Water District service boundaries. Station 755+84, 874+00, 880+40, 900+15

**Regulatory Compliance**

Environmental Review performed by USBR

**Project Budget & Schedule**

Fiscal Year	Cost
Phase I (Fiscal Year 2014-15)	\$ 81,000 - Carryover from FY 2013-14
Phase II (Fiscal Year 2014-15)	\$100,000
Phase III (Fiscal Year 2015-16)	\$160,000
Phase IV (Fiscal Year 2016-17)	\$100,000
Phase V (Fiscal Year 2017-18)	\$100,000
<b>Total</b>	<b>\$541,000</b>

**Blow-off Valve Replacement**

(2013-1-42)

**Project Ranking**

90%

**Estimated Cost:** Phases I through IV - \$169,000



**Background**

Blow-off valves are installed on all low points of a water system. There are a total of 72 AVAR's and 95 Blow-off valves in the system. The sole function of these valves is to dewater the South Coast Conduit should it be necessary to shut down the SCC and perform essential work. This project consists of replacing blow-off valves, risers, tee and discharge piping within the Lower Reach of the SCC. Valves and associated piping are over fifty years in age and in poor condition. The project will be completed in conjunction with, and at the same time as the AVAR replacement and relocation project.

COMB staff performed blow-off assessments on the Lower Reach of the South Coast Conduit (SCC). Air release and blow-off structures are showing moderate levels of corrosion.

Twenty-six blowoff valves from City of Santa Barbara to Carpinteria are in poor condition.

**Need for Project**

28 existing Blow-off valves are of questionable operability because of corrosion. The dependability of these valves is necessary to allow the system to be dewatered for maintenance and respond to an emergency break in the pipe. USBR has recommended replacement of blow-off valves within the lower reach of the SCC.



**Description**

The Blow-off Valve Replacement Project is planned to be accomplished in four phases. Each phase will require a shut down of the SCC. The project will be coordinated with the AVAR valve replacement and relocation shutdowns. Once the SCC is taken off-line COMB will be responsible for de-chlorinating all discharge water. A contractor will be utilized to replace existing SCC manhole covers, gate valves, risers, tees and discharge piping.

Phase I (Fiscal Year 2014-15); Replacement and relocation of blow-off valves within the Montecito Water District service boundary. Stations 318+50, 388+10, 427+25, 475+20 and 504+65.

Phase II (Fiscal Year 2014-15); Replacement and relocation of blow-off valves within the City of Santa Barbara service boundary. Stations 197+85, 223+40, 227+20, 233+05, 245+70, 257+36, 74+02, and 83+90.

Phase III (Fiscal Year 2015-16); Replacement and relocation of blow-off valves within the Carpinteria Valley Water District service boundary. Stations 17+90, 29+47, 517+90, 521+36, 552+45, 592+80, 664+35, and 679+80.

Phase IV (Fiscal Year 2016-17); Replacement and relocation of blow-off valves within the Carpinteria Valley Water District service boundary. Stations 698+55, 732+72, 756+84, 804+24, 880+05, and 902+96. This phase will also involve replacement and relocation of one blow-off valve in the Goleta Water District service boundaries, station 180+13.

**Regulatory Compliance**

Environmental Review performed by USBR

**Project Budget & Schedule**

Fiscal Year	Cost
Phase I (Fiscal Year 2014-15)	\$ 30,325 - Carryover from FY 2013-14
Phase II (Fiscal Year 2014-15)	\$ 50,000
Phase III (Fiscal Year 2015-16)	\$ 50,000
Phase IV (Fiscal Year 2016-17)	\$ 45,000
<b>Total</b>	<b>\$175,325</b>



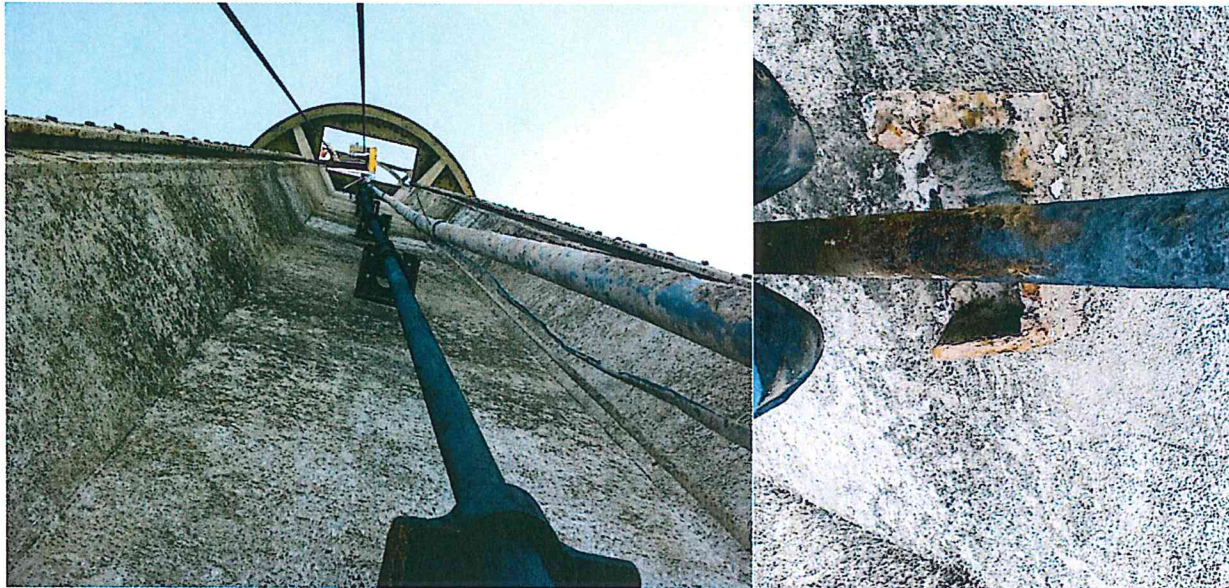
**Repair Intake Tower Gate Stem Guide Brackets**

**(2013-C-6)**

**Project Ranking**

89%

**Estimated Cost: \$484,000**



**Background**

The intake tower contains five gates at varying elevations to enable the gravity flow of water into the system based on lake elevation. Each gate, manually controlled from the top of the tower, contains a stem reaching from the top of the tower to a connection point at the top of the gate. It is this stem that mechanically allows the gate to be raised and lowered. The stem, as depicted in the pictures, travels through a series of stem guides. The current drought and resultant low lake elevation has provided staff the opportunity to inspect these stems and guides. A number of the guides are broken or corroded to a point of questionable operability. The stems are corroded and pitted raising questions regarding operability. The current low lake elevation provides an opportune time to replace the five gate stems and guides. Gates 4 and 5 suffer the most corrosion and deterioration. It is these two gates that will be utilized during the time of Emergency Pumping System operation. Therefore, any failure of this equipment during this period of time may impact the delivery of water to the SCC.

Each gate is protected with a fish screen. Three of the fish screens are badly corroded and should be repaired or replaced.

**Need for Project**

The stems and guides are an essential component of the intake tower gate opening and closing mechanism. The guides and stems are in varying condition of corrosion and show visible damage. Some guides are above water and visibly in a failed condition. These guides are the sole method to opening and closing the gates that feed water from Lake Cachuma to the Cachuma Project Conveyance facilities.



The installation of the Emergency Pumping System will likely be required to utilize Gates 4 and 5. The stems and guides for these two gates are in the most significant need of replacement.

**Description**

Project completion will take advantage of the low lake level to contract for the replacement and installation of new Intake Tower Gate stems and guides to ensure reliability of intake flows at varying levels of lake elevation. New fish screens will be fabricated or existing screens will be repaired and covered with an epoxy coating.

Fiscal Year 2014-15; will consist of replacement of one fish screen and the stems and guides on all gates.

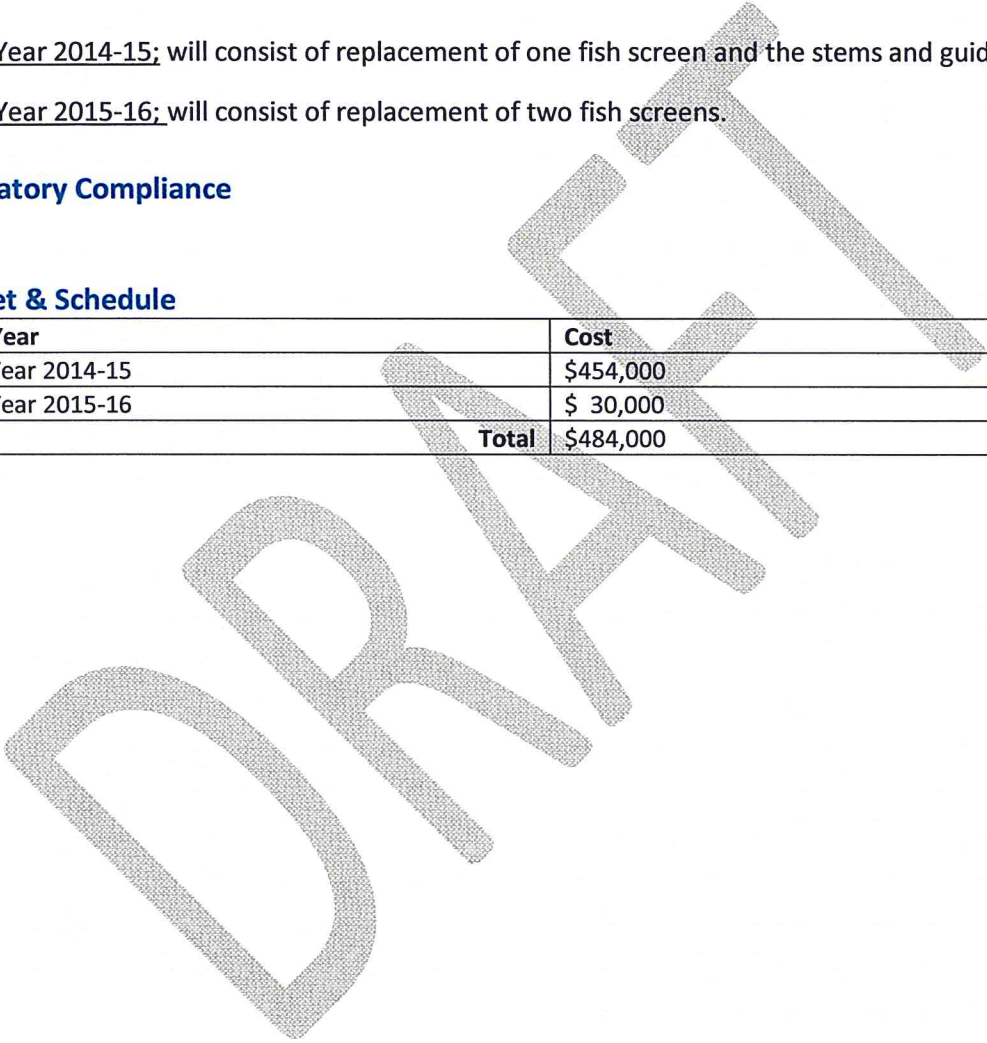
Fiscal Year 2015-16; will consist of replacement of two fish screens.

**Regulatory Compliance**

N/A

**Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 2014-15	\$454,000
Fiscal Year 2015-16	\$ 30,000
<b>Total</b>	<b>\$484,000</b>



**Mission Creek South Coast Conduit Crossing**

**(2013-C-56)**

**Project Ranking**

86%

**Estimated Cost:** 2 phases over 24 months - \$2.5 million



**Background**

The South Coast Conduit pipeline in Mission Creek suffered damage in the 1970's when a large boulder tumbled on top of the pipe creating a hole in the pipe. A temporary fix consisted of covering the damaged pipe with a concrete cap. The top of the pipe is above the flowline of the creek and the downstream side of the pipe has been undermined. The pipe is exposed to oxygen and water causing deterioration. The existing concrete apron is a barrier to migrating salmonids. The damaged pipe will be removed and replaced at a lower elevation and encased in concrete. This project will be environmentally required to meet fish passage considerations and therefore constructed in conjunction with a fish passage project. As part of the USBR Phase 2 Reliability Study for the SCC conducted in 2006, seven creek crossings, identified as areas of concern in the 2005 Reliability and Alternatives Study, were evaluated. The Mission Creek crossing, located at approximately pipeline Station 74+00, is about 25 feet downstream of Highway 192 Bridge, and an emergency retrofitted concrete cap to prevent channel bed scour beneath the bridge footings and the SCC were placed over the pipeline at the current flow line. The concrete cap acts as a grade control structure and is now undermined on the downstream side. The Mission creek crossing was identified as having continued exposure to undermining that could expose the pipeline. In June 2007 a report prepared by Questa Engineering for the Santa Barbara County Public Works Department addressed Mission Creek at Highway 192. That report concluded that the existing concrete apron is a barrier to migrating salmonids, and should be removed and replaced with a riffle-pool streambed.



**Need for Project**

The project will remove a section of the SCC and construct a new section encased in concrete at a lower elevation to protect it from damage by scour; remove an existing fish passage barrier; and improve the stream channel to reduce lateral scour of the banks. In the 1970s, the SCC was damaged by “rock impact” during a high flow event in the Creek. The SCC underwent emergency repairs that included repairs to the exterior of the steel pipe shell (however the interior mortar lining was not accessed for repair) and a non-reinforced concrete backfill/cap was installed. The emergency backfill/cap concrete is currently undermined on the downstream side, and the concrete acts as a grade control structure. The Mission Creek crossing was identified as having continued exposure to undermining. With no action the concrete apron will continue to cause erosion and scour along the banks, which threatens the integrity of the SCC.

**Description**

COMB will conduct an evaluation to determine what damage impacting near-term operational vulnerability has occurred to the pipe. Design and location will be determined using contracted engineering and an environmental review.

Phase I (Fiscal Year 2014-15); will consist of evaluation, design, project planning, grant writing

Phase II (Fiscal Year 2015-16); will consist of construction

**Regulatory Compliance**

EIR/EIS and full environmental review and compliance will be necessary.

**Budget & Schedule**

Fiscal Year	Cost
Phase I (Fiscal Year 2014-15)	\$ 400,000
Phase II (Fiscal Year 2015-16)	\$2,100,000
<b>Total</b>	<b>\$2,500,000</b>

**Repair Open Air Vent Structure in Upper Reach (Station 78+00)**

**(2013-3-49)**

**Project Ranking**

84%

**Estimated Cost:** \$70,000



**Background**

This Open Air Vent structures purpose is to evacuate air bubbles that impact pipeline capacity of the South Coast Conduit. The structure has corroded to a condition of structural instability due to degradation of the concrete caused by exposure to hydrogen sulfide.

**Need for Project**

Due to the hydrogen sulfide corrosion, the Open Air Vent will require design and repair with corrosion resistant materials. The air vent cap is assumed to have deteriorated based on metal appendage deterioration on lower and visible areas of the vent. The deterioration of the cap results in an unsafe condition for regular visual inspection Operations staff.

**Description**

This project consists of repairing and reconfiguring the Open Air Vent at Upper Reach Station 78+00 at Corona Del Mar. COMB contracted engineering will evaluate and provide guidance for rehabilitation of the Open Air Vent structure. Construction of the structure will be determined pursuant to the foregoing evaluation and engineering.

**Regulatory Compliance**

USBR Category 3 Recommendation

**Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 2014-15	\$70,000
<b>Total</b>	<b>\$70,000</b>



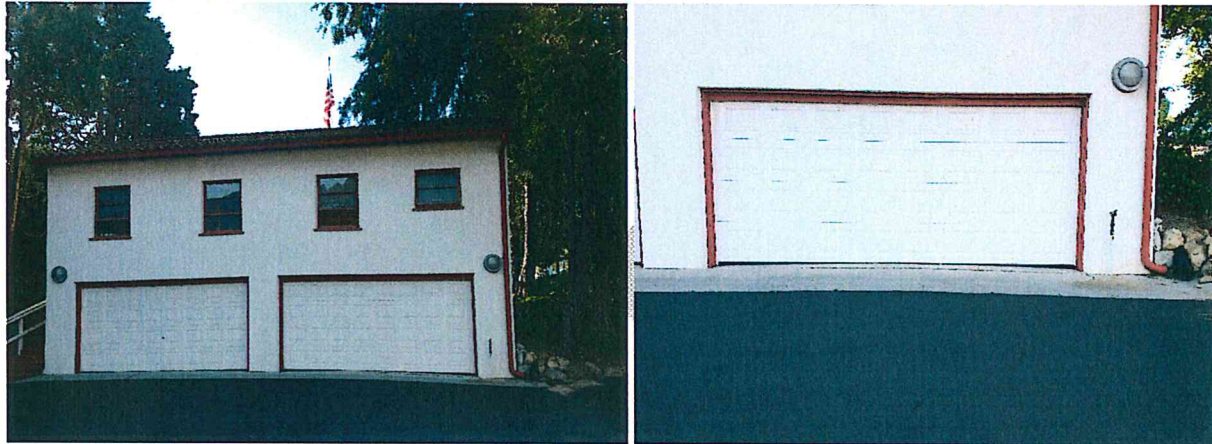
**COMB Buildings/Grounds Repair**

**(2014-C-75)**

**Project Ranking**

This project is considered part of regular maintenance and will not be ranked along with the other Infrastructure Improvement Plan Projects; The project is identified in the Infrastructure Improvement Plan because it exceeds \$25,000.

**Estimated Cost: \$254,000**



**Background**

The Board Room Building was constructed in 1956. This building was used as the administrative offices until the 1990's when mobile buildings were brought on-site. A geotechnical study completed in 2000 indicates that since the time of the original construction of the building, the soils have been expanding and compressing causing the foundation to move the building.

**Need for Project**

The building has visible signs of structural damage. The structural integrity of the building is unknown as is the potential for future degradation. The structure will be investigated to determine the stability of the building and provide suggested options to prevent further damage to the structure. A structural engineer will provide an evaluation of the current condition including the safety of the building and possible recommendations for structural repairs. This evaluation will cost \$4,000. The initial estimate for structural remediation was between \$40 and \$60 per square foot.

**Description**

Consequences of not repairing the building are unknown prior to the proposed evaluation. Comb will contract with a structural engineer to determine the potential for continued degradation and resulting impact on the future cost of rehabilitation. Based on the outcome of the structural evaluation, options for rehabilitation will be developed.

**Regulatory Compliance**

N/A

**Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 2014-15	\$254,000
<b>Total</b>	<b>\$254,000</b>

DRAFT



**V-Ditch Clean up at Upper Reach**

**(2013-C-48)**

**Project Ranking**

59%

**Estimated Cost: \$80,000**



**Background**

This V-Ditch is located in the Upper Reach section of the Cachuma Project and was created when the USBR originally built and installed the South Coast Conduit. The slope in the hillside was created to install the pipeline through this section of easement. Due to the maximum weight rating of the pipeline (see attached diagram), the V-Ditch has been left in place to ensure no overburden and protect the integrity of the pipeline.

**Need for Project**

During a storm in 2011, a mudslide caused an excess amount of over-burden on top of the South Coast Conduit in this V-Ditch area. This excess over-burden endangers the integrity of the pipeline and will be removed to an acceptable weight grade level for the pipeline.

**Description**

The V-Ditch Project will be conducted in two phases. The first phase will consist of an engineering analysis. The engineering firm will determine the maximum amount of burden that should be removed and design a grading plan to remove the excess over-burden. The second phase will consist of hiring a contractor to perform the work to remove all excess over burden.

Phase I (Fiscal Year 14-15); Engineering Evaluation and Design

Phase II (Fiscal Year 15-16); Implementation of Plan

**Regulatory Compliance**

N/A

**Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 14- 15	\$ 30,000
Fiscal Year 15-16	\$ 50,000
Total	\$ 80,000

DRAFT



**Re-Asphalt Sheffield Control Station Parking Lot**

**(2014-C-71)**

**Project Ranking**

This project is considered part of regular maintenance and is not ranked with the other Infrastructure Improvement Plan Projects; Project exceeds \$25,000 and therefore identified in the Infrastructure Improvement Plan.

**Estimated Cost: \$30,000**



**Background**

The Sheffield Control Station contains valves that divert water to Sheffield Reservoir and water flows to Ortega Reservoir.

**Need for Project**

The uneven existing condition of the asphalt allows water intrusion into the below ground control station. Water intrusion inhibits the regular removal of debris and causes corrosion of equipment in the station. The asphalt surrounding the Sheffield Control Station has deteriorated with age and is being undermined by tree roots. The current paving has been over-laid several times bringing the asphalt above the edges of the control station causing water from the parking lot to run into the control station rather than into the drainage channel.

**Description**

The re-asphalting Project will be completed in one phase. The contractor will remove the current pavement and re-lay the asphalt allowing the water to drain into the drainage channel rather than inside of the control station pit.

**Regulatory Compliance**

N/A

**Project Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 2014-15	\$ 30,000
<b>Total</b>	<b>\$ 30,000</b>

**Carpinteria Reservoir Fencing Replacement**

**(2014-C-70)**

**Project Ranking**

This project is considered part of regular maintenance and is not ranked with the other Infrastructure Improvement Plan Projects; Project exceeds \$25,000 and therefore identified in the Infrastructure Improvement Plan.

**Estimated Cost: \$41,500**



**Background**

Carpinteria Reservoir is surrounded by security fencing used to protect the reservoir from unauthorized access. The chain-link fence is four-foot high with additional height accomplished using four strands of barb wire.

**Need for Project**

Fencing has deteriorated due to age and weather. The fencing needs to be bought up to a standard to avoid public intrusion. The USBR determined the appropriate fencing needed around drinking water reservoirs is six-foot high chain-link fencing topped with V-shaped barb wire fencing.

**Description**

A fencing company will be hired to replace the current fence (1670 lineal ft) with 6-foot high V-shaped barb wire fencing consistent with USBR security requirements.

**Regulatory Compliance**

N/A

**Project Budget & Schedule**

Fiscal Year	Cost
Phase I (Fiscal Year 14-15)	\$ 41,500
<b>Total</b>	<b>\$ 41,500</b>



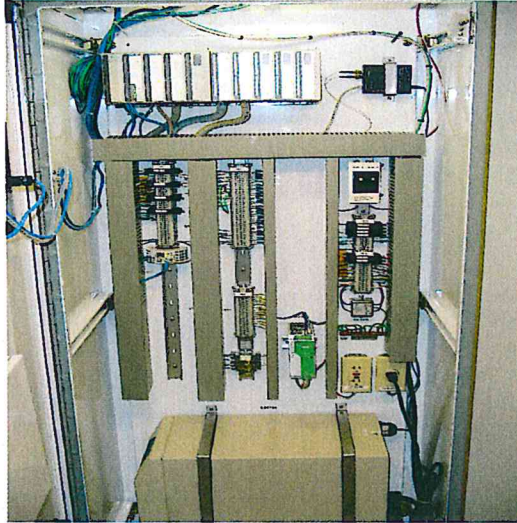
**Supervisory Control and Data Acquisition (SCADA)**

**(2014-C-74)**

**Project Ranking**

This project is considered part of regular maintenance and is not ranked with the other Infrastructure Improvement Plan Projects. This is an ongoing project.

**Estimated Cost: \$100,800**



**Background**

The “Supervisory Control and Data Acquisition” system (SCADA) serves four objectives:

1. Allows the remote adjustment of valves which control the flow of water based on demand.
2. Collects and enables the retrieval of historical data at COMB Offices or via remote computer. Information includes flows, reservoir elevations, alarms, communication, turbidity, pH, temperature, and valve positions.
3. Provides phone alerts to COMB Operations staff to enable remote corrective action 24/7.
4. Increases the efficiency of Operations staff by avoiding onsite corrective action and enhances system reliability.

Installation of the COMB Supervisory Control and Data Acquisition (SCADA) system began in 2003. Budgetary constraints have deferred upgrades over the ensuing 10-years. Substantial information is generated through this system that is used internally by COMB and requested externally by MUs and other agencies.

**Need for Project**

Components of system software are obsolete and no longer supported by the manufacturer. Further, system upgrades are necessary to maintain system reliability. Primary system software (Wonderware) must interface with the obsolete Microsoft operating system. The software linkage is necessary to respond to data requests in a timely manner. Existing system technology has software and hardware communication interface problems. These technological problems reduce timely data collection benefits and impact the efficient use of COMB staff resources.



**Description**

The following items represent the tasks and activities that will be completed by a contractor for fiscal year 2014-2015:

**Emergency Notification:** The current SCADA system response to a system outage is confined to one level of a two level system. Therefore, if the first level system suffers an outage the second level is unable to provide emergency notification through the on-call operator. Installation of an alarm system to the second level will provide a redundant notification system.

**Power Supply:** Goleta West Magnetic Flow Meter is not connected to a Universal Power Supply (UPS) and is subject to periodic power disruption. This meter transmits data used by COMB and GWD. GWD depends on information from the meter to chlorinate the system. The addition of the Universal Power Supply will ensure GWD maintains a consistent flow of accurate information to operate their chlorination facility.

**Data Storage:** The SCADA system data is currently stored in the Operations server room, if anything were to happen to this backup due to fire, flood, etc. COMB would lose all historical flow data from the SCADA system. To ensure system data redundancy and security, a backup server should be installed in a remote location.

**Communication:** The SCADA communication system utilizes telephone landlines. Land line communication has proved unreliable and has been a factor in the expenditure of staff resources to repair land line problems of require an approximate time of appointment with the provider to meet at the North Portal. When an outage occurs, Verizon is contacted and provides a range of time that they will meet a staff member at the remote location to respond. The average loss of staff time is approximately four hours during each outage. Cellular communication is the industry standard for SCADA communication. The existing land line would remain as back-up. . Importantly, the transfer from a land line to a cellular system will ensure reliable communication during the Emergency Pumping Facility Project. The North Portal is set up for this update and installation will take one week.

**Remote Communication Hardware:** COMB's Programmable Logic Controls (PLC's) hardware is outdated and no longer supported by the vendor. The hardware is the conduit of communication from remote locations to COMB Offices. Further, three PLCs are not compatible with existing and anticipated future software upgrades.

**Power System Supply:** The back-up power system utilizes house batteries that must be replaced bi-annually. This upgrade should be viewed as required annual maintenance.

**Software/Hardware Communication:** Corresponds to the request for Remote Communication Hardware. The existing PLC software requires updating to enable communication with the updated programmable logic control hardware being requested.

**Instrument Calibration:** SCADA measuring instruments must be annually calibrated. This should be



viewed as required annual maintenance.

**Staff Training:** Periodic staff training is necessary to operate the SCADA software and hardware.

**Regulatory Compliance**

N/A

TASKS	COST(\$)
911 Alarm System for SCADA station 2	\$1,500
Setup "UPS ON BATTERY" alarm for Goleta West Magnetic Meter	<b>\$2,000</b>
Setup a Historian Server Backup	<b>\$5,000</b>
Install a new cellular communication system	<b>\$5,000</b>
Upgrade 3 PLCs from Modicon 984 to Modicon Momentum	<b>\$20,000</b>
Spare Parts	\$2,000
Battery Backup	\$600
PLC Programing Software.	<b>\$5,000</b>
Calibrate measuring instruments (Pressure & Level Transmitters)	\$1,000
SCADA Training Courses	\$5,000

**Project Budget & Schedule**

Fiscal Year	Cost
Fiscal Year 14-15	\$ 47,100
Fiscal Year 15-16	\$ 45,100
Fiscal Year 16-17	\$ 8,600
<b>Total</b>	<b>\$100,800</b>

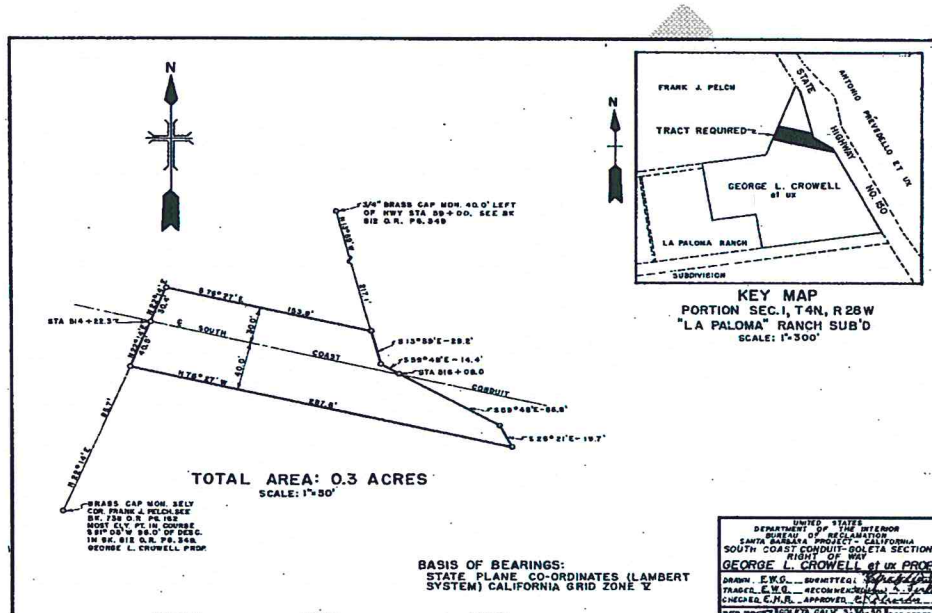
**Right Of Way Identification Program**

**(2014-C-72)**

**Project Ranking**

This project is considered part of regular maintenance and is ranked with the other Infrastructure Improvement Plan Projects: This project is identified in the Infrastructure Improvement Plan because it exceeds \$25,000. This project is a five year project identified during Fiscal year 13-14 budget preparation.

**Estimated Cost: \$ 70,000**



**Background**

Use of the USBR Easements by someone other than COMB is referred to as an encroachment. Previous studies have noted that encroachment into the SCC pipeline easement is widespread. COMB regularly finds unpermitted encroachments within the Cachuma Project Easement. These encroachments are found utilizing USA Dig-Alerts along with regular visual inspections of the Cachuma Project easement. COMB also reviews planning minutes produced within Santa Barbara County each month to determine if a proposed development is within the Cachuma Project Easement.

**Need for Project**

Unpermitted and unknown encroachments on the SCC easement potentially impact the structural integrity of the South Coast Conduit. Therefore, it is important that all encroachments be documented. This project will input existing and future encroachment information into an electronic inventory of encroachments on the easement. This inventory will be utilized for communication and potential site remediation activity involving existing landowners and evaluation of proposed encroachments to the easement through the permit process. This data will be GIS based and enable a more efficient and cost effective response to regular maintenance, testing, and monitoring activities. This GIS based system will largely negate time consuming staff site visits to review projects proposed involving the easement.



**Description**

The Right of Way Project (ROW) inventory will centralize information electronically to facilitate landowner communication regarding pending right-of-way work, provide communication with Santa Barbara permitting agencies, and enable COMB staff response to right-of-way disruptions and issues efficiently by utilizing the GIS inventory. Specific tasks of the project include identifying, locating, and labeling the pipeline through field mapping in GIS and surveying. Sequentially, as data is developed, landowners will be notified of property easements and of COMB’s South Coast Conduit responsibilities. The project anticipates placing up to 400 pipeline markers at property lines and alignment changes along the pipeline. Concurrently, COMB will enhance and continue communication with public and private permitting agencies made possible by the inventory. The location and inventory will enable regular inspection, expedite our ability to precisely locate, and identify visible leakage, ground erosion, or new encroachments.

Phase II Fiscal Year 2014-15; Retain temporary help to scan historical easement documentation onto the server. Develop specific Policy and Procedures for pipeline encroachments and mapping of Cachuma Project easements into GIS.

Phase III Fiscal Year 2015-16; Contact by letter to all easement impacted landowners regarding COMB maintenance responsibility provide informing information on Cachuma Project Facilities.

Phase IV Fiscal Year 2016-17; Survey pipeline and insert pipeline location markers.

Phase V Fiscal Year 2016-17; Develop the annual pipeline inspection program for inclusion in the work plan. The annual inspection effort conducted will provide for updating information into the data base.

**Regulatory Compliance**

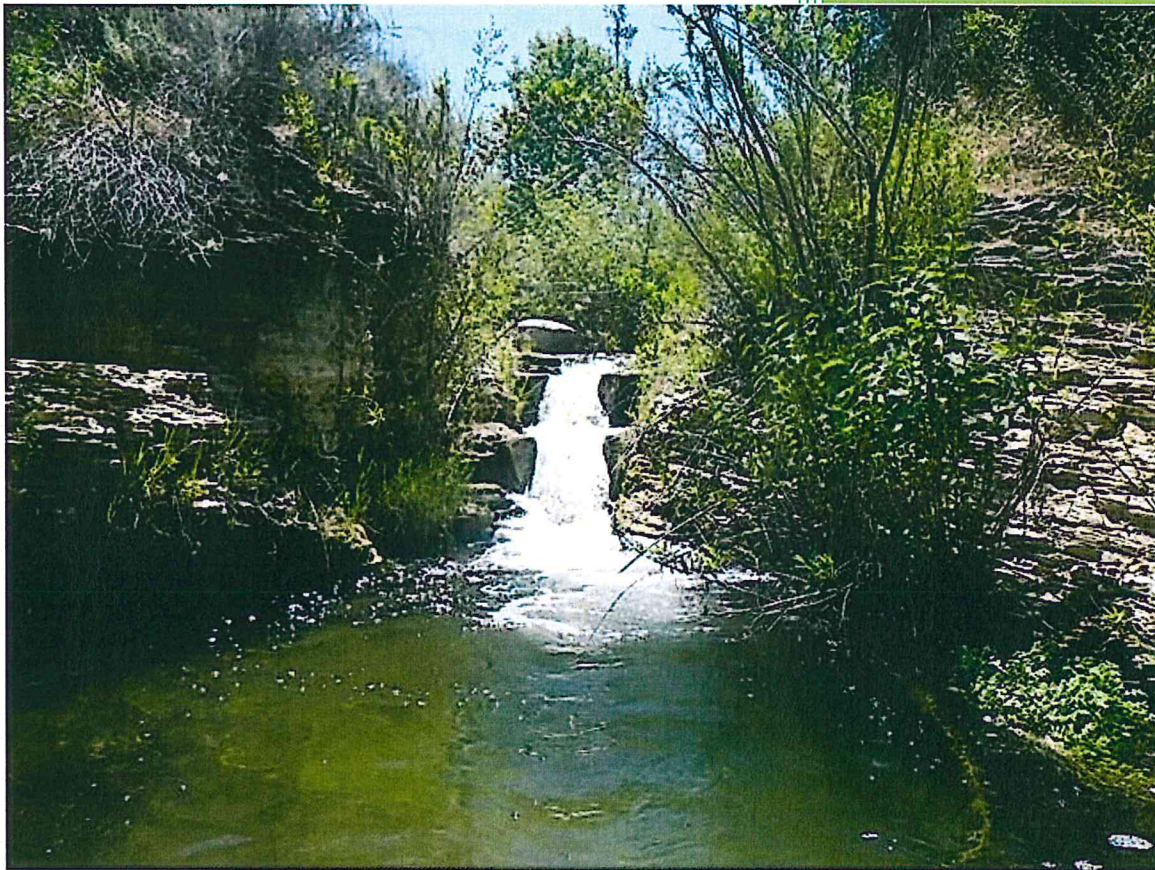
**Budget & Schedule**

Fiscal Year	Cost
Phase II (Fiscal Year 2014-15)	\$10,000
Phase III (Fiscal Year 2015-16)	\$20,000
Phase IV and V (Fiscal Year 2016-17)	\$20,000
<b>Total</b>	<b>\$70,000</b>



FY 2015-2019

# Habitat Improvement Plan



*Fisheries Division*



Item # 5c  
Page # 1



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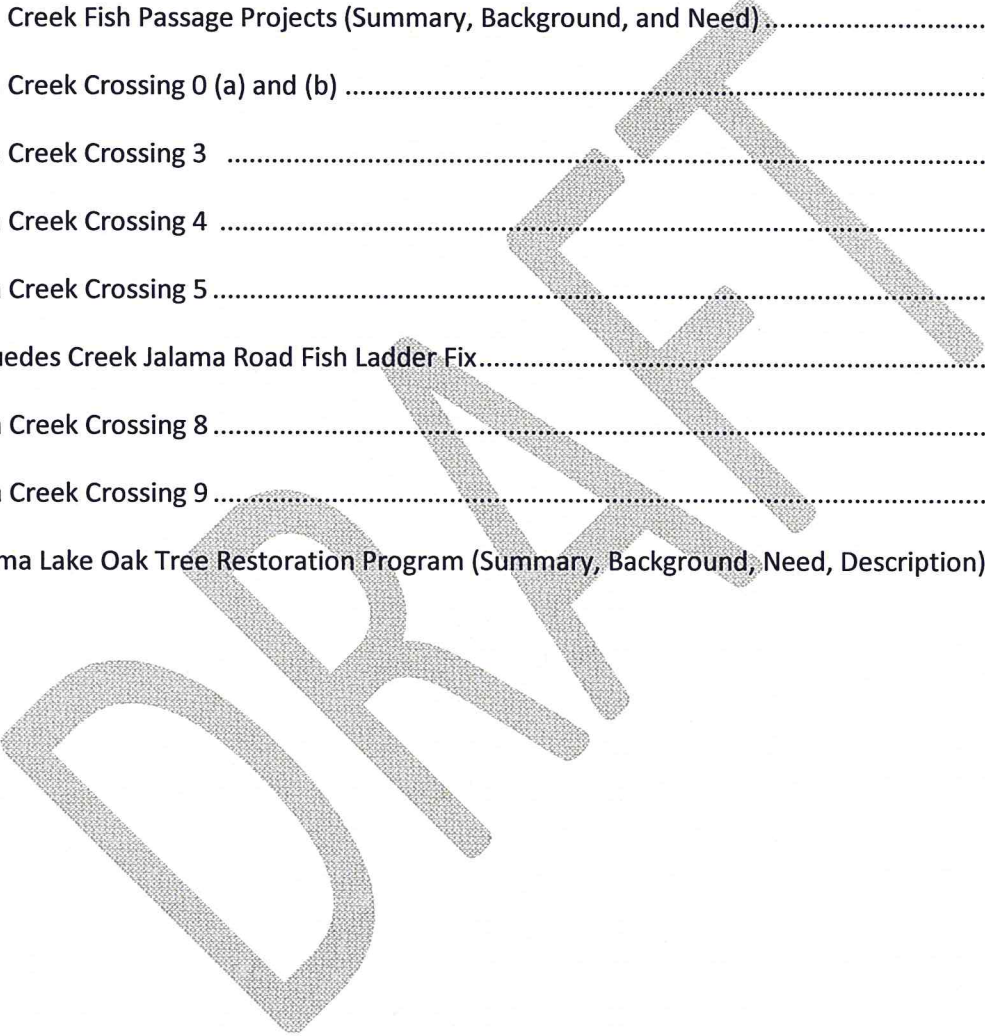
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## ***Executive Summary***

The Cachuma Operation and Maintenance Board (COMB) Fisheries Division is tasked, through the Bureau of Reclamation's (BOR) operation of the Cachuma Project, with carrying out the fisheries monitoring and data analysis described in the National Marine Fisheries Service (NMFS) 2000 Biological Opinion (BO). A consensus based, long-term fisheries program has been developed that provides protection for steelhead/rainbow trout downstream of Bradbury Dam through a combination of long-term monitoring, water releases from Bradbury Dam through the Hilton Creek Watering System, passage flows to assist migrating steelhead, improved riparian habitat, and the removal or modification of numerous fish passage barriers to steelhead on tributaries of the Lower Santa Ynez River. By implementing the NMFS BO, COMB has created significant additional habitat for steelhead within the Santa Ynez River watershed. The timeline and costs of projects slated for the next five years can be found in Table 1.

An additional component of COMB's Fisheries Division includes the Cachuma Lake Oak Tree Restoration Program (Oak Tree Program), which was recently transferred from a private consultant to COMB in July of 2012. The Oak Tree Program is entering into year eight (8) of a twenty (20) year project, which includes ongoing maintenance, monitoring, annual reporting (inventory and lakeshore surveys), and a replanting program. Budget allocation for the Oak Tree Program can be found at the bottom of Table 1.

The BOR is in reconsultation with NMFS for a new Cachuma Project BO which will contain a continuation of the fisheries monitoring program and enhancement projects where additional projects (and funding) will be needed.

## ***Introduction***

COMB's Five-Year Habitat Improvement Plan (HIP) identifies the necessary funding needed for restoration projects slated for construction as well on the ongoing Cachuma Lake Oak Tree Restoration Program through FY2018-19. Each year the HIP will be updated to reflect changes that may occur within the short and long-term, which could be manifested by funding sources, landowner agreements, and changes in compliance measures or project types through reconsultation with NMFS and BOR. Therefore, the HIP will continue to be a flexible document with annual updates submitted to the COMB Fisheries Committee and once recommended, will be presented to the Board for approval in preparation of the annual Fisheries Budget.



**Table 1:** 5-Year HIP financial matrix for Fiscal Years 2014-15 through 2018-19.

Project Name	Fiscal Year:				
	2014-15	2015-16	2016-17	2017-18	2018-19
Quiota Creek Crossing 0 (a) and (b)	\$40,000	\$720,000			
Quiota Creek Crossing 3	\$30,000	\$10,000	\$770,000		
Quiota Creek Crossing 4	\$30,000	\$10,000		\$770,000	
Quiota Creek Crossing 5			\$30,000	\$770,000	
Salsipuedes Creek Jalama Road Fish Ladder Fix				\$15,000	\$25,000
Quiota Creek Crossing 8	\$30,000	\$10,000		\$10,000	\$770,000
Quiota Creek Crossing 9					\$30,000
Cachuma Lake Oak Tree Restoration Program	\$100,000	\$100,000	\$40,000	\$40,000	\$40,000
<b>TOTALS:</b>	<b>\$130,000</b>	<b>\$750,000</b>	<b>\$800,000</b>	<b>\$1,565,000</b>	<b>\$825,000</b>

### Quiota Creek Fish Passage Projects

#### Summary

Quiota Creek is a tributary of the Lower Santa Ynez River (LSYR) located approximately 8.4 miles downstream of Bradbury Dam. The watershed is approximately eight square miles and includes both private lands and portions of the Los Padres National Forest. Refugio Road crosses Quiota Creek nine times in the form of Arizona/low flow crossings (Crossings 3, 4, 5, and 9), bottomless arched culverts (Crossings 1, 2, 6, and 7), and a temporary bridge (8). Two additional crossings are located on private property (Crossings 0a & 0b), bringing the total number of crossings on Quiota Creek to eleven. The bottomless arched culverts already installed by COMB replaced low flow crossings and each fully span the bank full width of the creek and provide complete passage for juvenile and adult steelhead/rainbow trout (*Oncorhynchus mykiss*, *O. mykiss*) passage. Those projects were completed by COMB in 2013, 2011, 2008, and 2012, respectively. The remaining crossings represent passage impediments that limit the passage opportunity for *O. mykiss* to reach designated critical habitat for spawning and rearing. The impediments are due to one or more of the following problems: 1) insufficient depth of flow over the crossing, 2) undersized and blocked culverts under the concrete low flow crossings that block fish passage, 3) insufficient pool depth below the crossing for *O. mykiss* to use when jumping, and 4) high vertical distance over the crossing that limit or prevent fish passage. U. S. Bureau of Reclamation (Reclamation) through Cachuma Operation and Maintenance Board (COMB) is systematically replacing the remaining concrete low flow crossings, which have been determined to be partial fish passage barriers, with bottomless arched culverts to provide unrestricted access for *O. mykiss* throughout Quiota Creek. Funding for the construction of these projects depends on State and Federal grants, hence a project cannot be built without grant funding. Each of these projects is described below.



## **Background**

The Quiota Creek watershed, a tributary of the LSYS, is considered by the National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) to have excellent habitat for endangered southern steelhead and resident rainbow trout (both considered to be *O. mykiss*) in the upper watershed. NMFS designated Quiota Creek as critical habitat for *O. mykiss* (NOAA, 2005) and completed the Southern Steelhead Recovery Plan (2012) that identified the Santa Ynez River as a Core 1 Watershed with a specific threat source from passage barriers (Listing Factors 1 and 4) that these projects directly addresses. Refugio Road crossing Quiota Creek nine times which are numbered from downstream to upstream. COMB evaluated each crossing for fish passage and published the Quiota Creek Watershed Enhancement Plan (Plan) (CCRB, 2009). The Plan summarized the existing baseline conditions in the watershed relating to salmonid habitat and passage conditions following the CDFW criteria at each of the low flow crossing, and used that information to provide a guidance document for future restoration efforts that determined the order and type of treatment for each crossing. That program of work dictated the following list of habitat improvement projects described in this HIP. In 2008, Crossing 6 was replaced with a 48-foot bottomless arched culvert, in 2011 Crossing 2 was replaced with a 60-foot bottomless arched culvert, in 2012 Crossing 7 was replaced with a 60-foot bottomless arched culvert, and in 2013 Crossing 1 was replaced with a 60-foot bottomless arched culvert. Crossings 0 (a & b), 3, 4, 5, 8, and 9 are scheduled to be fixed within the next 5-7 years, depending on funding availability. Crossing 0 is on private property and not on Refugio Road where there are two low flow crossings (a & b) in close proximity. Replacement of both will be done in one project.

## **Need for Projects**

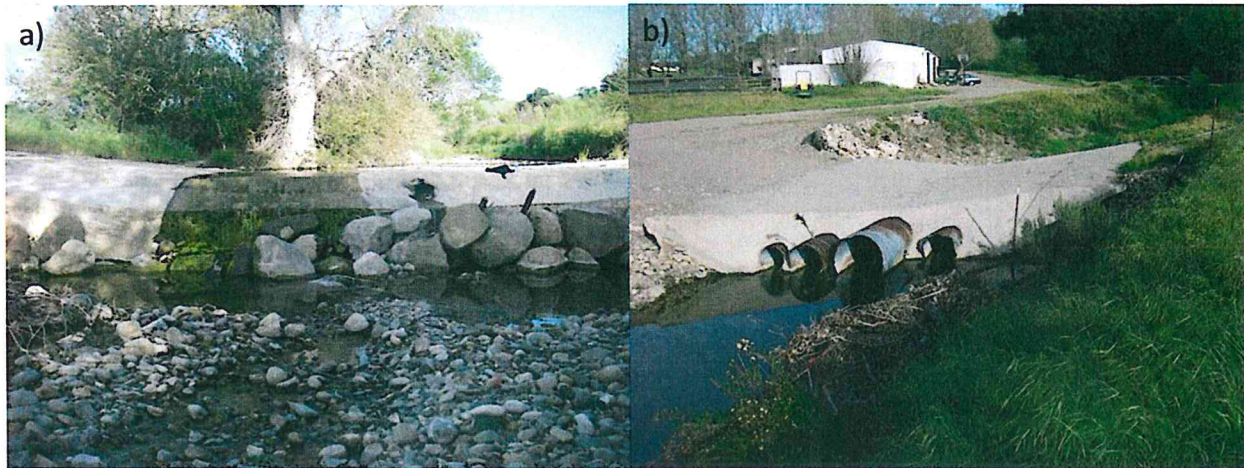
The Quiota Creek projects described below are part of the proposed actions in the Cachuma Project Biological Opinion (BO) (NMFS, 2000). NMFS considers Quiota Creek to be critical habitat for the endangered southern steelhead (NOAA, 2005) and has classified the Santa Ynez River as a top priority watershed (Core 1) for the success of the recovery efforts for southern steelhead (NMFS, 2012). By removing all of these migration barriers, approximately 6 miles of stream will be opened up above Crossing 0 for the endangered steelhead, most of which is in the upper watershed with the highest quality of rearing and spawning habitat. No anadromous steelhead have been observed in this creek since monitoring began in 2000 due to partial or total barriers. In 2008 though, an anadromous steelhead (600 mm fork length) was captured near the confluence of Quiota Creek and the LSYS mainstem that was genetically typed to be from Quiota Creek, suggesting that the anadromous gene persists in the watershed (Garza and Clemente, 2010).



**Quiota Creek Crossing 0 (a) and (b)**

**Project Schedule**

Design – FY 2014-15, Construction – Fall FY 2015-16



**Figure 1:** Lower Quiota Creek near the confluence with the Santa Ynez River showing a) upstream view of Crossing 0a, and b) upstream view of Crossing 0b.

**Description**

The proposed fixes for Crossing 0a and Crossing 0b are to replace each concrete low flow or Arizona-type crossing (Figure 1) with a bridge composed of two side-by-side railroad cars that will allow for a naturalized stream channel below. The bridges will be designed to convey the 25-year peak flow event as directed by Santa Barbara County for a rural private bridge. Also, the bridges will completely span the bankfull stream width following CDFW guidelines (CFDG, 2009). The resulting structures will provide for full juvenile and adult passage for anadromous and resident *O. mykiss* while improving road access and safety to the landowners. No trees will be removed during any portion of the construction. However, 10 native trees will be placed within an erosion escarpment downstream of Crossing 0b and hydro-mulching and hydro-seeding will be spread around the entire project footprint at the completion of the project in order to prevent erosion and additional runoff. Willow stakes will be planted within the channel margin to provide habitat and structural integrity to the modified streambed.

**Project Budget**

Fiscal Year	Cost
Fiscal Year 2014-15 (design)	\$40,000
Fiscal Year 2015-16 (construction)	\$720,000
<b>Total</b>	<b>\$760,000</b>



### Quiota Creek Crossing 3

#### *Project Schedule*

Design – FY 2014-15 and FY 2015-16, Construction – Fall FY 2016-17



**Figure 2:** Quiota Creek on Refugio Road showing side-view of Crossing 3.

#### *Description*

The proposed fix for Crossing 3 is to replace an existing Arizona-type concrete crossing (Figure 2) with a 53-foot bottomless arched culvert that will allow for full juvenile and adult *O. mykiss* passage under the bridge and improve road safety along Refugio Road. The bridge will be designed to convey the 50-year peak flow event with a minimum of 1 foot of freeboard, and the ability to withstand the 100-year peak flow event. The bridge will be aligned with the natural flow of the channel to reduce the potential for deposition and scour. The creek bed will be graded upstream and downstream to provide a natural channel bed gradient under the culvert at a design gradient of 2.3%. The culvert will provide for an 18-foot wide road as required by the County of Santa Barbara with bridge rails and road guardrails. The proposed project will remove the current low flow concrete crossing, install a 53-foot bottomless arched culvert, construct a new road over the bottomless arched culvert, install vegetated rock slope protection around the bridge footings, and re-vegetate the site with native CDFW approved plants. The project will be constructed to meet all the applicable guidance and permit criteria by CDFW, NMFS, California Regional Water Quality Control Board, US Army Corps of Engineers, US Fish and Wildlife Service, and the County of Santa Barbara with respect to adult and juvenile anadromous and resident *O. mykiss* populations, as well as meet all traffic and public safety concerns. Any Coastal Live Oak, Valley Oak, or willow trees will be removed and replaced at a 10:1, 15:1, and 5:1 ratio, respectively. Hydro-mulching and hydro-seeding will be spread around the entire project footprint at the completion of the project to prevent erosion and return the site to a native and natural condition.



**Budget**

<b>Fiscal Year</b>	<b>Cost</b>
Fiscal Year 2015-16 (design)	\$30,000
Fiscal Year 2016-17 (design)	\$10,000
Fiscal Year 2016-17 (construction)	\$770,000
<b>Total</b>	<b>\$810,000</b>

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## Quiota Creek Crossing 4

### **Project Schedule**

Design – FY 2014-15 and FY 2015-16, Construction – Fall FY 2017-18



**Figure 3:** Quiota Creek on Refugio Road showing upstream view of Crossing 4.

### **Description**

The proposed fix for Crossing 4 is to replace an existing Arizona-type concrete crossing (Figure 3) with a 60-foot bottomless arched culvert that will allow for full juvenile and adult *O. mykiss* passage under the bridge and improve road safety along Refugio Road. The bridge will be aligned with the channel flow to reduce the potential for deposition and scour. The slope of the culvert will be 1% and a minimum of 3-feet of engineered streambed material will be installed on top of native material to assure a naturalized channel bottom. The culvert will provide for an 18-foot wide road as required by the County of Santa Barbara with bridge rails and road guardrails. The proposed project will remove the existing temporary bridge, install a 60-foot bottomless arched culvert, construct a new road over the bottomless arched culvert, install vegetated rock slope protection around the bridge footings, and re-vegetate the site with native CDFW approved plants. The project will be constructed to meet all the applicable guidance and permit criteria by CDFW, NMFS, California Regional Water Quality Control Board, US Army Corps of Engineers, US Fish and Wildlife Service, and the County of Santa Barbara with respect to adult and juvenile anadromous and resident *O. mykiss* populations, as well as meet all traffic and public safety concerns. Any Coastal Live Oak, Valley Oak, or willow trees will be removed and replaced at a 10:1, 15:1, and 5:1 ratio, respectively. Hydro-mulching and hydro-seeding will be spread around the entire project footprint at the completion of the project to prevent erosion and return the site to a native and natural condition.



**Budget**

<b>Fiscal Year</b>	<b>Cost</b>
Fiscal Year 2014-15 (design)	\$30,000
Fiscal Year 2015-16 (design)	\$10,000
Fiscal Year 2017-18 (construction)	\$770,000
<b>Total</b>	<b>\$810,000</b>

DRAFT

## Quiota Creek Crossing 5

### ***Project Schedule***

Design – FY 2016-17, Construction – Fall FY 2017-18



**Figure 4:** Quiota Creek on Refugio Road showing upstream view of Crossing 5.

### ***Description***

The proposed fix for Crossing 5 is to replace an existing Arizona-type concrete crossing (Figure 4) with a 60-foot bottomless arched culvert that will allow for full juvenile and adult *O. mykiss* passage under the bridge and improve road safety along Refugio Road. The bridge will be aligned with the channel flow to reduce the potential for deposition and scour. The slope of the culvert will be 2% and a minimum of 3-feet of engineered streambed material will be installed on top of native material to assure a naturalized channel bottom. The culvert will provide for an 18-foot wide road as required by the County of Santa Barbara with bridge rails and road guardrails. The proposed project will remove the existing temporary bridge, install a 60-foot bottomless arched culvert, construct a new road over the bottomless arched culvert, install vegetated rock slope protection around the bridge footings, place four rock weirs in the stream channel for grade control and to create *O. mykiss* habitat, and re-vegetate the site with native CDFW approved plants. The project will be constructed to meet all the applicable guidance and permit criteria by CDFW, NMFS, California Regional Water Quality Control Board, US Army Corps of Engineers, US Fish and Wildlife Service, and the County of Santa Barbara with respect to adult and juvenile anadromous and resident *O. mykiss* populations, as well as meet all traffic and public safety concerns. Any Coastal Live Oak, Valley Oak, or willow trees will be removed and replaced at a 10:1, 15:1, and 5:1 ratio, respectively. Hydro-mulching and hydro-seeding will be spread around the entire project footprint at the completion of the project to prevent erosion and return the site to a native and natural condition.



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**Budget**

Fiscal Year	Cost
Fiscal Year 2016-17 (design)	\$30,000
Fiscal Year 2017-18 (construction)	\$770,000
<b>Total</b>	<b>\$800,000</b>

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**Salsipuedes Creek Jalama Road Fish Ladder Fix**

**Project Schedule**

Design – FY 2017-18, Construction – Fall FY 2018-19



**Figure 5:** Salsipuedes Creek fish ladder at Jalama Road showing weirs that need to be fixed.

**Description**

A concrete structure located downstream of the Jalama Road Bridge on Salsipuedes Creek was creating a fish passage barrier to adult and juvenile steelhead. In 2004, COMB installed a fish passage structure (ladder) on Salsipuedes Creek at the Jalama Road Bridge (Figure 5). This fish passage ladder was built along a bedrock outcrop by installing a series of three step-pools, which increased the range of flows during which juvenile and adult steelhead could migrate through the structure. Although this fish passage ladder has successfully been passing juvenile and adult steelhead since its completion, NMFS and CDFW have suggested that the orientation of the V-notch invert needs to be changed at each step-pool and that the maximum allowable jump height (1-foot) is being exceeded. In the spring of 2011, COMB solicited HDR (now HDR Fisheries Design Center) to create preliminary design criteria and design calculations for the fix.

The anticipated fix will include a modification to each weir invert and the installation of an additional pool within the structure to facilitate a reduced jump height between pools. A stream by-pass system will likely need to be installed to keep water away from the immediate construction site. On the ground project implementation is expected to take 1 month in the fall of 2019.

**Budget**

Fiscal Year	Cost
Fiscal Year 2017-18 (design)	\$15,000
Fiscal Year 2018-19 (construction)	\$25,000
<b>Total</b>	<b>\$40,000</b>



**Quiota Creek Crossing 8**

***Project Schedule***

Design – FY 2014-15, FY 2015-16 and 2017-18, Construction – Fall FY 2018-19



**Figure 6:** Quiota Creek on Refugio Road showing upstream view of Crossing 8.

***Description***

The proposed fix for Crossing 8 is to replace an existing undersized temporary County bridge (Figure 6) with a 48-foot bottomless arched culvert that will allow for full juvenile and adult *O. mykiss* passage under the bridge and improve road safety along Refugio Road. The bridge will be aligned with the natural flow of the channel to reduce the potential for deposition and scour. The slope of the culvert will be 0% and a minimum of 3-feet of engineered streambed material will be installed on top of native material to assure a naturalized channel bottom. The gradient of the stream is not expected to exceed 2% throughout the project area. The culvert will provide for an 18-foot wide road as required by the County of Santa Barbara with bridge rails and road guardrails. The proposed project will remove the existing temporary bridge, install a 48-foot bottomless arched culvert, construct a new road over the bottomless arched culvert, install vegetated rock slope protection around the bridge footings, place one to two root wads in the creek bank to create instream *O. mykiss* habitat downstream of the bridge, and re-vegetate the site with native CDFW approved plants. The project will be constructed to meet all the applicable guidance and criteria by CDFW, NMFS, California Regional Water Quality Control Board, and the County of Santa Barbara with respect to adult and juvenile anadromous and resident *O. mykiss* populations while meeting all traffic, public safety and water quality concerns. One large Coast Live Oak tree and one willow tree will be removed and replaced at a 10:1 and 5:1 ratio, respectively. Hydro-mulching and hydro-seeding will be spread around the entire project footprint at the completion of the project to prevent erosion and return the site to a native and natural condition.

**Budget**

<b>Fiscal Year</b>	<b>Cost</b>
Fiscal Year 2014-15 (design)	\$30,000
Fiscal Year 2015-16 (design)	\$10,000
Fiscal Year 2017-18 (design)	\$10,000
Fiscal Year 2018-19 (construction)	\$770,000
<b>Total</b>	<b>\$820,000</b>

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## Quiota Creek Crossing 9

### **Project Schedule**

Design – FY 2018-19, Construction – Fall FY 2019-20



**Figure 7:** Quiota Creek on Refugio Road showing side-view of Crossing 9.

### **Description**

The proposed fix for Crossing 9 is to replace an existing Arizona-type concrete crossing (Figure 7) with a 48-foot bottomless arched culvert that will allow for full juvenile and adult *O. mykiss* passage under the bridge and improve road safety along Refugio Road. The bridge will be aligned with the channel flow to reduce the potential for deposition and scour. The slope of the culvert will be 1% and a minimum of 3-feet of engineered streambed material will be installed on top of native material to assure a naturalized channel bottom. The culvert will provide for an 18-foot wide road as required by the County of Santa Barbara with bridge rails and road guardrails. The proposed project will remove the existing temporary bridge, install a 60-foot bottomless arched culvert, construct a new road over the bottomless arched culvert, install vegetated rock slope protection around the bridge footings, place two rock weirs in the stream for grade control and to create *O. mykiss* habitat, and re-vegetate the site with native CDFW approved plants. The project will be constructed to meet all the applicable guidance and permit criteria by CDFW, NMFS, California Regional Water Quality Control Board, US Army Corps of Engineers, US Fish and Wildlife Service, and the County of Santa Barbara with respect to adult and juvenile anadromous and resident *O. mykiss* populations, as well as meet all traffic and public safety concerns. Any Coastal Live Oak, Valley Oak, or willow trees will be removed and replaced at a 10:1, 15:1, and 5:1 ratio, respectively. Hydro-mulching and hydro-seeding will be spread around the entire project footprint at the completion of the project to prevent erosion and return the site to a native and natural condition.

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**Budget**

Fiscal Year	Cost
Fiscal Year 18-19 (design)	\$30,000
Fiscal Year 19-20 (construction)	\$770,000
<b>Total</b>	<b>\$800,000</b>

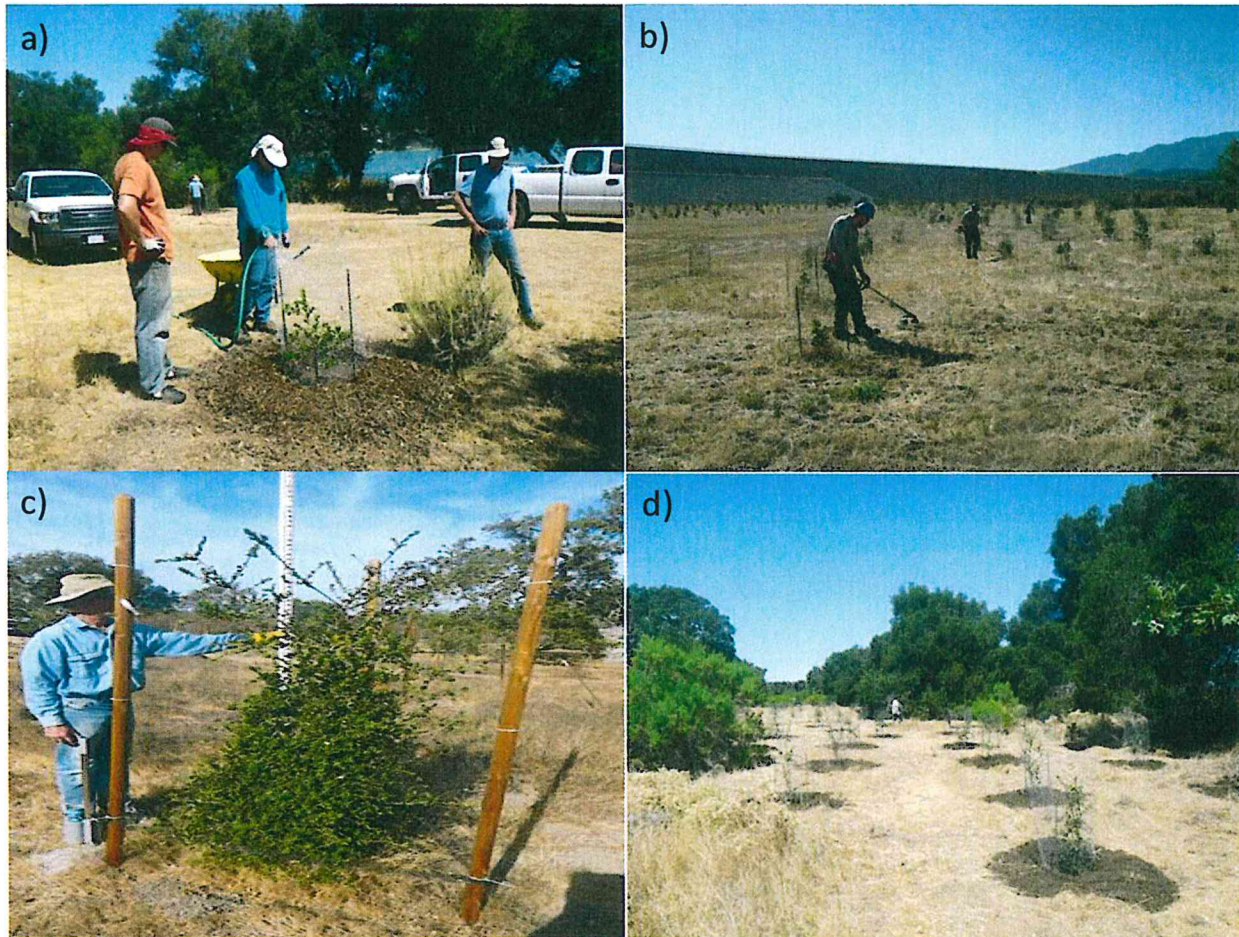
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***Cachuma Lake Oak Tree Restoration Program***

***Project Schedule***

Year round



**Figure 8:** Cachuma Lake Oak Tree Restoration Program showing a) irrigation training with arborist, b) weed whacking by California Conservation Core, c) oak tree inventory documentation, and d) recent mulch application.

***Summary***

COMB, with the assistance of a contracted registered consulting arborist, began managing and implementing the Cachuma Lake Oak Tree Restoration Program (Program) in Fiscal Year 2012-2013 (Figure 8). A maintenance and monitoring plan (Plan) was put into place which describes the current conditions and contains guidelines for all program operations that are derived from standards established by the International Society of Arboriculture Best Management Practices for oak tree planting and maintenance. The program is ongoing until mitigation requirements from surcharging Lake Cachuma by three feet are met in 2025.

***Background***



In 2004, Reclamation installed 4 foot high flash boards on Bradbury Dam on the top of the radial gates. This allows for the surcharging of Lake Cachuma from 750 to 753 feet above mean sea level. At that time, this additional water storage was calculated to be 9,200 acre-feet and was designated to support the fisheries activities below Bradbury Dam. Lake Cachuma was fully surcharged for the first time in 2005. After the December 2013 Bathymetric survey that additional 3 feet provides for 9,184 acre-feet of storage.

Surcharging Lake Cachuma was listed as a proposed action in the Cachuma Project Biological Opinion (BO) (NMFS, 2000). Environmental impacts from that action were described and covered in the EIR/EIS for the Lower Santa Ynez River Fish Management Plan and BO for southern steelhead trout (COMB and USBR, 2004). The environmental impact from surcharging Lake Cachuma was determined to be a significant but mitigable impact (Class II) due to the small acreage involved. The 2004 EIR/EIS states that Reclamation will be conservative in their count of impacted shoreline oak trees by including in their final count dead and impacted (threatened or at-risk) trees. The EIR/EIR recommended an initial replacement ratio of 5:1 but COMB settled on 2.5:1 in order to reach a final 2:1 replacement ratio at 20 years (2025) with the mitigation number set at 10 years after surcharging began in 2015.

Increasing storage in the lake during surcharge events can impact near shore oak trees by inundation or wave action. In 2005, the Cachuma Lake Oak Tree Restoration Program was put in place to mitigate the potential loss of oak trees around the shoreline of Lake Cachuma from surcharge operations. An oak tree specialist was contracted to run the project and continued to be utilized for the past seven years. The effect of surcharging on lakeshore oak trees was observable from 2005 onward. The reservoir was fully surcharged for the first time on January 14, 2005 and subsequently on May 7, 2006 and more recently on May 5, 2011. During 2011, which was a historic rainfall year, the lake was held at or near full surcharge for an extended period of time. This was the first time in the history of the project that a full surcharge had been maintained over the course of several months.

For six consecutive years starting in Fiscal Year 2005-2006, oak trees were planted and maintained in accordance with a mitigation plan. Mitigated oak trees have been planted in two areas around Lake Cachuma: Storke Flats and just downstream of Bradbury Dam. Over 2,200 trees have been planted so far at an approximate ratio of 9:1, Coastal Live Oak to Valley Oak trees. In 2015, the exact number of mitigated oak trees will be determined at which point more oak trees will be planted. If the mitigation requirement is met at a success rate of 2:1 for mature oak trees, the program will be over in 2025.

### ***Need for Project***

This mitigation effort is to replace dead or at-risk oak trees around the shore of Lake Cachuma due to lake surcharging, which is a requirement of the EIR/EIS for the Lower Santa Ynez River Fish Management Plan and BO for southern steelhead trout (COMB and USBR, 2004).

### ***Description***

The following BMPs have been and will be conducted under supervision of the consulting registered arborist.

***Irrigation:*** Oaks planted will be watered on an as needed basis depending on ambient conditions. All trees are now at least three years old and should be self-sustaining but drought conditions observed during the past three years will require some additional irrigation.



**Weeding:** All vegetation will be kept 1 foot away from the trunk, allowing the root collar to be exposed to air and sunlight. General weeding should be done in a 10 foot radius around each tree. Weed trimming will occur in the spring when grasses are expected to be prolific, followed by additional weeding in the summer and fall on an as needed basis.

**Protective Caging:** All trees will be caged for deer browsing protection until the trees are taller than 7 feet. Cages will be maintained in the winter when new growth is not being put on. Once the oak trees are over 7 feet tall, the tree cages will be removed.

**Mulching:** Mulch will be placed approximately 1-2 feet beyond the trunk base, extending out to where the roots are anticipated to be present (3-4 feet beyond the trunk). Mulch will be applied to a depth of 3 to 4 inches and will not be up against the tree trunk.

**Root Collar Maintenance:** Soil will be pulled back at least 4 inches from the trunk down to the root collar. The objective of this task is to allow continuous air circulation around the trunk, as moist soil adjacent to the trunk increases the likelihood of fungal diseases which can lead to tree failure.

**Pruning:** Young oak trees need a strong, well-established, central leader to promote vertical growth and long-term survival. This is particularly the case in areas where deer browsing can severely limit vertical growth such as around Lake Cachuma. This minor level of pruning will take place each fall and winter only.

**Inventory:** A comprehensive oak tree inventory will be conducted in the late fall and maintained to track the location, condition, and maintenance needs of each tree. Photo and GPS documentation will alleviate any discrepancies in survivorship and missing trees. A GIS oak tree inventory will assist in managing maintenance needs.

**Budget**

Fiscal Year	Cost
Fiscal Year 14-15	\$100,000
Fiscal Year 15-16	\$100,000
Fiscal Year 16-17	\$40,000
Fiscal Year 17-18	\$40,000
Fiscal Year 18-19	\$40,000
<b>Total</b>	<b>\$320,000</b>