SPECIAL MEETING
OF THE
CACHUMA OPERATION AND MAINTENANCE BOARD
at Cachuma Operation and Maintenance Board Office
3301 Laurel Canyon Road
Santa Barbara, California 93105

Wednesday, June 15, 2016

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. **[CLOSED SESSION]: CONFERENCE WITH LEGAL COUNSEL: EXISTING AND POTENTIAL LITIGATION**
   [Government Code Section 54956.9(d)(4)]
   Name of matter: Protest of Member Agency re: Payment of Quarterly Assessments

4. **RECONVENE INTO OPEN SESSION**
   [Government Code Section 54957.7]
   Disclosure of actions taken in closed session, as applicable
   [Government Code Section 54957.1]

5. **USBR REQUEST FOR PURCHASE OF WATER TANKS**
   For discussion and possible action by motion and roll call vote of the Board

6. **COMB PROPOSED DRAFT FISCAL YEAR 2016-17 OPERATING BUDGET**
   For discussion and possible action by motion and roll call vote of the Board

7. **MEETING SCHEDULE**
   - **June 27, 2016 Regular Board Meeting at 2:00 P.M., COMB Office**
   - **Board Packages Available on COMB Website**
     www.cachuma-board.org

8. **COMB ADJOURNMENT**

NOTICE TO PUBLIC

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

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

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

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

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

CACHUMA OPERATION & MAINTENANCE BOARD

BOARD MEMORANDUM

Date:	June 15, 2016
Submitted by:	Janet Gingras

SUBJECT: **COMB FY 2016-17 Proposed Draft Operating Budget**

SUMMARY:

Prepared for Board review and consideration is the FY 2016-17 COMB Proposed Draft Operating Budget, Budget Summary document, draft Budget Allocation worksheet, draft 5-year Infrastructure Improvement and Habitat Improvement Plans. The draft budget was presented to the Member Agency General Managers and staff on May 12th and to the Administrative Committee on May 26th. Suggested changes have been incorporated into this version of the draft budget. The proposed budget reflects projected expenditures for the Operations Division, the Fisheries Division as well as the General and Administrative Expenses for fiscal year 2016-17. These projected expenditures have been refined through development of the annual work plan, updates to the Infrastructure and Habitat Improvement Plans and addresses the most fundamental and prioritized services needed for operations.

The proposed draft budget reflects the current salaries and benefits package for all employees except for the General Manager's position. The budget includes a 1% COLA for all employees per the historical annual calculation which is based on the March or April Consumer Price Index (CPI) data each year. 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 averaged together to obtain the percentage COLA for the period. April data indicates a 1% increase for the COLA calculation during this time period.

Operations Division

Operations and Maintenance Expenses

The Operations Division labor line item shows a slight decrease and is due to the restructuring of field crew salaries from the previous fiscal year. This is the only change as compared to the prior year for the Operations & Maintenance expenses.

General and Administrative Expenses

The General and Administrative portion of the Operations Division shows a projected decrease in legal expenses. The cost of liability and property insurance has increased slightly for this fiscal year due to an increase in rates. Administrative salaries and associated payroll costs are decreased due to transfer of a position to the Fisheries Division to continue implementation of the Oak Tree Program of work. Overall, the Operations Division General and Administrative Expenses decreased over eleven percent as compared to the previous year budget.

Under Special G & A expenses, it is anticipated that the administrative costs for IRWMP Proposition 1 grants will be the same as the prior year. The OPEB actuarial will not be budgeted for FY 2016-17 as it is required to be performed every three years and defined according to revenue levels.

Infrastructure Improvement Projects

The Infrastructure Improvement Projects (IIP) section in the Operations Division portion of the budget reflects a significant decrease as compared to the prior year primarily due to projects delayed due to the ongoing drought. Careful consideration was employed in this section of the budget with only high priority infrastructure improvement projects proposed. Included for fiscal year 2016-17 are the Air Vacuum Air Release Valve (AVAR) and Blow-Off Valve replacement projects, the replacement of the Administrative Office Building, the installation of the North Portal Jet Control Spool, design review for Mission Creek pipeline, repair of Lateral 3 structure, and the installation of the Lauro Diversion Valve. Overall, a twenty-seven percent decrease is shown for the IIP section for fiscal year 2016-17.

The Emergency Pumping Facilities Project has been budgeted for ongoing operation and maintenance per contract and is thirty-one percent less than the previous fiscal year. Included in this line item are costs for engineering oversight, monthly operations, and demobilization. COMB has been awarded $360,000 for additional electrical service grant funding through Reclamation's Drought Assistance Program. An option available in the construction contract is the ability for COMB to purchase the barge system and consider a modified installation of the current project. Details are currently under development by the Project Engineer, HDR, and will be presented to the Operations Committee and as a possible project to the Santa Barbara County IRWMP cooperating partners for the Proposition 1 grant funding process.

Fisheries Division

Operation and Maintenance Expenses

The Fisheries Division Labor Account shows an increase compared to the prior fiscal year primarily due to the addition of a full time Biologist Aide. With the increased responsibilities of the Oak Tree Program, a full time position is proposed for implementing the program of work. An administrative position budgeted in the previous fiscal year is being eliminated and proposed to be transferred to the Fisheries Division for field work productivity. In addition, the contract labor line item has been reduced for fiscal year 2016-17.

General and Administrative Expenses

Legal expenses have been reduced slightly for fiscal year 2016-17. The cost of liability and property insurance has increased slightly for this fiscal year due to an increase in rates. Administrative salaries charged to the Fisheries Division have decreased due to elimination of a position as compared to the previous fiscal year. Overall, the Fisheries Division General and Administrative Expenses decreased approximately thirteen percent.

Program Support Services and Habitat Improvement Plan Projects

Program support services within the Fisheries Division incorporate all monitoring, mapping and reporting tasks required in the implementation of the Cachuma Project Biological Opinion (BO) and Lower Santa Ynez River (LSYR) Fisheries Management Plan (FMP). Most of the Special Projects line items have remained the same or decreased compared to the prior fiscal year.

The Habitat Improvement Plan projects have increased as compared to the prior fiscal year due to the strategy of completing of two projects in one year to take advantage of economies of scale. Crossings 0a and 4 are in close proximity to one another and provides an opportunity to utilize mobilization of equipment and construction processes simultaneously.

The Oak Tree Restoration Program continues to increase in staff time and materials needed particularly given the dry conditions over the past two years. Funds are needed in support of the program and in preparation for the potential of planting more oak trees. Overall, the Fisheries Division Budget increased by about five percent as compared to the previous fiscal year.

In summary, the COMB proposed FY 2016-17 Draft Operating Budget is $7,714,800. Overall, as indicated on page 4 of the budget, COMB will manage over $9 million in revenues during this fiscal year. These revenues include the Renewal/Trust Fund, the Santa Barbara County $100,000 annual contribution, $1.6m in grants affiliated with the Fisheries Division Projects, Cachuma Project Water Entitlement, Bradbury and Lauro Dam SOD Act repayments, and the Water Rights fee. With projected offsetting revenues of $1,991,108, the net FY 2016-17 COMB Draft Budget totals $5,723,692.

COMMITTEE STATUS:

Administrative Committee forwards the FY 2016-17 Draft Operating Budget and affiliated material to the Board for discussion with a recommendation to adopt the budget as presented.

RECOMMENDATION:

Board of Directors approve and adopt the COMB FY 2016-17 Proposed Operating Budget as presented.

LIST OF EXHIBITS:

1) FY 2016-17 Draft COMB Operating Budget
2) FY 2016-17 Draft COMB Allocation Worksheet
3) FY 2016-17 COLA Calculation
4) FY 2016-17 Draft COMB Budget Summary
5) FY 2017-21 Draft Infrastructure Improvement Plan
6) FY 2017-21 Draft Habitat Improvement Plan

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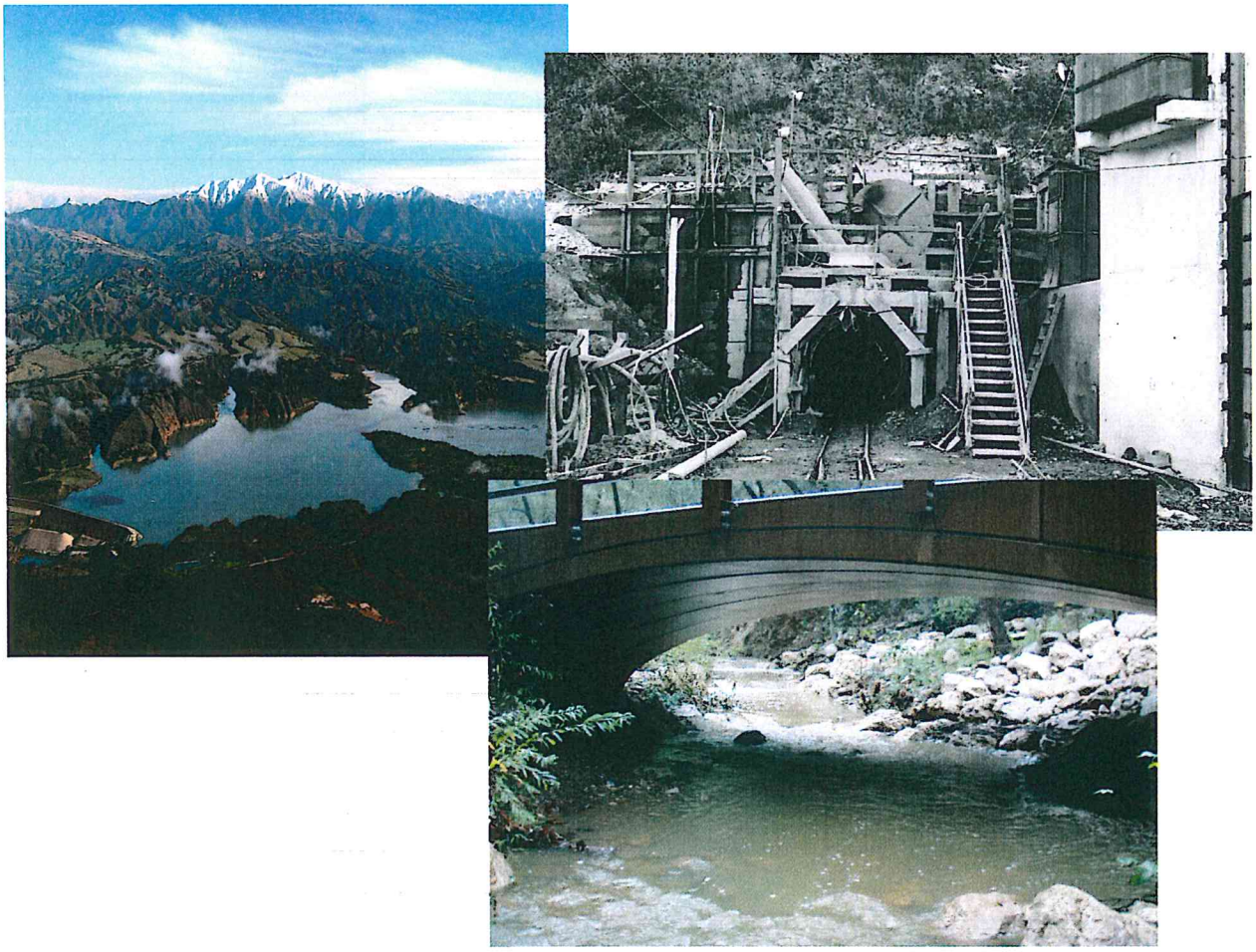
Cachuma Operation & Maintenance Board

Santa Barbara, California

Proposed Draft Operating Budget

July 1, 2016 – June 30, 2017



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

Mission

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

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.

The FY 2015-16 Operating Budget 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 2016-17. 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 2016-17 Net Operating Budget totals $5.7 million, representing a fifteen percent decrease as compared to the Fiscal Year 2015-16 Net Operating Budget. This decrease is primarily due to a reduction in level of staffing and reduced projected expenditures affiliated with the Operations division program of work. The updates to the Five-year Infrastructure and Habitat Improvement Plans reveal the validity and basis for improvement projects scheduled for fiscal year 2016-17. 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 Agency level.

Cachuma Operation & Maintenance Board

Consolidated Overview

Proposed Draft Budget

Fiscal Year 2016 - 2017

7/1/2016

	SALARIES & BENEFITS	FY 2015-16	FY 2016-17	Change
	Operations Division	$ 815,197	$ 812,376	$ (2,821)
	Fisheries Division	549,994	623,118	$ 73,125
	Administration	868,548	750,533	$ (118,015)
	TOTAL	**$ 2,233,739**	**$ 2,186,027**	**$ (47,712)**
	OPERATIONS and MAINTENANCE EXPENSES			
	Operations Division	$ 285,000	$ 285,000	$ -
	Fisheries Division	83,000	68,000	$ (15,000)
	TOTAL	**$ 368,000**	**$ 353,000**	**$ (15,000)**
	GENERAL AND ADMINISTRATIVE EXPENSES			
	Operation Division	$ 262,732	$ 233,342	$ (29,390)
	Fisheries Division	102,971	98,181	$ (4,790)
	TOTAL	**$ 365,703**	**$ 331,523**	**$ (34,180)**
Total Operating Budget		**$ 2,967,442**	**$ 2,870,550**	**$ (96,892)**

INFRASTRUCTURE IMPROVEMENT, HABITAT IMPROVEMENT and SPECIAL PROJECTS

Operations Division

Infrastructure Improvement Projects	$ 980,000	$ 715,000	**$ (265,000)**
Emergency Pumping Facilities Project	$ 2,709,250	$ 1,846,250	**$ (863,000)**

Fisheries Division

Habitat Improvement Projects	$ 1,920,000	$ 2,100,000	**$ 180,000**
Program Support Services	$ 212,000	$ 183,000	**$ (29,000)**

Total Budget	**$ 8,788,692**	**$ 7,714,800**	**$ (1,073,892)**

Cachuma Operation & Maintenance Board

Proposed Draft Budget

Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name	FY 2015 - 2016 Adopted Budget	FY 2015-16 Estimated Actuals	FY 2016 - 2017 Proposed Draft Budget	Variance ^ $ Higher / (Lower)	$ Higher / (Lower)
	OPERATIONS DIVISION					
	OPERATION & MAINTENANCE EXPENSES					
	LABOR					
3100	LABOR - Operations Field Crew	$ 514,058	$ 410,235	$ 503,586	$ (10,472)	
3155	CALPERS	72,497	63,000	77,834	5,337	
3150	HEALTH INSURANCE	163,861	98,000	167,281	3,420	
3150	WORKERS COMPENSATION INSURANCE	25,456	18,000	25,150	(306)	
3160	FICA	39,325	32,000	38,524	(801)	
	TOTAL	**$ 815,197**	**$ 621,235**	**$ 812,376**	**$ (2,821)**	**-0.35%**
	VEHICLES & EQUIPMENT					
3201	VEHICLE/EQUIP MTCE	$ 30,000	$ 29,524	$ 30,000	$ -	
3202	FIXED CAPITAL	15,000	14,839	15,000	-	
3203	EQUIPMENT RENTAL	5,000	1,796	5,000	-	
3204	MISC	5,000	4,650	5,000	-	
	TOTAL	**$ 55,000**	**$ 50,809**	**$ 55,000**	**$ -**	**0.00%**
	CONTRACT LABOR					
3301	CONDUIT, METER, VALVE	$ 20,000	$ 19,705	$ 20,000	$ -	
3302	BUILDINGS & ROADS	20,000	18,752	20,000	-	
3303	RESERVOIRS	30,000	27,895	30,000	-	
3304	ENGINEERING, MISC SVCS	25,000	24,474	25,000	-	
	TOTAL	**$ 95,000**	**$ 90,826**	**$ 95,000**	**$ -**	**0.00%**
	MATERIALS & SUPPLIES					
3401	CONDUIT, METER, VALVE & MISC	$ 65,000	$ 60,000	$ 65,000	$ -	
3402	BUILDINGS & ROADS	15,000	14,872	15,000	-	
3403	RESERVOIRS	10,000	9,394	10,000	-	
	TOTAL	**$ 90,000**	**$ 84,266**	**$ 90,000**	**$ -**	**0.00%**
	OTHER EXPENSES					
3501	UTILITIES	$ 7,000	$ 6,800	$ 7,000	$ -	
3502	UNIFORMS	5,000	3,936	5,000	-	
3503	COMMUNICATIONS	18,000	17,896	18,000	-	
3504	USA & OTHER SERVICES	4,000	3,893	4,000	-	
3505	MISC	8,000	6,500	8,000	-	
3506	TRAINING	3,000	1,500	3,000	-	
	TOTAL	**$ 45,000**	**$ 40,525**	**$ 45,000**	**$ -**	**0.00%**
	TOTAL O & M EXPENSE	**$ 1,100,197**	**$ 887,661**	**$ 1,097,376**	**$ (2,821)**	**-0.26%**

Cachuma Operation & Maintenance Board
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name	FY 2015 - 2016 Adopted Budget	FY 2015-16 Estimated Actuals	FY 2016 - 2017 Proposed Draft Budget	Variance ^ $ Higher / (Lower)	Variance ^ Percentage Change
	OPERATIONS DIVISION					
	GENERAL AND ADMINSTRATIVE EXPENSES					
5000	DIRECTORS FEES	$ 13,000	$ 11,969	$ 13,000	$ -	
5100	AUDIT	20,000	18,500	20,000	0	
5101	LEGAL	100,000	45,000	75,000	(25,000)	
5150	UNEMPLOYMENT INSURANCE	5,000	1,000	5,000	-	
5200	LIABILITY & PROPERTY INSURANCE	42,705	43,641	45,955	3,250	
5201	HEALTH insurance, W/C, Retirees medical	180,092	165,479	174,747	(5,345)	
5250	PERS	58,420	45,887	50,193	(8,227)	
5339	FICA/MEDICARE	25,608	20,592	21,382	(4,226)	
5300-5307	ADMINISTRATIVE SALARIES	334,750	278,652	279,500	(55,250)	
5310	POSTAGE / OFFICE SUPPLIES	8,000	4,850	5,000	(3,000)	
5311	OFFICE EQUIPMENT / LEASES	8,000	7,265	8,000	0	
5312	MISC. ADMIN. EXP.	10,790	7,000	7,150	(3,640)	
5313	COMMUNICATIONS	8,500	8,450	8,500	-	
5314	UTILITIES	9,737	9,250	9,737	-	
5315	MEMBERSHIP DUES	8,000	8,000	8,000	-	
5316	ADMIN. FIXED ASSETS	4,000	3,000	3,000	(1,000)	
5318	COMPUTER CONSULTANT	15,000	15,000	15,000	-	
5325	EMPLOYEE EDUCATION/TRAINING	2,000	1,500	2,000	-	
5330	ADMIN TRAV & CONFERENCES	2,000	1,530	2,000	-	
5331	PUBLIC INFO	1,000	880	1,000	-	
	TOTAL GENERAL & ADMINISTRATIVE	**$ 856,602**	**$ 697,445**	**$ 754,163**	**$ (102,439)**	**-11.96%**
	SPECIAL G & A EXPENSES					
5510	Integrated Regional Water Mgmt Plan	$ 5,000	$ 4,006	$ 5,000	$ -	
	TOTAL SPECIAL G & A EXPENSES	**$ 5,000**	**$ 4,006**	**$ 5,000**	**$ -**	**0.00%**
	INFRASTRUCTURE IMPROVEMENT PROJECTS					
6062	SCADA	$ 25,000	$ 18,500	$ 20,000	$ (5,000)	
6090	COMB Bldg/Grounds Repair	290,000	10,000	150,000	(140,000)	
6097	GIS and Mapping	10,000	10,000	10,000	0	
6096	SCC Structure Rehabilitation (AVAR / BO Valves)	240,000	150,000	240,000	0	
6100	Watershed Sanitary Survey	54,000	54,000	0	(54,000)	
6105	ROW Identification Program	20,000	20,000	20,000	0	
6109	North Portal Jet Flow Control Valve	0	900	50,000	50,000	
6111	Mission Creek Pipeline	60,000	56,000	50,000	(10,000)	
6118	Repair Lateral 3 Structure	20,000	10,000	100,000	80,000	
6122	Rehabilitate San Antoinio Creek Blow-off	10,000	10,000	0	(10,000)	
6123	Sheffield Tunnel Inspection / Evaluation of SCC	46,000	0	0	(46,000)	
6124	South Portal Slope Stabilization	10,000	10,000	0	(10,000)	
6127	Encroachment - Trees and Vegetative Overgrowth	25,000	0	0	(25,000)	
6128	Lauro Tunnel Pipe Support Repair	30,000	30,000	0	(30,000)	
6129	Rehabilitate SCC Lower Reach Lateral Structures	50,000	0	0	(50,000)	
6130	North Portal Slope Stabilization	90,000	0	0	(90,000)	
6131	Lauro Diversion Valve Installation	0	0	75,000	75,000	
	TOTALS	**$ 980,000**	**$ 379,400**	**$ 715,000**	**$ (265,000)**	**-27.04%**
	SPECIAL PROJECTS					
6120	Emergency Pumping Facilities Project	2,709,250	2,200,000	1,846,250	(863,000)	
	TOTALS	**$ 2,709,250**	**$ 2,200,000**	**$ 1,846,250**	**$ (863,000)**	**-31.85%**
	TOTAL IIP and SPECIAL PROJECTS	**$ 3,689,250**	**$ 2,579,400**	**$ 2,561,250**	**$ (1,128,000)**	**-30.58%**
	TOTAL OPERATIONS DIVISION BUDGET	**$ 5,651,049**	**$ 4,168,512**	**$ 4,417,789**	**$ (1,233,260)**	**-21.82%**

Cachuma Operation & Maintenance Board

Proposed Draft Budget

Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name	FY 2015 - 2016 Adopted Budget	FY 2015-16 Estimated Actuals	FY 2016 - 2017 Proposed Draft Budget	Variance ^ $ Higher / (Lower)	$ Higher / (Lower)
	FISHERIES DIVISION					
	OPERATION & MAINTENANCE EXPENSES					
	LABOR					
4100	LABOR - Biology Field Crew	$ 283,209	$ 287,000	$ 333,228	$ 50,019	
4114	LABOR - Seasonal Field Crew	82,500	81,356	68,000	(14,500)	
4151	CALPERS	59,454	58,945	66,607	7,153	
4150	HEALTH INSURANCE	78,203	77,651	104,528	26,325	
4150	WORKERS COMPENSATION	18,651	17,253	20,061	1,410	
4152	FICA	27,977	26,897	30,694	2,717	
	TOTAL	**$ 549,994**	**$ 549,102**	**$ 623,118**	**$ 73,125**	**13.30%**
	VEHICLES & EQUIPMENT					
4270	VEHICLE/EQUIP MTCE	$ 13,000	$ 12,944	$ 13,000	$ -	
4280	FIXED CAPITAL	15,000	15,000	15,000	$ -	
4290	MISCELLANEOUS	2,500	2,379	2,500	-	
	TOTAL	**$ 30,500**	**$ 30,323**	**$ 30,500**	**$ -**	**0.00%**
	CONTRACT LABOR					
4220	METERS & VALVES	$ 3,000	$ 3,113	$ 3,000	$ -	
4222	PROJECTS MAINTENANCE	40,000	22,658	25,000	(15,000)	
	TOTAL	**$ 43,000**	**$ 25,771**	**$ 28,000**	**$ (15,000)**	**-34.88%**
	MATERIALS & SUPPLIES					
4390	MISCELLANEOUS	$ 7,000	$ 6,275	$ 7,000	$ -	
	TOTAL	**$ 7,000**	**$ 6,275**	**$ 7,000**	**$ -**	**0.00%**
	OTHER EXPENSES					
4502	UNIFORMS	$ 2,500	$ 2,465	$ 2,500	$ -	
	TOTAL	**$ 2,500**	**$ 2,465**	**$ 2,500**	**$ -**	**0.00%**
	TOTAL O & M EXPENSE	**$ 632,994**	**$ 613,936**	**$ 691,118**	**$ 58,125**	**9.18%**
	FISHERIES DIVISION					
	GENERAL AND ADMINSTRATIVE EXPENSES					
5407	DIRECTORS FEES	$ 7,000	$ 7,000	$ 7,000	$ -	
5407	LEGAL	25,000	20,000	20,000	(5,000)	
5441	AUDIT	6,300	5,250	6,300	-	
5443	LIABILITY & PROPERTY INSURANCE	21,595	21,444	24,745	3,150	
5401	HEALTH BENEFITS & W/C	44,182	44,100	35,672	(8,510)	
5402	PERS	31,457	28,310	27,027	(4,430)	
5403	FICA/MEDICARE	13,789	11,517	11,513	(2,276)	
5404-09	ADMINISTRATIVE SALARIES	180,250	150,000	150,500	(29,750)	
5410	POSTAGE / OFFICE SUPPLIES	3,000	2,000	2,000	(1,000)	
5411	OFFICE EQUIPMENT / LEASES	5,218	4,529	5,218	-	
5412	MISC. ADMIN. EXP.	5,810	4,800	4,870	(940)	
5413	COMMUNICATIONS	4,305	4,928	4,305	-	
5414	UTILITIES	5,243	4,853	5,243	-	
5415	MEMBERSHIP DUES	4,000	3,028	4,000	-	
5416	ADMIN. FIXED ASSETS	4,000	2,900	3,000	(1,000)	
5418	COMPUTER CONSULTANT	5,000	9,120	5,000	-	
5425	EMPLOYEE EDUCATION/SUBSCRIPTIONS	2,500	1,875	2,500	-	
5430	ADMIN TRAV & CONFERENCES	2,500	2,239	2,500	-	
5431	PUBLIC INFO	1,500	1,462	1,500	-	
	TOTAL GENERAL & ADMINISTRATIVE	**$ 372,649**	**$ 329,355**	**$ 322,892**	**$ (49,757)**	**-13.35%**

Cachuma Operation & Maintenance Board
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name	FY 2015 - 2016 Adopted Budget	FY 2015-16 Estimated Actuals	FY 2016 - 2017 Proposed Draft Budget	Variance ^ $ Higher / (Lower)	$ Higher / (Lower)
	FISHERIES DIVISION					
	PROGRAM SUPPORT SERVICES					
6201	BO/FMP Implementation	$ 100,000	$ 30,000	$ 73,000	$ (27,000)	
6202	GIS and Mapping	10,000	9,600	10,000	-	
6203	Grants Technical Support	10,000	10,000	10,000	-	
6204	SYR Hydrology Technical Support	10,000	9,500	8,000	(2,000)	
6205	USGS Stream Gauge Program	77,000	77,000	77,000	-	
6206	Tri County Fish Team Funding	5,000	5,000	5,000	-	
	TOTALS	**$ 212,000**	**$ 141,100**	**$ 183,000**	**$ (29,000)**	**-13.68%**
	HABITAT IMPROVEMENT PLAN PROJECTS					
6303	Tributary Project Improvements	$ 20,000	$ 20,000	$ 20,000	$ -	
6207	Oak Tree Restoration Program	100,000	70,000	80,000	(20,000)	
6312	Quiota Creek Crossing 0a	138,365	35,000	840,000	701,635	
6313	Quiota Creek Crossing 3	930,000	841,000	0	(930,000)	
6314	Quiota Creek Crossing 4	30,000	30,000	1,120,000	1,090,000	
6315	Quiota Creek Crossing 8	20,000	20,000	0	(20,000)	
6316	Quiota Creek Crossing 5	10,000	10,000	30,000	20,000	
6317	Salsipuedes Fish Ladder Repair	0	0	10,000	10,000	
	TOTALS	**$ 1,248,365**	**$ 1,026,000**	**$ 2,100,000**	**$ 851,635**	**68.22%**
	TOTAL HIP and Program Support Services	**$ 2,132,000**	**$ 1,167,100**	**$ 2,283,000**	**$ 151,000**	**7.08%**
	TOTAL FISHERIES DIVISION BUDGET	**$ 3,137,643**	**$ 2,110,391**	**$ 3,297,011**	**$ 159,368**	**5.08%**
	Total COMB Gross Budget	**$ 8,788,692**	**$ 6,278,903**	**$ 7,714,800**	**$ (1,073,892)**	**-12.22%**

Projected Offsetting Revenues:

Renewal Fund *	$ -	$ (52,872)
Warren Act Trust Fund	(571,728)	(238,306)
Santa Barbara County Contribution	(90,000)	(90,000)
CDFW Grant Funding - QC Crossing 3	(705,205)	-
CDFW Grant Funding - QC Crossing 0 (a&b)	(671,635)	(671,635)
CDFW Grant Funding - QC Crossing 4	-	(938,295)
Total Offsetting Revenues	**$ (2,038,568)**	**$ (1,991,108)**

TOTAL COMB NET BUDGET	**$ 6,750,124**		**$ 5,723,692**	**$ (1,026,432)**	**-15.21%**

Other COMB Managed Revenues:

	Actual	Estimated
USBR Capital Repayment / O & M costs	$ 977,028	$ 980,000
Bradbury SOD Act Repayment	164,870	260,870
Lauro SOD Act Repayment	32,088	42,000
Water Rights Fee	41,300	44,000
	$ 1,215,286	**$ 1,326,870**
Totals	**$ 10,003,978**	**$ 9,041,670**

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% COLA increase per annual calculation
* *Special purpose fund generally restricted to Habitat Enhancement Projects*
^ *Compares FY 2016-17 Proposed Draft Budget to FY 2015-16 Adopted Budget*

Cachuma Operation & Maintenance Board
General and Administrative Expenses Consolidated
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Name

GENERAL AND ADMINISTRATIVE EXPENSES

	FY 2015-2016			FY 2016-2017		
	Operations	Fisheries	Total	Operations	Fisheries	Total
DIRECTORS FEES	$ 13,000	$ 7,000	$ 20,000	$13,000	$ 7,000	$20,000
AUDIT	20,000	6,300	26,300	20,000	6,300	26,300
LEGAL	100,000	25,000	125,000	75,000	20,000	95,000
UNEMPLOYMENT TAX	5,000	0	0	5,000	0	5,000
GENERAL LIABILITY INSURANCE	42,705	21,595	64,300	45,955	24,745	70,700
HEALTH INSURANCE	78,671	42,361	121,032	63,424	34,151	97,576
WORKERS COMPENSATION INSURANCE	3,381	1,821	5,202	2,823	1,520	4,343
RETIREES HEALTH INSURANCE	98,040	0	98,040	108,500	0	108,500
CAL-PERS	58,420	31,457	89,877	50,193	27,027	77,219
FICA / MEDICARE	25,608	13,789	39,397	21,382	11,513	32,895
ADMINISTRATIVE SALARIES	334,750	180,250	515,000	279,500	150,500	430,000
POSTAGE/OFFICE SUPPLIES	8,000	3,000	11,000	5,000	2,000	7,000
OFFICE EQUIP/LEASES	8,000	5,218	13,218	8,000	5,218	13,218
MISC ADMIN EXP	10,790	5,810	16,600	7,150	4,870	12,020
COMMUNICATIONS	8,500	4,305	12,805	8,500	4,305	12,805
UTILITIES	9,737	5,243	14,980	9,737	5,243	14,980
MEMBERSHIP DUES	8,000	4,000	12,000	8,000	4,000	12,000
ADMIN FIXED ASSETS	4,000	3,000	7,000	3,000	3,000	6,000
COMPUTER CONSULTANT	15,000	5,000	20,000	15,000	5,000	20,000
EMPLOYEE EDUCATION/SUBSCRIPTIONS	2,000	2,500	4,500	2,000	2,500	4,500
TRAVEL & CONF.	2,000	2,500	4,500	2,000	2,500	4,500
PUBLIC INFO	1,000	1,500	2,500	1,000	1,500	2,500
TOTAL	**$856,602**	**$371,649**	**$1,223,251**	**$754,163**	**$322,892**	**$1,077,056**

Notes:

Administrative salaries/burden are allocated as 35% Fisheries Division and 65% Operations

Cachuma Operation & Maintenance Board

Operation and Maintenance Expenses Consolidated

Proposed Draft Budget

Fiscal Year 2016 - 2017

7/1/2016

Account Name	FY 2015-2016 Operations	FY 2015-2016 Fisheries	FY 2015-2016 Total	FY 2016-2017 Operations	FY 2016-2017 Fisheries	FY 2016-2017 Total
OPERATION & MAINTENANCE EXPENSES						
LABOR						
LABOR - Field Crews	$ 514,058	$ 365,709	$ 879,767	$ 503,586	$ 401,228	$ 904,814
CALPERS	72,497	59,454	131,951	77,834	66,607	144,441
HEALTH INSURANCE	163,861	78,203	242,064	167,281	104,528	271,809
WORKERS COMPENSATION INSURANCE	25,456	18,651	44,107	25,150	20,061	45,211
FICA	39,325	27,977	67,302	38,524	30,694	69,218
TOTAL	**$ 815,197**	**$ 549,994**	**$ 1,365,191**	**$ 812,376**	**$ 623,118**	**$ 1,435,494**
VEHICLES & EQUIPMENT						
VEHICLE/EQUIP MTCE	$ 30,000	$ 13,000	$ 43,000	$30,000	$ 13,000	$ 43,000
FIXED CAPITAL	15,000	15,000	30,000	15,000	15,000	30,000
EQUIPMENT RENTAL	5,000	0	5,000	5,000	0	5,000
MISC	5,000	2,500	7,500	5,000	2,500	7,500
TOTAL	**$ 55,000**	**$ 30,500**	**$ 85,500**	**$ 55,000**	**$ 30,500**	**$ 85,500**
CONTRACT LABOR						
CONDUIT, METER, VALVE	$ 20,000	$ 3,000	$ 23,000	$20,000	$ 3,000	$ 23,000
BUILDINGS & ROADS	20,000	0	20,000	20,000	0	20,000
RESERVOIRS	30,000	0	30,000	30,000	0	30,000
ENGINEERING, FISH PROJ MTCE, MISC SVCS	25,000	40,000	65,000	25,000	25,000	50,000
TOTAL	**$ 95,000**	**$ 43,000**	**$ 138,000**	**$ 95,000**	**$ 28,000**	**$ 123,000**
MATERIALS & SUPPLIES						
CONDUIT, METER, VALVE & MISC	$ 65,000	$ 7,000	$ 72,000	$65,000	$ 7,000	$ 72,000
BUILDINGS & ROADS	15,000	0	15,000	15,000	0	15,000
RESERVOIRS	10,000	0	10,000	10,000	0	10,000
TOTAL	**$ 90,000**	**$ 7,000**	**$ 97,000**	**$ 90,000**	**$ 7,000**	**$ 97,000**
OTHER EXPENSES						
UTILITIES	$ 7,000	$ -	$ 7,000	$7,000	0	7,000
UNIFORMS	5,000	2,500	7,500	5,000	2,500	7,500
COMMUNICATIONS	18,000	0	18,000	18,000	0	18,000
USA & OTHER SERVICES	4,000	0	4,000	4,000	0	4,000
MISC	8,000	0	8,000	8,000	0	8,000
TRAINING	3,000	0	3,000	3,000	0	3,000
TOTAL	**$ 45,000**	**$ 2,500**	**$ 47,500**	**$ 45,000**	**$ 2,500**	**$ 47,500**
TOTAL O & M EXPENSE	**$ 1,100,197**	**$ 632,994**	**$ 1,733,191**	**$ 1,097,376**	**$ 691,118**	**$ 1,788,494**

Cachuma Operation & Maintenance Board
Operations & Maintenance Expenses - Operations Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name			Description
OPERATIONS and MAINTENANCE EXPENSES - Operations Division				
	LABOR			
3100	LABOR OPS	$	503,586	Division Manager, Operations Field Crew salaries
3155	CALPERS		77,834	CalPERS pension
3150	HEALTH INSURANCE		167,281	ACWA/JPIA Health Plans, Delta Dental, VSP vision plan
3150	WORKERS COMPENSATION		25,150	ACWA/JPIA workers compensation program
3160	FICA		38,524	Agency payroll costs
	TOTAL	**$**	**812,376**	
	VEHICLES & EQUIPMENT			
3201	VEHICLE/EQUIP MTCE	$	30,000	Ops & mtce costs of vehicles & equip/Cat generators/fuel costs
3202	FIXED CAPITAL		15,000	Misc replacement equipment, portable pumps, generators
3203	EQUIPMENT RENTAL		5,000	Rental equipment
3204	MISC		5,000	Small tools, supplies for tools & equipment
	TOTAL	**$**	**55,000**	
	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		30,000	Reservoir cleaning/weed abatement/silt vacuuming - CCC contract
3304	ENGINEERING, MISC SVCS		25,000	Consultants, engineering, design
	TOTAL	**$**	**95,000**	
	MATERIALS & SUPPLIES			
3401	CONDUIT, METER, VALVE & MISC	$	65,000	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.
	TOTAL	**$**	**90,000**	
	OTHER EXPENSES			
3501	UTILITIES	$	7,000	Electric; gas
3502	UNIFORMS		5,000	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
	TOTAL	**$**	**45,000**	
TOTAL O & M EXPENSE		**$**	**1,097,376**	

Cachuma Operation & Maintenance Board
OPERATIONS EXPENSES - OTHER
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	*Account Name*	*Vendor*	*Totals*	*Detail*
OTHER EXPENSES DETAIL				
3501	Utilities		**$7,000**	
		PGE		3,500
		Southern California Edison		3,500
3502	Uniforms		**$5,000**	
		ATZ Monogramming		500
		The Wharf		4,500
3503	Communications		**$18,000**	
		ATT		1,000
		Verizon - Mn office, Carp, Ortga, NP		2,500
		Verizon - SCADA		8,000
		Verizon Cell		5,500
		Echo		1,000
3504	USA & Other Services		**$4,000**	
		USA		1,500
		Safety-Kleen		1,500
		County of Santa Barbara		500
		Draganchuk Alarms		500
3505	Miscellaneous		**$8,000**	
		Misc. non-fixed assets		1,000
		OD computer/office		2,000
		City of SB Refuse		3,000
		Marborg Industries		2,000
3506	Education / Training Operations		**$3,000**	
	TOTAL		**$45,000**	

Cachuma Operation & Maintenance Board
General and Administrative Expenses - Operations Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	*Account Name*		*Description*
GENERAL AND ADMINISTRATIVE EXPENSES			
5000	DIRECTORS FEES	$ 13,000	Directors Fees
5100	AUDIT	20,000	Audit
5101	LEGAL	75,000	Legal
5150	UNEMPLOYMENT TAX	5,000	Unemployment tax
5200	GENERAL LIABILITY INSURANCE	45,955	General liability premiums
5201	HEALTH, WC, DC, Retirees Medical	174,747	Health, WC, DC, Retirees medical
5250	CAL-PERS	50,193	PERS employer portion increased slightly
5339	FICA / MEDICARE	21,382	Payroll driven
5300-5307	ADMINISTRATIVE SALARIES	279,500	Admin Salaries
5310	POSTAGE/OFFICE SUPPLIES	5,000	Ofc supplies/postage
5311	OFFICE EQUIP/LEASES	8,000	Copiers lease / maintenance / postage machine
5312	MISC ADMIN EXP	7,150	Janitor / paychex / misc Admin
5313	COMMUNICATIONS	8,500	COX / Verizon / ATT
5314	UTILITIES	9,737	SCE / SC Gas
5315	MEMBERSHIP DUES	8,000	ACWA / AWWA / CVWP
5316	ADMIN FIXED ASSETS	3,000	Computers / Office Furniture
5318	COMPUTER CONSULTANT	15,000	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
TOTAL		**$ 754,163**	

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 2016 - 2017

7/1/2016

Account Number	Account Name	Totals	Detail
GENERAL AND ADMINISTRATIVE DETAIL			
5000	Directors Fees	**$13,000**	
5100	Audit	**$20,000**	
5101	Legal	**$75,000**	
5150	Unemployment Insurance	**$5,000**	
5200	Liability & Property Insurance	**$45,955**	
	Property		2,925
	Crime Coverage		780
	Auto & General Liability		42,250
5310	Postage and Office Supplies	**$5,000**	
5311	Office Equipment & Leases	**$8,000**	
	Coastal Copy		1,800
	Culligan Water		200
	GE Capital		4,500
	Pitney Bowes		1,500
5312	Misc Admin. Expense	**$7,150**	
	Office Cleaning		2,350
	Paychex		3,600
	Misc Items		1,200
5313	Communications	**$8,500**	
	ATT		3,500
	Premier Global		300
	Verizon Ca/wireless		2,200
	COX Cable Online		2,500
5314	Utilities	**$9,737**	
	Southern California Edison		9,337
	The Gas Company		400
5315	Membership Dues	**$8,000**	
	ACWA		7,000
	AWWA		500
	Other Dues		500
5316	Admin. Fixed Assets	**$3,000**	
			3,000
5318	Computer Consultant	**$15,000**	
			15,000
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
	TOTAL	**$228,342**	

Cachuma Operation & Maintenance Board
INFRASTRUCTURE IMPROVEMENT PROJECTS - Operations Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name			Description
6062	**SCADA**	**$20,000**		
	Contractor		20,000	Upgrade of SCADA system (PLC replacement)
6090	**COMB Building/Grounds Repair**	**$150,000**		
	Contractor		150,000	Replacement of Administration Office Building
6096	**SCC Structure Rehabilitation**	**$240,000**		
	Contractor - Phase II		70,000	AVAR Riser Pipe Replacement
	Contractor - Phase II		70,000	Blow-off Riser Pipe Replacement
	Contractor - Phase III		100,000	AVAR Valve Replacement (6 remaining)
6097	**GIS and Mapping**	**$10,000**		
	Vendor		10,000	Software, licensing, support/additional mapping
6105	**ROW Identification Program**	**$20,000**		
	Intern staff		20,000	Mapping of easements into GIS
6109	**North Portal Jet Flow Control Valve / Spool**	**$50,000**		
	Contractor		50,000	Purchase and Install Spool / Remove Valve for rehab
6111	**Mission Creek Pipeline**	**$50,000**		
	Consultant Engineer		50,000	Design review
6118	**Repair Lateral 3 Structure**	**$100,000**		
	Phase II - Contractor		100,000	Removal and rehabilitation
6131	**Lauro Diversion Valve**	**$75,000**		
	Phase II - Contractor		75,000	Removal / Replacement Lauro Diversion Valve
	TOTAL Infrastructure Improvement Projects	**$715,000**		

Cachuma Operation & Maintenance Board
EMERGENCY PUMPING FACILITIES PROJECT - Operations Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2015

Account Number	Account Name			Description
6120	**Emergency Pumping Facility Project**			
	Pumping Barge Location 2	**$1,846,250**		
	HDR Engineering		100,000	Engineering Oversight
	Cushman Contracting		1,488,000	Contractor monthly operational costs ($124k/mo)
	PGE		0	PGE electrical operating costs (October - June @ $40k/mo)**
	Cushman Contracting		241,000	Demobilization at Site 2 (per contract)
	Cushman Contracting		17,250	Record Drawings (per contract)
	TOTAL Emergency Pumping Facilities Project	**$1,846,250**		
	TOTAL IIP & EPFP	**$2,561,250**		

** PGE electrical operating costs are funded through grant from Reclamation ($360,000 - 10/1/2016 - 6/30/2017)

Cachuma Operation & Maintenance Board
Operations & Maintenance Expenses - Fisheries Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name			Description
OPERATIONS and MAINTENANCE EXPENSES - Fisheries Activites				
	LABOR			
4100	LABOR	$	623,118	Biology Field Crew salary/benefits
	TOTAL	**$**	**623,118**	
	VEHICLES & EQUIPMENT			
4270	VEHICLES MAINT	$	13,000	Fuel, tires, maintenance, etc.
4280	FIXED CAPITAL		15,000	Thermographs, probes, etc.
4290	MISC		2,500	Miscellaneous
	TOTAL	**$**	**30,500**	
	CONTRACT LABOR			
4221	METERS & VALVES	$	3,000	Calibration of flow meters and sonde meters
4222	FISH PROJECTS MT. WORK		25,000	Maintenance of fish passage projects, CCC
	TOTAL	**$**	**28,000**	
	MATERIALS & SUPPLIES			
4390	MISC	$	7,000	Misc supplies/additional monitoring equipment
	TOTAL	**$**	**7,000**	
	OTHER EXPENSES			
4502	UNIFORMS	$	2,500	Biology crew gear
	TOTAL	**$**	**2,500**	
	TOTAL O & M EXPENSE	**$**	**691,118**	

Cachuma Operation & Maintenance Board
General and Administrative Expenses - Fisheries Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	*Account Name*		*Description*
GENERAL AND ADMINISTRATIVE EXPENSES			
5400	DIRECTORS FEES	$7,000	Directors Fees
5441	AUDIT	6,300	Annual Audit
5407	LEGAL	20,000	Legal
5443	GENERAL LIABILITY INSURANCE	24,745	General liability premiums
5401	HEALTH & Workers Comp.	35,672	Health and WC premiums
5402	CAL-PERS	27,027	PERS employer portion increased slightly
5403	FICA / MEDICARE	11,513	Payroll driven
5404-09	ADMINISTRATIVE SALARIES	150,500	Administrative Salaries
5410	POSTAGE/OFFICE SUPPLIES	2,000	Ofc supplies/postage
5411	OFFICE EQUIP/LEASES	5,218	Copiers lease / maintenance / Pitney Bowes
5412	MISC ADMIN EXP	4,870	J&C janitorial / Paychex / Website mtce & updates/misc
5413	COMMUNICATIONS	4,305	COX / Verizon / ATT
5414	UTILITIES	5,243	SCE / SC Gas
5415	MEMBERSHIP DUES	4,000	Fisheries Associations
5416	ADMIN FIXED ASSETS	3,000	Computers / Office Furniture
5418	COMPUTER CONSULTANT	5,000	Technical Expertise
5425	EMPLOYEE EDUCATION/SUBSCRIPTIONS	2,500	Admin Expense
5430	TRAVEL & CONF.	2,500	Travel Expenses
5431	PUBLIC INFO	1,500	Newpaper ads/public announcements
TOTAL		**$ 322,892**	

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 2016 - 2017

7/1/2016

Account Number	Account Name	Totals	Detail
GENERAL AND ADMINISTRATIVE DETAIL			
5400	Directors Fees	**$7,000**	
5407	Legal	**$20,000**	
5441	Audit	**$6,300**	
5443	Liability & Property Insurance	**$24,745**	
	Property		1,575
	Crime Coverage		420
	General Liability		22,750
5410	Postage and Office Supplies	**$2,000**	
5411	Office Equipment & Leases	**$5,218**	
	Coastal Copy		900
	Culligan Water		300
	GE Capital		3,118
	Pitney Bowes		900
5412	Misc Admin. Expense	**$4,870**	
	J & C Services		1,260
	Paychex		2,610
	Misc.		1,000
5413	Communications	**$4,305**	
	ATT		1,500
	Verizon		1,000
	COX Cable Online		1,805
5414	Utilities	**$5,243**	
	Southern California Edison		3,943
	The Gas Company		1,300
5415	Membership Dues	**$4,000**	
	American Fisheries Society		500
	ACWA		2,500
	Salmonid Restoration Federation		1,000
5416	Admin. Fixed Assets	**$3,000**	
			3,000
5418	Computer Consultant	**$5,000**	
			5,000
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
	TOTAL	**$98,181**	

Cachuma Operation & Maintenance Board
Support Services - Fisheries Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	Account Name	Totals		Description
6201	**Biological Opinion/FMP Implementation**	**$73,000**		
			46,000	BO Compliance Tasks and Support
			2,000	AMC and CC participation and tech support
			25,000	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**	**$8,000**		
			8,000	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
	TOTAL Special Projects	**$183,000**		

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

Cachuma Operation & Maintenance Board
Habitat Improvements - Fisheries Division
Proposed Draft Budget
Fiscal Year 2016 - 2017

7/1/2016

Account Number	*Account Name*	*Totals*		*Description*
6303	**Tributary Projects Improvements**	**$20,000**		
	HDR FishPro		20,000	Engineering
6207	**Oak Tree Restoration Program**	**$80,000**		
	Ken Knight Consultant		20,000	Oak Tree Consultant oversight
	Vendor		60,000	Materials and supplies
6312	**Quiota Creek Crossing Oa**	**$840,000**		
	HDR FishPro		30,000	Design support, bid administration
	Consultants		90,000	Permitting, Review, Inspections
	Contractor		720,000	Construction
6314	**Quiota Creek Crossing 4**	**$1,120,000**		
	HDR FishPro		30,000	Design support, bid administration
	Consultants		100,000	Permitting, Review, Inspections
	Contractor		990,000	Construction
6316	**Quiota Creek Crossing 5**	**$30,000**		
	HDR FishPro		30,000	Design support
6317	**Salsipuedes Creek Jalama Road Fish Ladder**	**$10,000**		
	HDR FishPro		10,000	
	TOTAL Habitat Enhancements	**$2,100,000**		
Grant Funding:				
	CDFW Grant Funding - Crossing No. 0a	$ (671,635)		
	CDFW Grant Funding - Crossing No. 4	$ (938,295)		
			$ (1,609,930)	
	NET Habitat Enhancement Cost	**$ 490,070**		

CACHUMA OPERATION & MAINTENANCE BOARD

Proposed Draft Budget Allocation FY 2016-17

OPERATIONS DIVISION

7/1/2016

ID#1 Allocated Costs (SC Operations Division)			FY 2016 -17
COMB Buildings / Grounds Repair	$150,000	10.31%	$ 15,465
TOTAL			$ 15,465

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
TOTAL	100.00%	$ 20,000

SCMU Allocated Costs (SC Ops Div)		
MEMBER UNIT		
Goleta Water District	40.42%	$ 1,771,335
City of Santa Barbara	35.88%	$ 1,572,378
Carpinteria Valley Water District	12.20%	$ 534,644
Montecito Water District	11.50%	$ 503,967
TOTAL	100.00%	$ 4,382,324

TOTAL Operations Division Budget		
MEMBER UNIT		
Goleta Water District	40.25%	$ 1,775,335
City of Santa Barbara	35.74%	$ 1,576,378
Carpinteria Valley Water District	12.18%	$ 538,644
Montecito Water District	11.49%	$ 507,967
Santa Ynez River Wtr Conservation District, ID#1	0.35%	$ 19,465
TOTAL	100.00%	$ 4,417,789

FISHERIES DIVISION

Stetson, Hanson Consultants Only		FY 2016 -17
MEMBER UNIT		
Goleta Water District	40.42%	$ 10,508
City of Santa Barbara	35.89%	$ 9,331
Carpinteria Valley Water District	12.20%	$ 3,171
Montecito Water District	11.50%	$ 2,989
Total allocated costs for Stetson, Hanson only	100.00%	$ 26,000

O & M, G & A, Special Projects		
MEMBER UNIT		
Goleta Water District	36.25%	$ 1,185,741
City of Santa Barbara	32.19%	$ 1,052,938
Carpinteria Valley Water District	10.94%	$ 357,849
Montecito Water District	10.31%	$ 337,241
Santa Ynez River Wtr Conservation District, ID#1	10.31%	$ 337,241
Total allocated costs for remaining FD budget	100.00%	$ 3,271,011

MEMBER UNIT		
Goleta Water District	36.28%	$ 1,196,250
City of Santa Barbara	32.22%	$ 1,062,270
Carpinteria Valley Water District	10.95%	$ 361,020
Montecito Water District	10.32%	$ 340,230
Santa Ynez River Wtr Conservation District, ID#1	10.23%	$ 337,241
TOTAL Fisheries Division Budget	100.00%	$ 3,297,011

MEMBER UNIT TOTALS		
Goleta Water District	39.16%	**$ 2,971,585**
City of Santa Barbara	34.77%	**$ 2,638,648**
Carpinteria Valley Water District	11.84%	**$ 899,663**
Montecito Water District	11.16%	**$ 848,197**
Santa Ynez River Wtr Conservation District, ID#1	3.07%	**$ 356,707**
TOTAL GROSS COMB BUDGET	100.00%	**$ 7,714,801**

CACHUMA OPERATION & MAINTENANCE BOARD

Proposed Draft Budget Allocation FY 2016-17

		7/1/2016 FY 2016 -17
Warren Act Trust Fund / Renewal Fund Offset		
Goleta Water District	36.25%	$ (105,552)
City of Santa Barbara	32.19%	$ (93,730)
Carpinteria Valley Water District	10.94%	$ (31,855)
Montecito Water District	10.31%	$ (30,020)
Santa Ynez River Wtr Conservation District, ID#1	10.31%	$ (30,020)
TOTAL	100.00%	**$ (291,178)**
County Betterment Fund Offset		
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)
TOTAL	100.00%	**($90,000)**
CDFW Grant Funding Offset		
Goleta Water District	36.25%	$ (583,600)
City of Santa Barbara	32.19%	$ (518,236)
Carpinteria Valley Water District	10.94%	$ (176,126)
Montecito Water District	10.31%	$ (165,984)
Santa Ynez River Wtr Conservation District, ID#1	10.31%	$ (165,984)
TOTAL	100.00%	**($1,609,930)**
NET TOTAL COMB BUDGET		
Goleta Water District	39.38%	$ 2,249,809
City of Santa Barbara	34.96%	$ 1,997,710
Carpinteria Valley Water District	11.93%	$ 681,836
Montecito Water District	11.25%	$ 642,914
Santa Ynez River Wtr Conservation District, ID#1	2.49%	$ 151,424
TOTAL		**$ 5,723,693**
2016-17 Estimated Annual Debt Service - EPFP Loan		
Goleta Water District	63.00%	$ 261,450
City of Santa Barbara		$ -
Carpinteria Valley Water District	19.00%	$ 78,850
Montecito Water District	18.00%	$ 74,700
Santa Ynez River Wtr Conservation District, ID#1		$ -
TOTAL	100.00%	**$ 415,000**
Annual Budget plus estimated debt service		
Goleta Water District		$ 2,511,259
City of Santa Barbara		$ 1,997,710
Carpinteria Valley Water District		$ 760,686
Montecito Water District		$ 717,614
Santa Ynez River Wtr Conservation District, ID#1		$ 151,424
TOTAL		**$ 6,138,693**
Quarterly Assessments		
Goleta Water District		$ 627,815
City of Santa Barbara		$ 499,428
Carpinteria Valley Water District		$ 190,172
Montecito Water District		$ 179,403
Santa Ynez River Wtr Conservation District, ID#1		$ 37,856
TOTAL		**$ 1,534,673**

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 & Maintenance Board
Annual COLA Calculation

April

L.A.		
	246.26	*15-16 Index*
	242.63	*14-15 Index*
	3.63	*Pts Increase*
Percentage Increase Year over Year		
Los Angeles	**1.5%**	
U.S.		
	237.78	*15-16 Index*
	236.69	*14-15 Index*
	1.08	*Pts Increase*
Percentage Increase Year over Year		
U.S.	**0.5%**	
Avg Increase	**1.0%**	

CACHUMA OPERATION AND MAINTENANCE BOARD

FISCAL YEAR 2016-2017

BUDGET SUMMARY

The Cachuma Operation and Maintenance Board was formed as a joint powers agency organized by the Cachuma Member Units pursuant to the provisions of Articles 1, 2, and 4 of Chapter 5, Division 7, Title 1 of the California Government Code (section 6500 et seq.) and the "1996 Amended and Restated Agreement for the Establishment of a Board of Control to Operate and Maintain the Cachuma Project - Cachuma Operation and Maintenance Board." The 1996 Amended and Restated Agreement, Contract No. 14-06-200-5222R "Contract for the Transfer of Operation and Maintenance of the Cachuma Transferred Project Works" by and between the United States and COMB, Contract No. 175r-1802R "Contract Between the United States and Santa Barbara County Water Agency Providing for Water Service from the Project," and the "Cachuma Project Member Units Contracts" between the County Water Agency and each of COMB's five Member Units, provide for the rights to, the facilities of, and the operation, maintenance and use of the United States, Department of the Interior, Bureau of Reclamation project known as the Cachuma Project, including storage, treatment, transport and appurtenant facilities, and all necessary tangible and intangible property and rights. COMB is also provided the authority for the financing of "costs" for the capture, development, treatment, storage, transport and delivery of water.

In September of 2010, the Cachuma Operation and Maintenance Board approved a budget adjustment effective January 2011 to transfer from CCRB the implementation of the Santa Ynez Fisheries Program as required by the 2000 Biological Opinion. The Lower Santa Ynez River Fish Management Plan (FMP) and the Cachuma Project Biological Opinion (BO) were issued in 2000. A long-term Fish Management Program was developed which provides protection for steelhead/rainbow trout downstream of Bradbury Dam through a combination of water releases from Bradbury Dam through the Hilton Creek watering system, and the removal or modification of numerous fish passage barriers to steelhead on tributaries to the mainstem Santa Ynez River. By implementing these actions, the Cachuma Member Agencies have created significant additional habitat for steelhead within the Santa Ynez River watershed.

OPERATIONS AND MAINTENANCE DIVISION:

Program Description

To maintain and support all associated costs of operating and maintaining the Tecolote Tunnel, South Coast Conduit and all appurtenant facilities and four regulating reservoirs: Glen Anne, Lauro, Carpinteria, and Ortega reservoirs.

LABOR – 3100 - 3165

Operation and Maintenance Labor is actual labor costs of the total salaries and benefits for a six member field crew and an Operations Division Manager position. The benefits include medical, dental and vision insurance coverage, a $20,000 life insurance policy per employee, an employee assistance program (EAP), and the Cal-PERS retirement contribution (2% @ 55%

Formula - All employees hired after January 2013 who are not classified as "classic" members will contribute 6.55% of the CalPERS retirement premium from their bi-weekly paycheck). The health, vision, dental and life insurance programs are selected through ACWA/JPIA. The Workers' Compensation premiums are based on payroll calculated at various percentages depending on the category of each employee (clerical, outside sales and field operations). FICA is a mandatory employer expense. A multiple policy discount has been applied as additional savings to the employee benefits program. The overall labor line item includes a 1% COLA per the annual calculation and reflects a decrease as compared to the prior year.

3103 Labor Operations	$ 503,586
3155 CalPERS	77,834
3150 Health Insurance	167,281
3150 Workers Compensation	25,150
3160 FICA	38,524
Total of these accounts:	$ 812,376

VEHICLES & EQUIPMENT – 3201 thru 3204

The Vehicles and Equipment account is made up of four sub-accounts which include funds for the purchase of vehicles, fuel, parts, inspections and maintenance of vehicles, equipment, and rental of equipment for both replacement and upgrading of the conveyance system. In particular, account 3201 includes supplies necessary to operate vehicles and equipment such as fuel, oil, tires, parts, inspections and labor, etc. This account reflects amounts determined by historical expense data and projected operational needs. Account 3202 contains funds for the purchase of replacement vehicles, equipment or large tools as may be necessary in the fiscal year. Account 3203 includes all rental equipment charges necessary for operation. Account 3204 is utilized for the purchase of small tools, equipment and supplies. These accounts are increased or decreased annually to reflect changes in the price, work plan and number of items appropriately designated to be purchased from these accounts.

Totals by Account:	3201 Vehicle/Equip Maint.	$ 30,000
	3202 Fixed Capital	15,000
	3203 Equip Rental	5,000
	3204 Misc.	5,000
		$ 55,000

CONTRACT LABOR - 3301 thru 3304

The Contract Labor account contains funds for outside services/labor that cannot be supported by COMB staff which may include elevator repair, tree trimming and removal services, heavy equipment and operators' labor costs for various small projects, meter calibration and meter repair, etc. The amounts have been distributed through 3301, 3302 & 3303 to reflect the costs accurately. Account 3304 is used to hire consultants as necessary for extraordinary engineering, design or study projects. This account has increased from the prior fiscal year due to contracting with CCC and anticipated engineering services.

Totals by Account:	3301 Conduit, Meter, Valve	$ 20,000
	3302 Buildings & Roads	20,000
	3303 Reservoirs	30,000
	3304 Engineering, misc.	25,000
		$ 95,000

MATERIALS / SUPPLIES - 3401 thru 3403

The Materials and Supplies account covers costs related to operation and maintenance of the conduit, reservoirs, and outlying buildings and roads. This account includes funding for gravel, fencing, charts, locks, paint, fire extinguishers, etc. This account has increased due to the anticipated purchase of inventory and supplies for staff to complete projects within the Infrastructure Improvement Plan.

Totals by Account:	3401 Conduit, Meter, Valve	$ 65,000
	3402 Buildings & Roads	15,000
	3403 Reservoirs	10,000
		$ 90,000

OTHER EXPENSES - 3501 thru 3506

The Other Expenses account includes utilities, uniforms, hazardous waste disposal, communications (phones at facilities and cell phones for operations & maintenance), Underground Service Alerts, employee training and certifications. All of these costs are based on actual charges for the services and changes in amounts are made only as necessary. This account is budgeted slightly less than the prior fiscal year.

Totals by Account:	3501 Utilities	$ 7,000
	3502 Uniforms	5,000
	3503 Communications	18,000
	3504 USA & Other Svcs	4,000
	3505 Misc.*	8,000
	3506 Training & Certs	3,000
		$45,000

*Misc detail:

Operations Division non-fixed assets expenses, computer/software/office supply needs, shipping, refuse/recycle/green waste/non-hazmat material disposal, portable toilets/roll off boxes, operations employment ads/background checks.

Non-fixed assets	$ 1,000
Operations computer/ Software/office supply needs	2,000
Refuse/recycle, etc.	3,000
Portable toilets/roll offs	2,000
	$ 8,000

TOTAL O & M EXPENSES – Operations Division **$1,097,376**

GENERAL AND ADMINISTRATIVE

Program Description

The General and Administrative (G & A) accounts reflect costs for support of all administrative functions of COMB. The G & A portion of the budget provides for the time and effort spent by administrative staff in many areas that are to the benefit of all five Member Units of COMB. These include water supply and delivery reports, human resources and risk management, tax, audit, contractual and employment law, salary & benefits, accounting and bookkeeping, communications with Federal, State and local agencies and the general public on a variety of contractual and informational matters. Most of the Administrative accounts are allocated between the Operations Division (65%) and the Fisheries Division (35%) according to payroll allocations.

DIRECTORS' FEES - 5000

This account reflects Directors' fees at a rate of $128.00 per meeting and mileage expenses and remains unchanged from the previous fiscal year. The Directors will decide future increases by public meeting and change of ordinance. This cost is allocated between the Operations and Fisheries division.

Total of this account: $13,000

AUDIT - 5100

This account reflects costs for the annual COMB audit allocated 65% to the operations division and 35% to the fisheries division.

Total of this account: $20,000

LEGAL - 5101

This account reflects costs for the COMB general counsel and any special litigation expenses. The legal line item for the Operations Division is budgeted slightly lower than the prior fiscal year.

Total of this account: $75,000

UNEMPLOYMENT TAX - 5150

COMB belongs to the California State Unemployment "self-insured" program which means that we do not actually pay unemployment premiums, but we must budget for and have the ability to pay any unemployment claims which may arise. This account is an estimate.

Total of this account: $ 5,000

LIABILITY / PROPERTY INSURANCE - 5200

This account reflects insurance costs for coverage provided by ACWA/JPIA for all general liability, property insurance (buildings, personal property, fixed equipment, and catastrophic coverage), crime coverage, employee dishonesty, and replacement costs. The general liability premiums are based on a formula that includes annual payroll as well as a three year loss history of claims. The property insurance premiums are based on value of property in which coverage is provided. The general liability and property insurance line item is an allocated cost between Operations and Fisheries Divisions.

Total of this account: $ 45,955

HEALTH AND WORKERS' COMPENSATION, Retirees Medical - 5201

This account reflects costs for 65% of all administrative staff health premiums (medical, dental, vision & life), and employee assistance program (EAP), workers' compensation premiums as well as all retiree health premiums. The cost for health premiums is a set premium amount for each employee and their dependents, as well as eligible retirees, depending on hire date. The health, workers compensation and life insurance programs were negotiated through ACWA/JPIA and, although there have been substantial increases in the past, the premiums have remained competitive throughout the years. This line item includes a projected increase in health premiums which may occur in January 2017.

Total of this account: $174,747

CalPERS - 5250

This account reflects costs for the California Public Employees Retirement System. The costs are based on 65% of salaries for all COMB administrative staff. COMB pays the employer and employee cost for classic members and new hires pay 50% of the normal cost contributions. Our current employer contribution percentage remains relatively low. The calculation of this account is payroll driven.

Total of this account: $ 50,193

FICA & MEDICARE - 5339

This account reflects 65% of the matching share of social security and Medicare taxes for all administrative employees.

Total of this account: $ 21,382

ADMINISTRATIVE SALARIES – 5300 - 5307

This account reflects salaries for the specified positions of General Manager, Administrative Manager, Administrative Assistant III, and Administrative Assistant I at 65% apportionment. The salaries for all administrative staff (except the GM) contain a .9% cost of living increase. The COLA calculation is based on a melding of both the Los Angeles / Riverside index with the US City average index for a 13 month rolling period. The salary for the General Manager is set by the COMB Board. This line item has been reduced as compared to the prior fiscal year.

Total of these accounts: $ 279,500

OFFICE EXPENSE & POSTAGE - 5310

The Office Expense & Postage account reflects the cost of all office supplies and postage for general and administrative tasks. General and Administrative expenses have been reduced to the lowest level of effective operation.

Total of this account: $ 5,000

OFFICE EQUIPMENT/LEASES/SERVICES - 5311

The Office Equipment/Leases account includes costs associated with leases and quarterly service agreements for postage machine, copier equipment and any maintenance fees.

Total of this account: $ 8,000

MISCELLANEOUS ADMINISTRATIVE EXPENSE - 5312

This account contains funds necessary for office cleaning, board meeting supplies, outside payroll services, building alarm renewal, and miscellaneous expenses. General and Administrative expenses have been reduced to the lowest level of effective operation.

Office Cleaning	$2,350
Paychex payroll costs	3,600
Misc. expenses	1,200
Total of this account:	$ 7,150

COMMUNICATIONS - 5313

This account contains funds necessary for the telephone service, long distance service, cable internet service, conference call service and cell phone service. General and Administrative expenses have been reduced to the lowest level of effective operation.

Total of this account: $ 8,500

UTILITIES - 5314

This account contains funds necessary to provide utilities to the administrative offices.

Total of this account: $ 9,737

MEMBERSHIP DUES - 5315

This account reflects membership dues for ACWA, ASME, APWA, AWWA, and subscriptions for professional publications.

Total of this account: $ 8,000

ADMINISTRATIVE FIXED ASSETS - 5316

This fiscal year's fixed assets include the replacement of computers and office furniture as needed. This account has been reduced as compared to the prior fiscal year.

Total of this account: $ 3,000

COMPUTER CONSULTANT - 5318

This account was established for an outside consulting company which provides monitoring and technical support for all of our information technology and computer related needs. This account has been reduced due to contracting with a new consultant on a time and materials basis.

Total of this account: $ 15,000

EMPLOYEE EDUCATION / TRAINING - 5325

This account was established to provide employees with the ability to obtain professional training, required certifications and for management training purposes. This account also provides for human resources and employee related subscriptions. This account remains the same as compared to the prior fiscal year.

Total of this account: $ 2,000

ADMINISTRATIVE TRAVEL - 5330

This account reflects actual travel costs for the COMB staff. This account is also used for attendance at conferences by the General Manager and/or staff.

Total of this account: $ 2,000

PUBLIC INFORMATION - 5331

This account is available for public information bulletins, website or newsletters in order to communicate with the community in case of emergencies or environmental impacts on the COMB water distribution system or reservoirs.

Total of this account: $ 1,000

TOTAL GENERAL AND ADMINISTRATIVE - Operations Division $ 754,163

SPECIAL GENERAL AND ADMINISTRATIVE

INTEGRATED REGIONAL WATER MANAGEMENT PLAN - 5510

This account has been established for COMB to participate in the development and maintenance of an integrated regional water management plan for Santa Barbara County.

Total of this account: $ 5,000

TOTAL SPECIAL GENERAL AND ADMINISTRATIVE – Operations Division $ 5,000

INFRASTRUCTURE IMPROVEMENT PROJECTS – Operations Division

(Refer to Infrastructure Improvement Plan for FY 2016-17 project descriptions)

SCADA SYSTEM – 6062	$ 20,000
COMB BUILDING AND GROUNDS REPAIR - 6090	$ 150,000

GIS AND MAPPING - 6097

Over the past several years, COMB has developed a Geographical Information System by purchasing and maintaining the latest software, components, and data input. This budget year COMB continues to update the GIS data base with current information that also periodically requires software updates. This account will also be used to keep licenses current and maintenance of the programs up to date. The GIS database is used daily for USA callouts and the newly developed maintenance management program.

Total of this account:	$ 10,000
SCC STRUCTURE REHABILITATION (AVAR/BO VALVES) – 6096	$240,000
RIGHT OF WAY IDENTIFICATION PROGRAM – 6105	$ 20,000
NORTH PORTAL JET FLOW CONTROL VALVE – 6109	$ 50,000
MISSION CREEK PIPELINE – 6111	$ 50,000
REPAIR LATERAL 3 STRUCTURE – 6118	$100,000
LAURO DIVERSION VALVE – 6131	$ 75,000
INFRASTRUCTURE IMPROVEMENT PROJECTS TOTAL	**$ 715,000**

EMERGENCY PUMPING FACILITIES PROJECT – 6120

This line item will provide the resources necessary to pump Carryover, State and Supplemental water from the lake to the intake tower.

Total of this account: $1,846,250

TOTAL IIP and Special Projects	**$ 2,561,250**
TOTAL OPERATIONS DIVISION BUDGET	**$ 4,417,789**

OPERATIONS AND MAINTENANCE - Fisheries Division

Program Description

To maintain and support all associated costs of operation and maintenance as they relate to the implementation of the NMFS Biological Opinion and the Lower Santa Ynez River Fish Management Plan.

LABOR – 4100 - 4152

The Fisheries Division Labor line item reflects labor costs and benefits for a three member field crew, a Senior Resource Scientist, and four part-time seasonal bio-aide positions. The benefits include medical, dental and vision insurance coverage, a $20,000 life insurance policy per employee, deferred compensation, matching social security contributions, mandatory workers' compensation coverage, an employee assistance program (EAP), FICA/Medicare and a CalPERS retirement contribution (2% @ 55 formula). This line item includes a .9% COLA per the annual calculation.

4100	Labor Biology Field Crew	$ 333,228
4114	Labor Seasonal Field Crew	68,000
4151	CalPERS	66,607
4150	Health Insurance	104,528
4150	Workers Compensation	20,061
4152	FICA	30,694
Total of these accounts:		$ 623,118

VEHICLES & EQUIPMENT - 4270 thru 4290

The Vehicles and Equipment section is made up of three accounts which include funds for the purchase of vehicles, fuel, parts, inspections and maintenance of vehicles and equipment. Account 4270 includes supplies necessary to operate vehicles and equipment such as fuel, oil, tires, parts, inspections and labor, etc. This account reflects amounts determined by historical expense data and projected operational needs. Account 4280 contains funds for the purchase or replacement of equipment or large tools as may be necessary in the fiscal year, specifically thermographs, digital camera, pressure transducers, and replacement probes for the three Sondes. Account 4290 includes funding all miscellaneous items affiliated with vehicles or equipment. These accounts are increased or decreased annually to reflect changes in the price and number of items appropriately designated to be purchased from these accounts.

Totals by Account:	4270 Vehicles	$ 13,000
	4280 Fixed Capital	15,000
	4290 Miscellaneous	2,500
		$ 30,500

CONTRACT LABOR – 4220, 4222

The Contract Labor account contains funds for outside services/labor to support equipment calibration on flow meters and sonde meters, and funds for technical assistance corresponding to the operation, maintenance and performance review of completed fish passage projects. Completed tributary projects at Rancho San Julian, Cross Creek Ranch, and Quiota Creek Crossings require annual performance evaluation; licensed fish passage engineers need to conduct the structural evaluation whereas the biological evaluation and report are done by COMB staff. This line item also contains funding for 50% of the CCC contract.

Totals by Account:	4220 Equip. Calib.	$ 3,000
	4222 Projects Maint.	25,000
		$ 28,000

MATERIALS / SUPPLIES - 4390

The Materials and Supplies account covers costs for the purchase of materials needed for the Fisheries Monitoring Program specifically monitoring for migration, spawning and over-summering such as constructing and repairing fish migration traps (pvc, netting, plywood, locks, waders, etc.) and the equipment necessary to conduct snorkel (dry suit, masks, snorkels, hoods, gloves, etc.) and redds surveys (waders, clipboards, etc). This account has increased considerably compared to the prior fiscal year due to the purchase of materials to construct new migration traps.

Total of this account: $ 7,000

OTHER EXPENSES - 4502

The Other Operating Expenses account includes funds to pay for uniforms and gear for the fisheries employees. This account is based on actual charges for the above services and changes in amounts are made only as necessary.

Total of this account: $ 2,500

TOTAL O & M EXPENSES – Fisheries Division $691,118

GENERAL AND ADMINISTRATIVE – Fisheries Division

Program Description

The General and Administrative accounts reflect costs for support of all fisheries division administrative functions of COMB. The salaries and benefits are divided at a 65% - 35% basis between the Operations Division and the Fisheries Division based on payroll allocations. General and Administrative expenses have been reduced to the lowest level of effective operation for FY 2016-17.

DIRECTORS FEES - 5400

This account reflects Directors' fees at a rate of $128.00 per meeting and mileage expenses. The increase from the prior year affiliated with this account is due to the inclusion of costs for any Special Board meetings and a more regular use of the Committee process. The Directors will decide future increases by public meeting and change of ordinance. This cost is allocated between Operations and Fisheries divisions.

Total of this account: $7,000

LEGAL - 5407

This account reflects the costs for General Counsel expense affiliated with the Fisheries Division program of work.

Total of this account: $ 20,000

AUDIT - 5441

This account reflects costs for a portion of the annual COMB audit.

Total of this account: $ 6,300

LIABILITY/PROPERTY INSURANCE – 5443

This account reflects a portion of insurance costs for coverage provided by ACWA/JPIA for all general liability and property i.e., buildings, structures, computers, modular furniture, copiers, postage meters, vehicles and an increase in replacement costs of all properties belonging to COMB.

Total of this account: $ 24,745

HEALTH AND WORKERS' COMPENSATION - 5401

This account reflects costs for 35% of all administrative staff health premiums (medical, dental, vision & life), and employee assistance program (EAP), deferred compensation and workers' compensation premiums. The cost for health premiums is a set premium amount for each employee and their dependents. The health and life insurance programs were negotiated through ACWA/JPIA and although there have been substantial increases in the past, the premiums have remained competitive throughout the years. This line item includes a projected increase in health premiums which may occur in January 2017.

Total of this account: $ 35,672

CalPERS - 5402

This account reflects 35% percent of costs for the California Public Employees Retirement System for administrative personnel charged to the fisheries division. All employees hired after January 2013 who are not classified as "classic" members will contribute 6.55% of the CalPERS retirement premium from their bi-weekly paycheck. The calculation of this account is payroll driven.

Total of this account: $ 27,027

FICA & MEDICARE - 5403

This account reflects 35% of the matching share of social security and Medicare taxes for all administrative employees.

Total of this account: $ 11,513

SALARIES – 5404, 5405, 5408, 5409, 5419

This account reflects a 35% allocation of salaries for the General Manager, Administrative Manager, Administrative Assistant III, and Administrative Assistant I.

Total for this account: $150,500

POSTAGE / OFFICE SUPPLIES EXPENSE - 5410

The Office Expense & Postage account reflects the cost of all office supplies and postage for general and administrative tasks attribute to the fisheries division.

Total of this account: $ 2,000

OFFICE EQUIPMENT/LEASES/SERVICES - 5411

The Office Equipment / Leases account includes the fisheries division portion of leases and quarterly service agreements for postage machine, copier equipment and any maintenance fees.

Total of this account: $ 5,218

MISCELLANEOUS ADMINISTRATIVE EXPENSE - 5412

This account contains funds necessary for office cleaning, Board meeting supplies, Paychex payroll costs, outside copy costs and other minor miscellaneous expenses.

Total of this account: $ 4,870

COMMUNICATIONS - 5413

This account contains funds necessary for the telephone service, long distance service, cable internet service, and staff cell phones.

Total of this account: $ 4,305

UTILITIES - 5414

This account contains funds necessary to provide utilities to the administrative offices affiliated with the fisheries division program of work.

Total of this account: $ 5,243

MEMBERSHIP DUES - 5415

This account reflects costs for membership dues for the American Fisheries Society as well as a portion of ACWA dues as they pertain to the fisheries division employees. This account also covers subscriptions for professional publications.

Total of this account: $ 4,000

ADMINISTRATIVE FIXED ASSETS - 5416

This fiscal year's fixed assets include the purchase of computers according to the replacement schedule and office equipment / furniture as needed.

Total of this account: $ 3,000

COMPUTER CONSULTANT / SOFTWARE LICENSES - 5418

This account was established to fund needs for all computer and internal network systems support through outside computer consultant services. It also accommodates purchasing and updating of software licenses.

Total of this account: $ 5,000

EMPLOYEE EDUCATION / SUBSCRIPTIONS - 5425

This account was established to provide employees with the ability to obtain professional training, required certifications and for management training purposes specifically for in field and office operations, and safety and regulatory compliance. This account also provides for employee related subscriptions to professional fisheries organizations.

Total of this account: $ 2,500

ADMINISTRATIVE TRAVEL - 5430

This account provides for actual travel costs for professional conferences, seminars, training, and strategy meetings that are attended by the General Manager and/or staff throughout the fiscal year.

Total of this account: $ 2,500

PUBLIC INFORMATION - 5431

This account is for miscellaneous costs that may arise out of public records act requests, newsletters, webpage support or other public information requirements.

Total of this account: $ 1,500

TOTAL GENERAL AND ADMINISTRATIVE EXPENSES
Fisheries Division - $ 322,892

SPECIAL PROJECTS – Fisheries Division

BIOLOGICAL OPINION/FMP IMPLEMENTATION - 6201

This line item provides funding for outside consultant support on activities which include participation in the NFMS Biological Opinion compliance preparation as well as review of technical reports, study plans, participation in coordination and review meetings and conference calls.

BO Compliance Tasks and Support
$46,000

This task addresses ongoing Cachuma Project Biological Opinion (BO) compliance efforts and implementation of the Lower Santa Ynez River Fisheries Monitoring Program (FMP). As needed, consultants will provide technical and analytical support and review of the fisheries monitoring program and any proposed study plans. This may require participation on the Science Advisory Committee to obtain consensus on the recommendations. A fish passage engineer will review, evaluate, and develop technical elements of fisheries related monitoring, fish passage and restoration program elements. In addition, this item includes bio-statistician support and genetic tissue analysis (fish fin clips) conducted by a National Marine Fisheries Service certified geneticist. Activities may involve background research, concept development, content development and production schematics support for the ongoing BO and FMP activities.

AMC and CC Participation and Technical Support
$2,000

Conference calls preparation and follow-up per call as well as participation in face-to-face meeting of the AMC and CC if necessary. Technical support to COMB in preparing work products for the AMC and the CC as required.

Review of Fisheries Monitoring Reports
$25,000

Review of any fisheries monitoring reports that are prepared by the Cachuma Project Biology Staff. These reports would be compliance measures for terms and conditions presented in the BO and would include the Annual Monitoring Report and technical memos prepared for Reclamation as well as the AMC, CC or COMB Board. This may include participation on the Science Advisory Committee to discuss comments on the reviewed reports.

Total of this account: $ 73,000

GIS AND MAPPING - 6202

This account provides funds for the purchase and maintenance of the GIS and GPS system components, software (ESRI, AutoCAD, Field Maplet, MapLogic, Photoshop), hardware, aerial imagery, and GIS/GPS technical support.

Total of this account: $ 10,000.

GRANTS AND SEMINAR TECHNICAL SUPPORT - 6203

This account provides funds for restoration grant technical evaluation and review to assure the most complete, thorough and competitive grant application possible in support of the Fisheries Program. In addition, these funds will be used for needed technical seminars on specific subjects in support of the endangered southern steelhead on the Lower Santa Ynez River.

Total of this account: $ 10,000.

SYR HYDROLOGY TECHNICAL SUPPORT - 6204

This project includes funding for consultants who provide hydrologic support for analyzing operations in the SYR basin and operations for the Fisheries Program.

Total of this account: $ 8,000

USGS STREAM GAUGE PROGRAM - 6205

This line item is to fund the required stream discharge and water quality monitoring on the lower Santa Ynez River and its tributaries in compliance with the NMFS Biological Opinion.

Total of this account: $ 77,000

TRI COUNTY FISH TEAM FUNDING - 6206

This line item is to fund COMB's agreed upon portion of the MOU for financial support of the Tri-County salmonid restoration efforts.

Total of this account: $ 5,000

TOTAL PROGRAM SUPPORT SERVICES $183,000

HABITAT ENHANCEMENTS

TRIBUTARY PROJECTS SUPPORT CONSULTANT - 6303

This line item is to fund technical assistance provided by a fish passage engineer for tasked anticipated to include refinement of monitoring methods and procedures, hydraulic review of fish passage within a stream network, troubleshooting of general operation and maintenance issues, and review of miscellaneous technical data and reporting.

Total of this account: $ 20,000

OAK TREE RESTORATION PROGRAM - 6207

This line item is to fund the eighth year of oak tree planning efforts at several planting sites bordering the Cachuma Lake and Bradbury Dam. This planting and maintenance program is intended to result in a 2:1 replacement of oak trees lost due to the higher water elevations during surcharge events.

Total of this account: $ 80,000

QUIOTA CREEK CROSSING No. 0a - 6312

This line item is to fund the continued design effort and construction of Quiota Creek Crossing 0a which is slated to take place in the fall of 2016. The CDFW has awarded grant funding of $671,635 toward this project with a landowner match of $50,000. COMB's net obligation for completion of this project is approximately $100,000.

Total of this account: $ 840,000

QUIOTA CREEK CROSSING No. 4 - 6314

This line item is to fund the continued design effort and construction of Quiota Creek Crossing No. 4 which will begin in the fall of 2016. The CDFW has awarded grant funding of $938,295 with a COMB construction match of $50,000. COMB's net obligation for completion of this project is approximately $125,000.

Total of this account: $ 1,120,000

QUIOTA CREEK CROSSING No. 5 - 6316

This line item is to fund the continued design effort on Quiota Creek Crossing No. 5 which will be used for NMFS and CDFW design approval as well as permitting with regulatory agencies and the County of Santa Barbara. Design engineering will continue toward 100% design level.

Total of this account: $ 30,000

SALSIPUEDES FISH LADDER REPAIR - 6315

This line item is to fund the repair of the fish ladder originally installed on Salsupuedes Creek in 2004. The anticipated fix will include a modification to each weir invert to reverse the angle, enhance the grade control structure to focus more flow through the fish ladder, and install two weirs downstream to increase the scour pool height for easier access to the fish ladder.

Total of this account: $ 10,000

TOTAL HABITAT ENHANCEMENTS	**$2,100,000**
TOTAL PROGRAM SUPPORT AND HIP:	**$2,283,000**
TOTAL FISHERIES DIVISION BUDGET:	**$3,297,011**
TOTAL COMB BUDGET 2016-2017	**$7,714,800**

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FY 2017-2021

Infrastructure Improvement Plan

Operations Division

Executive Summary

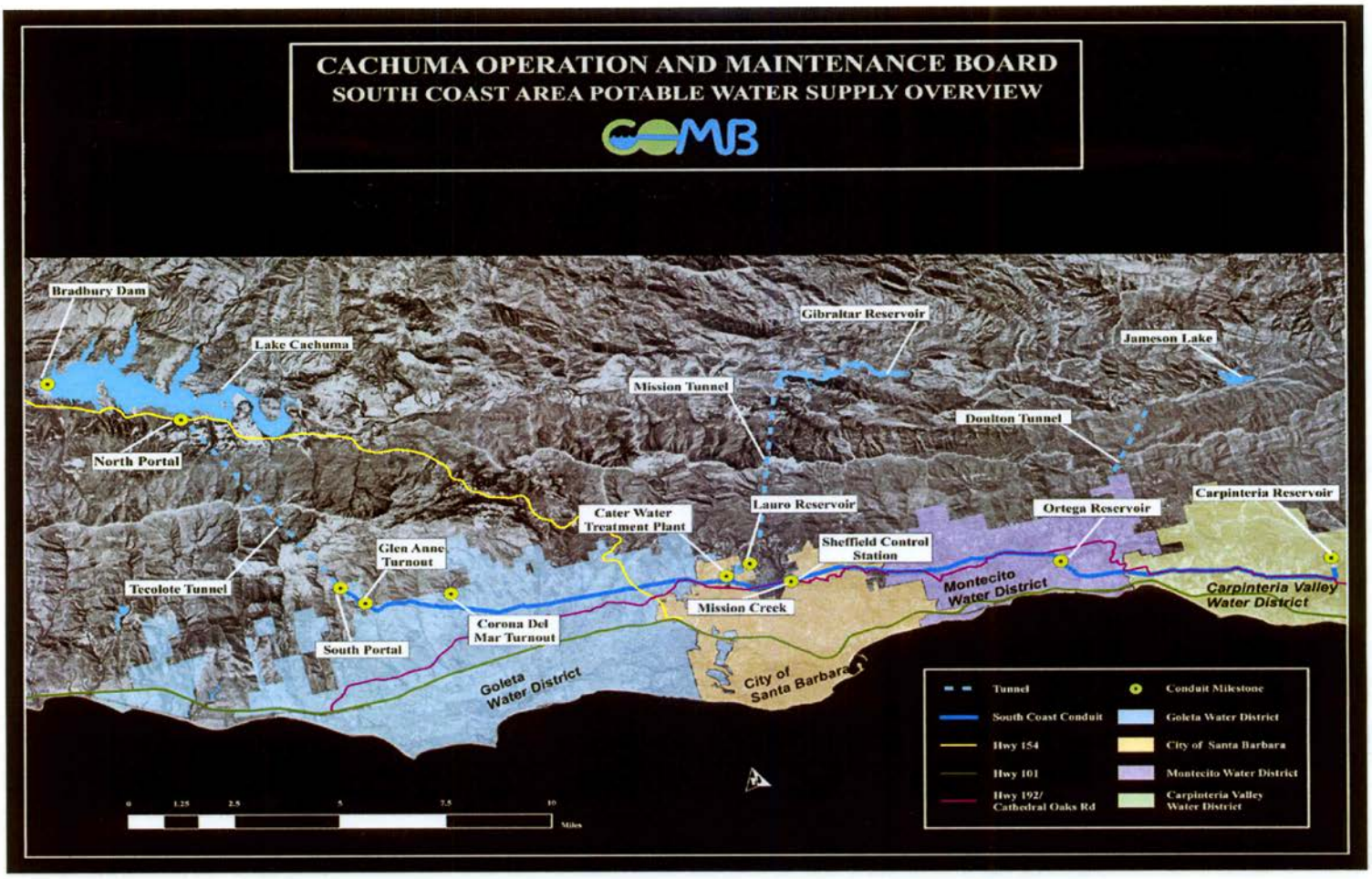
The Cachuma Project was constructed in the early 1950s by the United States Department of the Interior, U.S. Bureau of Reclamation under contract with the Santa Barbara County Water Agency on behalf of the Cachuma Project Member Units. The original cost of the Cachuma Project was approximately $25.1 million. Using a CPI inflator, the present value is approximately $212.7 million. This amount does not include labor costs increases, land use or environmental considerations that have evolved subsequent to original construction. Inclusion of these additional costs would result in a substantially higher replacement cost.

The Cachuma Member Units are the 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 by the Cachuma Member Agencies pursuant to an agreement with the U.S. Bureau of Reclamation (Reclamation). The agreement transferred to the Cachuma Member Agencies the responsibility to operate, repair and maintain all Cachuma Project facilities exclusive of Bradbury Dam. COMB is the mechanism through which the Member Agencies carry out that responsibility. The Member Agencies 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 Agencies. 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 Agencies 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)(non-operational), 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 to 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 provide a methodology for 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
COMB
Bradbury Dam
Lake Cachuma
North Portal
Tecolote Tunnel
Glen Anne Turnout
South Portal
Corona Del Mar Turnout
Cater Water Treatment Plant
Mission Tunnel
Gibraltar Reservoir
Lauro Reservoir
Mission Creek
Sheffield Control Station
Doulton Tunnel
Jameson Lake
Ortega Reservoir
Carpinteria Reservoir
Montecito Water District
Carpinteria Valley Water District
City of Santa Barbara
Goleta Water District
Tunnel
South Coast Conduit
Hwy 154
Hwy 101
Hwy 192/ Cathedral Oaks Rd
Conduit Milestone
Goleta Water District
City of Santa Barbara
Montecito Water District
Carpinteria Valley Water District
0
1.25
2.5
5
7.5
10
Miles

Overview

1.1 Introduction

COMB's Five-Year Infrastructure Improvement Plan (IIP) is structured to identify and prioritize rehabilitation projects for COMB Board and Member Agency 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 Agencies. 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 project development process. The plan will correspondingly be submitted to the Administration Committee for budget development. Concurrent with Administration Committee review, the plan will be forwarded the Member Agency General Managers for review and comment. 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. The comprehensive identification of near and long-term projects over a five-year planning horizon will be subject to annual addition and amendment as the identification and analysis of operation and maintenance evolves. Previously, substantial asset rehabilitation planning work has been accomplished with the assistance of contracted engineering firms. Those efforts 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 3rd and 6th year of selected Cachuma Project facilities and components. However, the ranking categories used in their inspection reports do 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 IIP provides an inventory of those assets determined to require rehabilitation over a five-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 in anticipation of 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. The Infrastructure Improvement Plan will:

1. Display project ranking criteria to enable a structured analysis by each Director and Member Agency.
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 Agency 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.

Projects may be shifted to out years and replaced with other approved projects based on conditions that would impact a shut-down of the South Coast Conduit or other considerations. Conversely, conditions that would allow a minimally disruptive shut-down may cause a project or projects to be moved forward. It is the intent to have projects shovel ready to enable completion during optimal conditions and to minimize shut-downs of the South Coast Conduit.

The South Coast Conduit has six shut-down valve locations extending from the South Portal that allows a locational shut-down of the system for maintenance and repair thereby reducing system disruption.

Description of Rating Criteria
Table 1

32%	Water Supply Reliability		
	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
30%	Risk		
	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
18%	Critical Need/Life Cycle of asset		
	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
12%	Safety		
	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
8%	Service Disruption Necessary to Accomplish Project		
	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
100%	**The criteria percentages were established using factors deemed important specifically to the Cachuma Project System.**		

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 Agency Agencies.

1.6 Cost Estimates

The cost estimates included for each IIP project are derived from internal estimates or developed by professional engineering consultants. Estimates may change as more precise information becomes available.

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.

Table: 5-year Infrastructure Improvement Plan Scoring Matrix

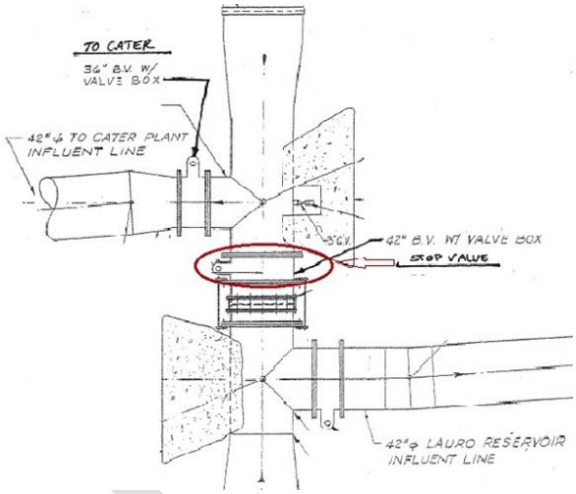
Infrastructure Improvement Plan Projects	Page No.	Water Supply Reliability		Risk		Critical Need		Safety		Service Disruption		Ranking
		Weight:		Weight:		Weight:		Weight:		Weight:		
Project Name/Description		Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	Score	Wt. Score	
Lauro Stop Valve Replacement	10	3	32%	3	30%	3	18%	3	12%	2	5%	**97%**
South Coast Conduit AVAR Riser Pipe Replacement *	12	3	32%	3	30%	3	18%	3	12%	1	3%	**95%**
South Coast Conduit Blowoff Valve Riser Pipe Replacement *	14	3	32%	3	30%	3	18%	3	12%	1	3%	**95%**
Repair Lateral 3 - Upper Reach *	15	3	32%	3	30%	3	18%	3	12%	1	3%	**95%**
North Portal Jet Flow Spool Installation Project *	16	3	32%	3	30%	3	18%	2	8%	1	3%	**91%**
South Coast Conduit Air Vacuum Air Release Valve Replacement / Relocation *	17	3	32%	3	30%	3	18%	2	8%	1	3%	**91%**
Mission Creek South Coast Conduit Crossing	18	3	32%	3	30%	2	12%	1	4%	3	8%	**86%**
Rehabilitate San Antonio Creek Blow-off *	20	3	32%	3	30%	2	12%	2	8%	1	3%	**85%**
Glen Annie Reservoir Rehabilitation	21	2	21%	3	30%	2	12%	3	12%	3	8%	**83%**
Rehabilitate South Coast Conduit Lower Reach Lateral Structures *	24	3	32%	2	20%	2	12%	2	8%	2	5%	**77%**
Sheffield Tunnel Inspection and Evaluation	25	3	32%	2	20%	1	6%	2	8%	3	8%	**74%**
South Portal Slope Stabilization	26	2	21%	2	20%	2	12%	3	12%	3	8%	**73%**
Inspect Interior of Ortega Outlet Pipe *	27	3	32%	2	20%	1	6%	2	8%	2	5%	**71%**
Inspect Interior of Sheffield Tunnel Pipe *	27	3	32%	2	20%	1	6%	2	8%	2	5%	**71%**
Inspect Interior of Lauro Dam Pipe *	27	3	32%	2	20%	1	6%	2	8%	2	5%	**71%**
Inpect Interior of Carpinteria Control Station Pipe *	27	3	32%	2	20%	1	6%	2	8%	2	5%	**71%**
Install a second sump pump in the lower chamber of the North Portal	28	2	21%	2	20%	2	12%	2	8%	3	8%	**69%**
Rebuild inflow Rip Rap at Lauro Reservoir	29	2	21%	2	20%	2	12%	2	8%	2	5%	**67%**
North Portal Slope Stabilization	30	1	11%	2	20%	2	12%	2	8%	3	8%	**59%**
Tecolote Tunnel Concrete Deterioration Investigation *	31	1	11%	2	20%	2	12%	1	4%	2	5%	**52%**
Clean clogged weep holes in Tecolote Tunnel *	32	1	11%	2	20%	2	12%	1	4%	2	5%	**52%**
Investigate structural requirements of the steel collar between outlet works and 48-inch intake pipe at Lauro Tunnel	33	2	21%	1	10%	1	6%	1	4%	3	8%	**49%**
Waterproof gate shaft in the North Portal	34	1	11%	1	10%	2	12%	1	4%	3	8%	**45%**
Locate Discharge Pipe; Outfalls at Four Blow-off Stations	35	1	11%	1	10%	1	6%	1	4%	3	8%	**39%**

***Indicates System Shutdown required**

Table: 5-year Budget Matrix

Project ID	*Project Name*	*Ranking*	*2016-17*	*2017-18*	*2018-19*	*2019-20*	*2020-21*	*Totals*
2015-C-73	Lauro Diversion Valve	97%	$75,000					$75,000
2014-C-62	SCConduit AVAR Riser Pipe Replacement	95%	$70,000	$100,000	$100,000	$100,000		$370,000
2013-1-42	SCConduit Blow-off Riser Pipe Replacement	95%	$70,000	$225,000	$225,000	$225,000		$745,000
2013-C-47	Repair Lateral Structure 3 - Upper Reach	95%	$100,000					$100,000
2013-C-1	North Portal Jet Flow Spool Installation	91%	$50,000					$50,000
2012-1-26	South Coast Conduit Air Vacuum Air Release (AVAR) Valve Replacement / Relocation (6)	91%	$100,000					$100,000
2013-C-56	Mission Creek South Coast Conduit Crossing	86%	$50,000	$400,000	$2,100,000			$2,550,000
2012-2-35	Rehabilitate San Antonio Creek Blowoff	85%		$150,000				$150,000
2011-C-57	Glen Annie Resrevoir Rehabilitation	83%	$0	$0	$0	$0	$0	$0
2015-C-3	Rehabilitate all South Coast Conduit Lower Reach Lateral Structures	77%		$50,000	$50,000	$50,000	$50,000	$200,000
2007-2-33	Sheffield Tunnel Inspection and Evaluation of SCC components	74%		$100,000	$300,000			$400,000
2014-C-59	South Portal Slope Stabilization	73%		$50,000	$750,000			$800,000
2013-2-20	Inspect interior of Ortega Outlet Pipe	71%			$36,000			$36,000
2001-2-28	Inspect interior of Sheffield Tunnel Pipe	71%			$20,000			$20,000
2001-2-10	Inspect interior of Lauro Dam Pipe	71%			$12,000			$12,000
2013-2-39	Inspect interior of Carpinteria Control Station	71%			$74,000			$74,000
2012-2-36	Install a second sump pump in the lower chamber of the North Portal	69%		$35,000				$35,000
2013-C-15	Rebuild inflow Rip Rap at Lauro Reservoir	67%		$200,000				$200,000
2014-C-58	North Portal Slope Stabilization	59%		$50,000	$500,000			$550,000
2005-2-55	Tecolote Tunnel Concrete Deterioration Investigation	52%		$100,000				$100,000
2005-2-31	Clean clogged weep holes Tecolote Tunnel	52%		$200,000				$200,000
2013-2-41	Investigate structural requirements of the steel collar between outlet works and 48-inch intake pipe at Lauro Tunnel	49%		$30,000				$30,000
1999-2-53	Waterproof gate shaft in the North Portal	45%			$70,000			$70,000
2013-2-43	Locate Discharge Pipe; Outfalls at Four Blow-off Stations	39%		$40,000				$40,000
2014-C-59	Lauro Office Building Replacement		$150,000					$150,000
2014-C-70	Carpinteria Reservoir Security Fencing					$41,500		$41,500
2014-C-61	Supervisory Control and Data Acquisition (SCADA) Updates		$20,000	$50,000				$70,000
2014-C-72	Right of Way Identification Program		$20,000					$20,000
2010-2-8	Clean and Apply Grout into Leaking Cracks Inside Outlet Works Walls at Lauro Reservoir			$38,000				$38,000
	Totals		**$705,000**	**$1,818,000**	**$4,237,000**	**$416,500**	**$50,000**	**$7,226,500**

Lauro Stop Valve Replacement (2015-C-73)



Project Ranking
97%

Total Estimated Cost: $95,000

Background

The Lauro Stop Valve is a 42" Butterfly valve located in the upper maintenance yard of the COMB property, adjacent to the Lauro Reservoir outlet works tunnel. The valve is primarily used to direct flow into Lauro Reservoir via the 42" flume inlet and also serves as an isolation point, which allows COMB the ability to bypass the reservoir and supply water directly to Cater Water Treatment Plant in the event of an emergency.

Need for Project

During the 2015 annual valve exercise, COMB staff determined the valve to be inoperable. A following inspection of the valve's internal components revealed a broken sheer pin inside the valve's gear reduction unit. A replacement sheer pin was subsequently purchased as an operable solution, but also failed. After several more failed attempts to open the valve, staff ultimately determined replacement of the valve to be necessary.

Description

Following the valve's excavation and site review, COMB engaged HDR Engineering, Inc. (HDR) to provide technical specifications for inclusion in vendor proposals for the new, replacement valve. HDR is also contracted to assist COMB in evaluating the received proposals and will recommend the best vendor for the purchase of the replacement valve. Installation of the new valve will complete this project.

Phase I (Fiscal Year 2015-16): Design, Specifications, and Purchase

Phase II (Fiscal Year 2016-17): Installation

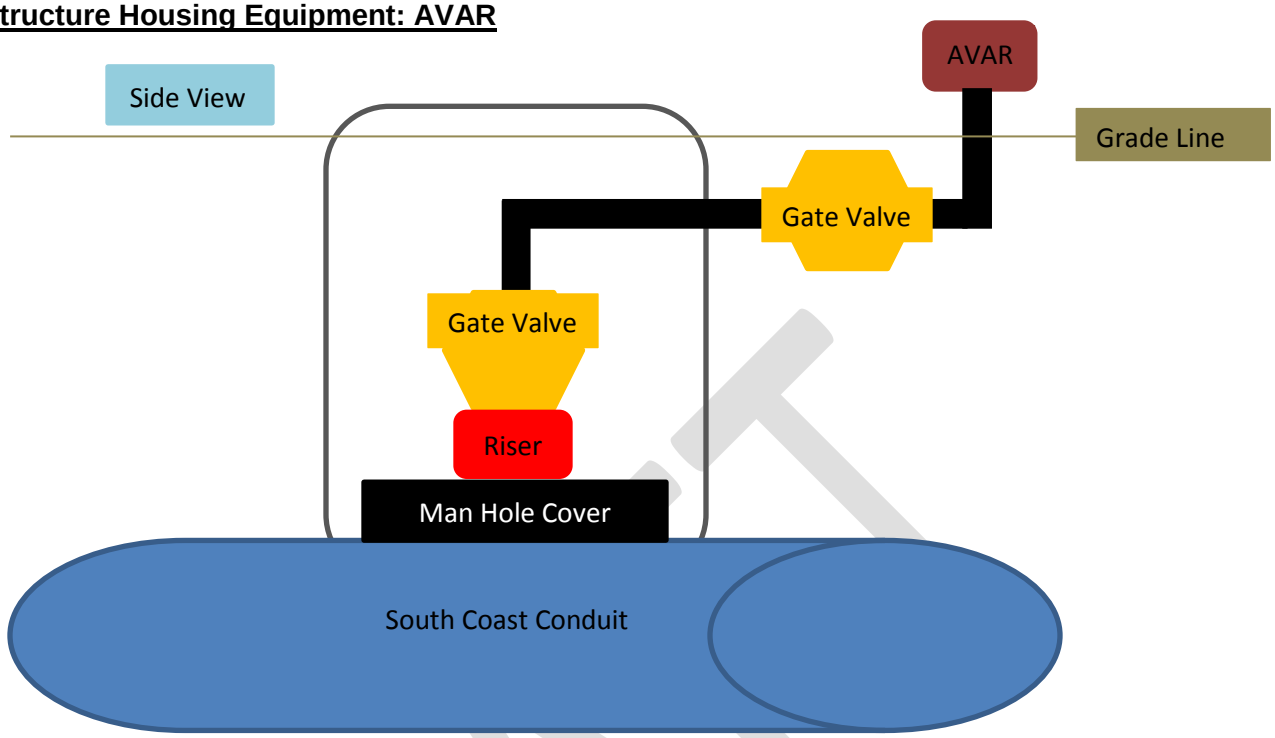
Regulatory Compliance

N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 15-16 (Phase I)	$20,000
Fiscal Year 16-17 (Phase II)	$75,000
Total	**$95,000**

Structure Housing Equipment: AVAR



The appurtenant structures involved with the South Coast Conduit system are depicted in the sketch above. These structures are identified as either Lateral structures, Air Vacuum Air Release (AVAR) structures, or Blow-off structures.

Divided into the Upper Reach (from the South Portal to Lauro Dam) and the Lower Reach (from the Cater Treatment Facility to Carpinteria), each structure contains a man hole cover, a riser, a gate valve and an air vacuum air release valve (AVAR). The concrete structures containing these components are called vaults and are located above and below ground level on top of the South Coast Conduit (SCC).

The total number of AVAR structures on the SCC is **57.**

The Upper Reach contains **31** AVAR structures and the Lower Reach contains **26** AVAR structures.

The internal components are described as follows:

- Man Hole Cover - sits directly on top of the pipe providing direct access inside the SCC.
- Riser component - serves as a connection between the manhole cover and the gate valve.
- Gate Valve - under normal operation this valve is open to allow the AVAR to function.
- AVAR - functions to allow volume of air to be exhausted from or admitted into the pipeline to protect the system from a loss of capacity and prevent the pipe from collapsing in the event of a break in the pipe.

AVAR	Total Structure	100% Complete	Need Man Hole	Need Riser	Need Gate Valve
Upper Reach	31	31	0	0	0
Lower Reach	26	6	20	20	20
Total	**57**	**37**	**20**	**20**	**20**

South Coast Conduit Riser Pipe Replacement – Air Vacuum Air Release Valve (AVAR) Structures (2014-C-62)

Project Ranking
95%

Total Estimated Cost: $430,000

Background

The riser pipe is the functional connection between the SCC and air vacuum air release valves (AVARs) located in the system. The AVARs function to allow volumes of air to be exhausted from or admitted into the pipeline to protect the system from a loss of capacity and to prevent the pipe from collapsing in the event of a break in the pipe. The riser pipe sits directly on top of a man-hole cover and supports a gate valve that sits below the AVAR. Riser pipes exist at all # AVAR locations.

Need for Project

Twenty riser sections have been identified to be of questionable integrity because of varying degrees of corrosion and thus pose an operational risk. Replacement and/or relocation of the riser pipes affiliated with the air vacuum air release valves will ensure the functionality of this system component

Description

Replace manhole, riser pipes and the valves in the AVAR structures within designated locations in the system. The riser replacement and relocation project would be performed in several phases with consideration of operational impacts. For efficiency and to minimize cost, phases of this project will be performed concurrently with similar phases of the blow-off project. The project would require retention of engineering and contractor services.

This project will be completed over time and during low water demand months to reduce the impact of system shutdown. An assessment of condition and risk will determine the scheduling priority.

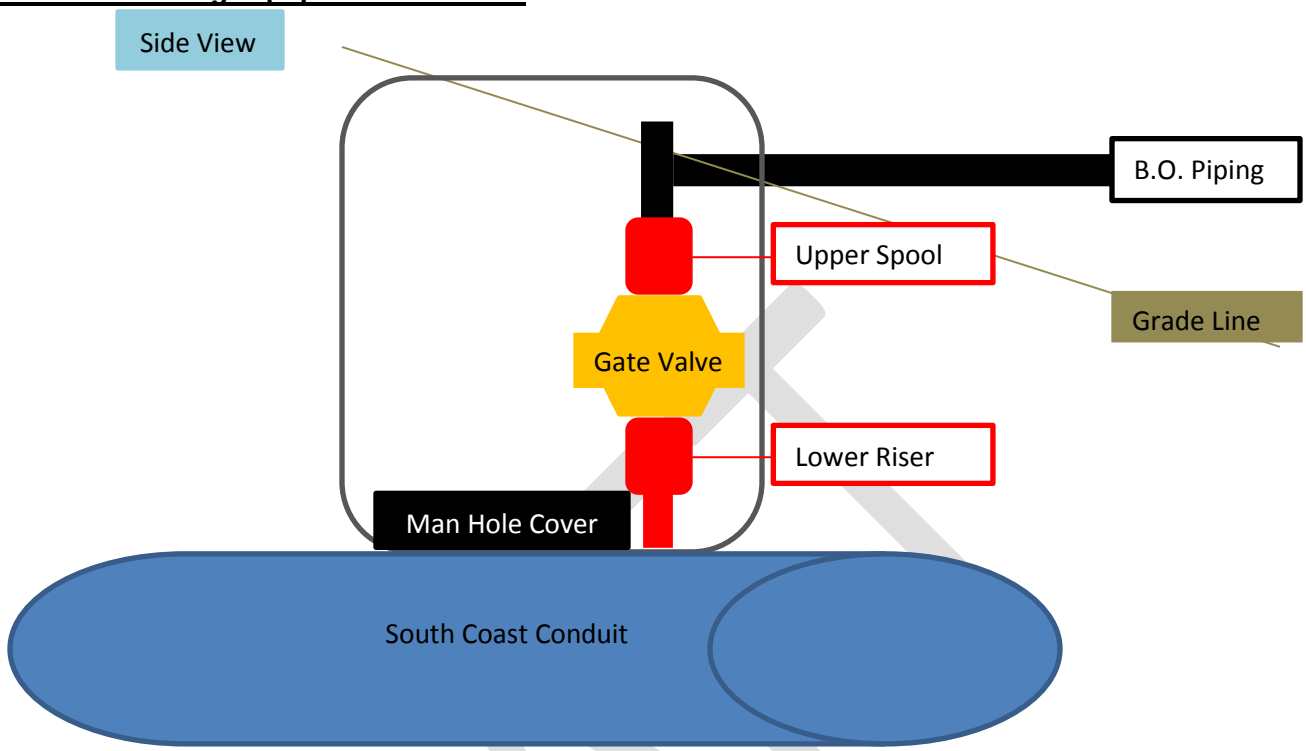
Regulatory Compliance

This is USBR Category 1 recommendation.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 15-16 (Phase I – Engineering)	$ 60,000
Fiscal Year 16-17 (Phase II – Construction)	$ 70,000
Fiscal Year 17-18 (Phase III – Construction)	$100,000
Fiscal Year 18-19 (Phase IV – Construction)	$100,000
Fiscal Year 19-20 (Phase V – Construction)	$100,000
Total	**$430,000**

Structure Housing Equipment: Blow Off



The appurtenant structures involved with the South Coast Conduit system are depicted in the sketch above. These structures are identified as either Lateral structures, Air Vacuum Air Release structures, or Blow-off structures.

Divided into the Upper Reach (from the South Portal to Lauro Dam) and the Lower Reach (from the Cater Treatment Facility to Carpinteria), each structure contains a man hole cover, a lower riser, and upper riser, a gate valve and blow-off piping. The concrete structures containing these components are called vaults and are located above and below ground level on top of the South Coast Conduit (SCC).

The total number of blow-off structures on the SCC is **65.**

The Upper Reach contains **34** blow-off structures and the Lower Reach contains **31** blow-off structures.

The internal components are described as follows:

- Man Hole Cover - sits directly on top of the pipe providing direct access inside the SCC.
- Riser component - serves as a connection between the Man Hole Cover and the Gate Valve.
- Blow-Off Valve (Gate Valve) - functions to dewater the section of pipeline for the purpose of conducting repairs or responding to an emergency.

Blow Off	Total Structure	100% Complete	Need Man Hole	Need Lower Riser	Need Upper Riser	Need Gate Valve
Upper Reach	34	0	1	34	1	1
Lower Reach	31	0	27	31	27	27
Total	**65**	**0**	**28**	**65**	**28**	**28**

South Coast Conduit Blow-off Structure Rehabilitation (2013-1-42)

Project Ranking
95%

Estimated Cost: Phases I to V - $875,000

Background

Blow-off structures exist on all low points of a water distribution system. The components included in these structures include man-hole covers, lower riser sections, an upper spool section, a gate valve, and blow-off piping. There are a total of sixty-five blow-off structures in South Coast Conduit system.

Need for Project

The existing blow-off components are of questionable operability because of corrosion. The dependability of these components is necessary to allow the system to be dewatered for maintenance and respond to an emergency break in the pipe.

There are twenty-eight manhole covers identified to be replaced. Sixty-five lower risers have been identified to be of questionable integrity because of corrosion. Twenty-eight gate valves and upper spools will need to be replaced due to age and fragility. Blow-off piping will be replaced on an as needed basis.

Description

The project consists of replacing the man hole covers, lower risers, gate valves, upper spools, and discharge piping within the Upper and Lower Reaches of the SCC. The project would be completed in conjunction with the AVAR valve replacement and relocation project and coordinated with the affected Member Units during the required system shutdown. Water released during the implementation of this project would require de-chlorination. The project would require retention of engineering and contractor services.

Regulatory Compliance

This is a USBR Category 1 recommendation.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 15-16 (Phase I – Engineering)	$ 130,000
Fiscal Year 16-17 (Phase II – Construction)	$ 70,000
Fiscal Year 17-18 (Phase III – Construction)	$ 225,000
Fiscal Year 18-19 (Phase IV – Construction)	$ 225,000
Fiscal Year 19-20 (Phase V – Construction)	$ 225,000
Total	**$ 875,000**

Repair of Lateral 3 – Upper Reach (2013-C-47)

Project Ranking
95%

Total Estimated Cost: $120,000

Background

Lateral three is a multi-joint pipe configuration contained in a concrete vault located in the Upper Reach of the system. The vault contains a riser coming through the concrete floor, a meter, a valve, and affiliated piping. Lateral three originally functioned as an operational component of GWD. This lateral no longer operates as an operational component of GWD and currently functions as a blow-off structure.

Need for Project

The riser extending from the South Coast Conduit through the vaults' concrete floor was discovered to be leaking when the lateral was taken out of service. A temporary fix of mortar was placed on the pipe and the floor connection to eliminate leaking into the vault. Because of the fragility of this temporary fix, regular maintenance cannot be performed to the remaining components within the structure.

Description

The vault sits directly on top of the South Coast Conduit. The vault must be removed to access the riser component extending into the vault. Removing the vault will require replacing three sections of the South Coast Conduit. A new blow-off structure will be re-constructed in its place. The repair would require a shutdown of the SCC and coordination with impacted Member Agencies. The project would require retention of an engineering and contractor services.

Regulatory Compliance

N/A

Budget & Schedule **Internal Staff Estimate**

Fiscal Year	Cost
Fiscal Year 15-16 (Engineering)	$ 20,000
Fiscal Year 16-17 (Construction)	$100,000
Total	**$120,000**

North Portal Jet Flow Spool Installation Project (2015-C-1)

Project Ranking
91%

Total Estimated Cost: $50,000

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 is located within the red piping component as pictured above. It is operated through the SCADA system. The adjacent gate valve (black) can manually be used as an alternate method to control flow through the tunnel. This valve was replaced in 1990 and has a useful life of approximately thirty years. Internal replacement components of the valve were approved in the 2014-15 budget and have been purchased.

Need for Project

Because of the valve's uncertain useful life, replacement of the internal components should be a near-term consideration. The manufacturer estimates a rebuild time of approximately three days. The installation of a pipe spool as a temporary bypass would enable the delivery of water to the tunnel during the time of the valve rebuild. This spool would also serve an emergency function in the event of a future valve failure.

Description

A 30-inch, five foot long piece of pipe with flanged ends would be fabricated to have on-site and ready for installation at the time of internal valve component replacement. The spool would be lowered by crane into the lower gallery of the North Portal through the elevator shaft.

Regulatory Compliance

N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 16-17 (Installation)	$50,000
Total	**$50,000**

South Coast Conduit Air Vacuum Air Release (AVAR) Valve Replacement / Relocation (2012-1-26)

Project Ranking
91%

Total Estimated Cost: $150,000

Background

Air vacuum air release valves (AVAR) are float operated valves which are common to water delivery systems. The AVAR's function to allow volumes of air to be exhausted from or admitted into the pipeline to protect the system from a loss of capacity and prevent the pipe from collapsing in the event of a break in the pipe. There are twenty-six AVARs on the Lower Reach of the SCC. Of these, twenty have been rehabilitated; the remaining six will be completed by an outside contractor over the next two fiscal years. Replacement of the AVARs is a USBR Category 1 recommendation.

Need for Project

Six remaining AVAR valves pose an operational risk and/or do not meet current required regulatory standards. Because of the location and operational configuration of the remaining six AVARs, this project would be completed by a retained contractor and require preliminary engineering.

Description

Replace and relocate to above ground sites six (6) AVARs in the Lower Reach. Consistent with other AVAR replacements, manhole covers, gate valves, risers, laterals and AVAR valves would be replaced at the same time. Each AVAR valve would be relocated and enclosed above grade. The project would require coordination with impacted MUs during the required shutdown of the SCC. The project would require retention of engineering and contractor services.

Regulatory Compliance

This project has been identified by the USBR as a Category 1 recommendation.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 15-16 (Phase I – Engineering)	$ 50,000
Fiscal Year 16-17 (Phase II – Construction)	$100,000
Total	**$150,000**

Reference

September 2006 Boyle "Phase 2 Reliability Study for South Coast Conduit Upper Reach Tecolote Tunnel to Corona Del Mar Water Treatment Plant and Carpinteria Reach South Coast Conduit Booster Pump Station to Ortega Reservoir" Figure 4-3 and Figure 4-4.Boyle April 2005 "Reliability and Alternatives Study for the South Coast Conduit Carpinteria Reach Cater Booster Pump Station to Ortega Reservoir" Page 81

Mission Creek South Coast Conduit Crossing (2013-C-56)

Project Ranking
86%

Total Estimated Cost: $2,600,000

Background

The South Coast Conduit (SCC) crosses Mission Creek at approximate pipeline Station 74+00, 25 feet downstream of the County road Highway 192 Bridge. The SCC suffered damage in the 1970s when a large boulder tumbled on top of the pipe creating a hole in the pipe. Through an emergency retrofit project, a concrete cap was placed over the pipeline at the current flow line to prevent channel bed scour beneath the bridge footings and the SCC. The concrete cap acts as a grade control structure and is now undermined due to stream scour on the downstream side of the pipeline and concrete apron. The exposed pipe is subject to further damage from boulder impacts during stormflow events as well as material deterioration from exposure to oxygen and water. Although temporary repairs to the crossing were completed in Fiscal Year 2015-16, a more permanent solution will be necessary in the near future. As part of the U.S. Bureau of Reclamation (USBR) Phase 2 Reliability Study for the SCC conducted in 2006 and a subsequent site inspection during 2014, this site was identified as a priority due to the potential for failure of the SCC.

The existing concrete apron is intended to protect the pipeline and the Highway 192 Bridge footings but has resulted in a barrier to migrating juvenile and adult endangered southern steelhead (*Oncorhynchus mykiss, O. mykiss*) within the creek. Mission Creek has been identified as a Core 1 watershed for steelhead recovery by the National Marine Fisheries Service (NMFS) in their Southern California Steelhead Recovery Plan (NMFS, 2012). As a result, this project will be required to meet fish passage considerations and therefore constructed in conjunction with a fish passage project. The City of Santa Barbara has now completed three fish passage projects on Mission Creek downstream of the Hwy 192 Bridge. The subject project is the next significant fish passage impediment upstream. Questa Engineering was contracted by the City of Santa Barbara to evaluate fish passage options and provided a report in 2008. Several design workshops have been held since then with the regulatory agencies and a riffle and step-pool sequence has been determined to be the preferred alternative (Questa Engineering, 2012); design specifics will depend on the horizontal and vertical placement of the SCC below the streambed.

Need for Project

The SCC at Mission Creek is the primary water supply for the cities of Carpinteria, Montecito and a large portion of Santa Barbara. The vulnerability of the pipeline to failure resulting from further structural damage and/or corrosion poses an operational risk. The project would remove a section of the SCC and construct a new section encased in concrete at a lower elevation well below the streambed to protect it from damage by scour. At the same time, the concrete apron and channel downstream would be altered to provide fish passage while protecting the Highway 192 Bridge footings. Project designs would be reviewed and approved by the City of Santa Barbara, County of Santa Barbara, NMFS and California Department of Fish and Wildlife to meet road, pipe and fish passage design standards.

Description

COMB retained engineering services to conduct an evaluation of the site and develop and implement a temporary repair. Over the next few years, a permanent solution will be designed, reviewed and approved by local, state and federal regulatory agencies. Once an acceptable design has been developed, COMB would then determine funding options for construction of the project.

Phase I (Fiscal Year 2015-16): Temporary Repair

Phase II (Fiscal Year 2016-17): Permanent Solution – Engineering and Design

Phase III (Fiscal Year 2017-18): Planning, Grant Writing, etc.

Phase IV (Fiscal Year 2018-19): Construction

Regulatory Compliance

EIR/EIS and full environmental review and compliance will be a required project component.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 15-16 (Phase I)	$ 50,000
Fiscal Year 16-17 (Phase II)	$ 50,000
Fiscal Year 17-18 (Phase III)	$ 400,000
Fiscal Year 18-19 (Phase IV)	$2,100,000
Total	**$2,600,000**

Reference

"Phase 2 Reliability Study for South Coast Conduit Upper Reach Tecolote Tunnel to Corona Del Mar Water Treatment Plant and Carpinteria Reach South Coast Conduit Pump Station to Ortega Reservoir" Boyle April 2008 Page 100 and Table 8-1.

September 2006 Boyle "Phase 2 Reliability Study for South Coast Conduit Upper Reach Tecolote Tunnel to Corona Del Mar Water Treatment Plant and Carpinteria Reach South Coast Conduit Booster Pump Station to Ortega Reservoir" Page 100 and Table 8-1.

NMFS, 2012. Final Southern California Steelhead Recovery Plan, National Marine Fisheries Service (NMFS-NOAA), Long Beach, CA.

Questa Engineering, 2008. Highway 192 at Mission Creek South Coast Conduit Rehabilitation and Fish Passage Improvement Project. Questa Engineering Corporation. Prepared for the City of Santa Barbara, November.

Questa Engineering, 2012. Highway 192 at Mission Creek South Coast Conduit Rehabilitation and Fish Passage Improvement Project Design Review. Prepared for the Cachuma Operation and Maintenance Board.

Rehabilitate San Antonio Creek Blow-off (2012-2-35)

Project Ranking
85%

Total Estimated Cost: $160,000

Background

The San Antonio Creek blow-off structure was constructed as an addition to the Cachuma Project facilities in 1958. It was constructed to provide a method for water release and draining of Lauro Reservoir during an Emergency Scenario. The structure's sole purpose is to respond to dam safety considerations.

Need for Project

The existing structure includes a 16-inch and a 12-inch gate valve that are both frozen in place and inoperable because of age and corrosion. The inoperable condition of the valves prevents regular maintenance. The two valves serve as a lifeline control response to an emergency that would require COMB to drain or reduce the elevation at Lauro Reservoir in response to dam safety considerations.

Description

San Antonio Creek blow-off structure is twenty-five feet deep and a quarter mile from the access road which crosses San Antonio Creek, making access difficult and potentially complicated. The 16 and 12 inch valves would be removed and replaced. The project will require a shutdown of the South Coast Conduit.

Phase I (Fiscal Year 15-16): Engineering and Design

Phase II (Fiscal Year 17-18): Construction

Regulatory Compliance

The structure is located in a county park and may require environmental review because of access restrictions. This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule **Internal Staff Estimate**

Fiscal Year	**Cost**
Fiscal Year 15-16 (Phase I)	$ 10,000
Fiscal Year 16-17	$ 0
Fiscal Year 17-18 (Phase II)	$150,000
Total	**$160,000**

Glen Anne Reservoir Safety of Dams Rehabilitation Project (2011-C-57)

Project Ranking
83%

Total Estimated Cost: $33,500,000
Federal share: $28,475,000
MU Share: $5,025,000
(SOD Act Repayment over time)

Background

Glen Anne is one of four regulating reservoirs on the Cachuma Project facilities. Glen Anne Reservoir had an initial storage capacity of 500AF. Due to seismic stability requirements and risk of failure potentially causing catastrophic damage downstream, the maximum capacity was limited to 375AF in 1988. In 2002 it was limited again to 175 AF maximum capacity. Glen Anne Reservoir is no longer in service, but COMB continues regular maintenance and inspections as required by the USBR.

Need for Project

The ability to store water in all system reservoirs is critical to water delivery during a shutdown of the Tecolote Tunnel. Further, Glen Anne is important as a balancing reservoir to enable work on other system reservoirs and appurtenances to the SCC. The inoperability of Glen Anne impacts all Member Agencies.

Raw water storage in the Upper Reach is critical to allow the Tecolote Tunnel to shut down for repairs while allowing Goleta Water District to continue to deliver water to their customers. This can be accomplished by upgrading Glen Anne Reservoir and Dam. This project will benefit all of the Member Agencies on the South Coast, by providing additional storage capacity, increase efficiency and reliability of COMB facilities, reduce the complexity of shut-downs, simplify scheduled repairs of the Tecolote Tunnel and aid in fire protection and flood control.

Description

Dam seismic safety and other operational problems that exist because of deterioration would be addressed. Adjacent pumps and delivery system piping will be restored to operability. Remediation components will likely include removing the silt to allow operation at designed capacity and replacement of deteriorated 12 inch thick asphaltic concrete liner.

Seismic retrofit will like include installation of shear key and berm installed down to the bedrock to resolve the existing potential for liquefaction.

Phase I (Fiscal Year 16-17);	Investigation of project phasing and potential grant funding
Phase II (Fiscal Year 17-18);	Initial studies and preliminary Engineering
Phase III (Fiscal Year 18-19);	Engineering
Phase IV (Fiscal Year 19-20);	Construction

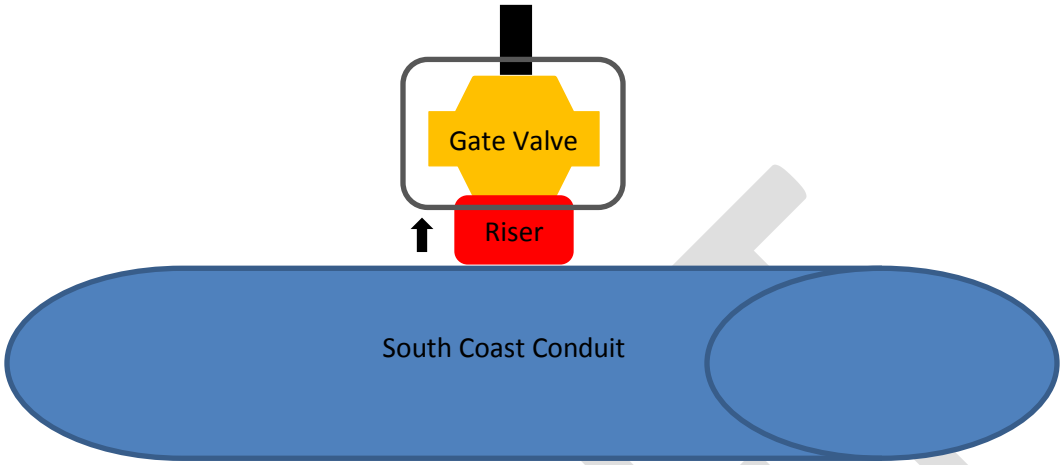
Regulatory Compliance
Environmental Review performed by USBR

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 16-17 (Phase I)	$ 0
Fiscal Year 17-18 (Phase II)	$ 0
Fiscal Year 18-19 (Phase III)	$ 0
Fiscal Year 19-20 (Phase IV)	$ 0
Total	**$33,500,000 (15% SOD Act repayment)**

Structure Housing Equipment: Lateral

Overview



The appurtenant structures involved with the South Coast Conduit system are depicted in the sketch above. These structures are identified as either Lateral structures, Air Vacuum Air Release structures, or Blow-off structures.

Divided into the Upper Reach (from the South Portal to Lauro Dam) and the Lower Reach (from the Cater Treatment Facility to Carpinteria), each structure contains a man hole cover, a lower riser, and upper riser, a gate valve and blow-off piping. The concrete structures containing these components are called vaults and are located above and below ground level on top of the South Coast Conduit (SCC).

The total number of lateral structures on the SCC is **65.**

The Upper Reach contains **21** lateral structures and the Lower Reach contains **44** lateral structures.

The internal components are described as follows:

- Riser component - serves as a connection between the Man Hole Cover and the Gate Valve.
- Gate Valve - under normal operation this valve is open to allow water flow to adjacent Member Unit delivery systems.

Lateral	Total Structure	100% Complete	Active	Non- Active	Need Riser	Need Gate Valve
Upper Reach	21	1	1	20	20	0
Lower Reach	44	1	43	1	43	43
Total	**65**	**2**	**44**	**21**	**63**	**43**

Rehabilitate South Coast Conduit Lower Reach Lateral Structures (2015-C-3)

Project Ranking
77%

Total Estimated Cost: $200,000

Background

There are forty-four lateral connections housed in concrete cylinder structures on the lower reach of the South Coast Conduit. The function of these connections is to provide water to sections of the Montecito Water District and Carpinteria Valley Water District. Each connection contains a gate valve, a check valve and an air vent component.

Need for Project

Thirty-five of the existing lateral appurtenances pose an operational risk due to age, corrosion, and unreliable valve operating conditions. The dependability of these valves is necessary to provide reliable water service to customers served in sections of the Montecito and Carpinteria Water District Boundary areas.

Description

This project would replace corroded and inoperable valves, air vents, and check valves on active lateral connections. The project will require shutdowns for the specified turnout distribution supply areas and would be coordinated with the impacted Member Units. The project would require retention of engineering and contractor services; and, due to each site's differing conditions, engineering would be required for each individual structure.

Regulatory Compliance

N/A

Budget & Schedule — **Internal Staff Estimate**

Fiscal Year	Cost
Fiscal Year 2017-18	$ 50,000
Fiscal Year 2018-19	$ 50,000
Fiscal Year 2019-20	$ 50,000
Fiscal Year 2020-21	$ 50,000
Total	**$200,000**

Sheffield Tunnel Inspection and Evaluation of South Coast Conduit Components (2007-2-33)

Project Ranking
74%

Total Estimated Cost: $400,000

Background

The Sheffield Tunnel is a concrete tunnel housing the 36" South Coast Conduit (SCC) that extends 6,100 feet through rising geology on the south side of Foothill Road. Within the tunnel, sections of concrete pipe are connected and joined with mortar joints and pipe supports to maintain the integrity of the pipe collar connections.

Need for Project

The USBR inspection report of the Sheffield Tunnel identified and recommended remediation of cracked pipe collars and adjoining deterioration of mortar joints and pipe supports. Deterioration potentially compromises the integrity of the tunnel and poses an operational risk. Heavy seepage appears to be a contributing factor to deterioration.

Description

Retain outside engineering to conduct an evaluation of the identified deterioration to determine the structural integrity and reliability of the connecting and support structure of Sheffield Tunnel. Engineering evaluation will include recommended repairs and determine how to eliminate areas of heavy seepage. It is possible the engineering evaluation could find a lower cost remedy to that recommended by USBR. Upon completion of the evaluation retain a qualified contractor to repair the deteriorated mortar joints and pipe supports at locations identified.

Phase I (Fiscal Year 17-18): Evaluation of Tunnel Deterioration

Phase II (Fiscal Year 18-19): Remediation Design (based on the evaluation)

Regulatory Compliance

This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	**Cost**
Fiscal Year 17-18	$100,000
Fiscal Year 18-19	$300,000
Total	**$400,000**

South Portal Slope Stabilization (2014-C-59)

Project Ranking
73%

Total Estimated Cost: $800,000

Background

The Modified Upper Reach Reliability Project (MURRP) is sited at the base of Glen Anne Canyon, which has a history of landslides because of unstable terrain. The MURRP contains open vents that are vulnerable to landslides. During 1995 a slide engulfed the old South Portal Structure. The hillside was excavated to create additional space for the new South Portal Configuration on the MURRP. Slope stabilization was not addressed as a component of the project. The site has been temporarily protected with concrete road barriers (K-rails), but a more adequate and permanent solution remains necessary.

Need for Project

Existing slope instability has the potential to cover the South Portal Configuration on the Modified Upper Reach Reliability Project, adversely affecting access and causing soil infiltration into the SCC. Multiple professionals have visited the site and concur with the risk identified.

Description

Phase I (Fiscal Year 2017-18): Geotechnical Study/Engineering Design (identify the most economic method to stabilize the slope and protect the asset).

Phase II (Fiscal Year 2018-19): Slope Stabilization and remediation (based on design plan completed in Phase I).

Regulatory Compliance

N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	**Cost**
Fiscal Year 17-18 (Phase I)	$ 50,000
Fiscal Year 18-19 (Phase II)	$750,000
Total	**$800,000**

Inspect Interior of:

Ortega Outlet Pipe	(2013-2-20)
Sheffield Tunnel Pipe	(2001-2-28)
Lauro Dam Pipe	(2001-2-10)
Carpinteria Control Station	(2013-2-39)

Project Ranking
71%

Total Estimated Cost: $142,000

Background

Under the direction of USBR, the South Coast Conduit (SCC) was completed in the mid-1950s. During its service life, the archives indicate, aside from normal wear and tear, the system appurtenances have exceeded designed life. The USBR requires COMB to perform interior inspections on facilities every six years to determine physical integrity.

Need for Project

Because certain system components and appurtenances have exceeded projected useful life, an evaluation should be conducted to ensure system integrity and identify potential performance weaknesses. This inventory and examination will serve as a basis for future IIP development.

Description

Contract services would be retained to perform the examination and document current condition and issues requiring attention. It is anticipated entry into the conduit would likely occur through AVAR locations, which would allow the team to move from high points in the line toward the lower spots where blow-off structures exist. The conduit would need to be ventilated safely to ensure safe ingress/egress. This examination would require MU coordinated shutdowns.

The inspection will focus on locations subject to corrosion and wear beginning with the interiors of outlet piping from all reservoirs leading to the control building. Because of the unique structural characteristics of Ortega Reservoir, COMB would contract with an engineering firm with specialized capabilities including structural analysis, video inspections (piping/tunnel), etc. Each inspection would require the contractor to prepare an analysis in a format designed by COMB and coordinated with USBR. Once complete, COMB would submit the plans to USBR for review and approval.

Regulatory Compliance

USBR Category 2 recommendation and required to meet SOP requirements.

Budget & Schedule **Internal Staff Estimate**

Fiscal Year 2018-19	**Cost**
Ortega Outlet Pipe	$ 36,000
Sheffield Tunnel Pipe	$ 20,000
Lauro Dam Pipe	$ 12,000
Carpinteria Control Station	$ 74,000
Total	**$142,000**

Install Second Sump Pump in the Lower Chamber of the North Portal (2012-2-36)

Project Ranking
69%

Total Estimated Cost: $35,000

Background

The bottom of the North Portal chamber contains a sump pump to mitigate the impact of water intrusion into the elevator shaft and upper and lower gate chambers. The sump pump is sited below grade at the bottom of the chamber and effectively removes standing water, acting as a protection against corrosion for all below ground equipment.

Need for Project

Installation of a second sump pump would provide redundancy to the existing sump pump. If the first sump pump fails or is overcome by excess water, the second sump pump would ensure water is pumped out of the chamber.

Description

Contracted electrical services would be retained to install and integrate the new pump into the existing pump control system.

Regulatory Compliance

This is a USBR Category 2 recommendation.

Budget & Schedule **Internal Staff Estimate**

Fiscal Year	Cost
Fiscal Year 17-18	$35,000
Total	**$35,000**

Rebuild the Inflow Rip Rap at Lauro Reservoir (2013-C-15)

Project Ranking
67%

Total Estimated Cost: $200,000

Background

The inflow to Lauro Reservoir from the South Coast Conduit commences with water flow on a channel composed of rip rap rock installed to slow and aerate the inflow of water and prevent erosion to reservoir side walls. The rip rap structure is composed of rock and concrete and is designed to prevent scour or erosion of the adjacent side walls.

Need for Project

The lower portion of the rip rap apron has been undermined across the base of the reservoir. The rip rap apron measures approximately twenty-five feet in length and is in need of repair. Without repair of the apron, water flow will erode the embankment and the base of the channel will become unable to support the rip rap structure. Loss of the rip rap would make the inflow structure unable to fulfill its required function.

Description

A structural engineering firm would conduct an evaluation to determine an appropriate repair to maintain the essential support and integrity of the rip rap channel. The reservoir would need to be lowered to accommodate inspections and repairs.

Phase I (Fiscal Year 2017-18): Engineering and Construction

Regulatory Compliance

N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	**Cost**
Fiscal Year 17-18 (Phase I)	$200,000
Total	**$200,000**

North Portal Slope Stabilization (2014-C-58)

Project Ranking
59%

Total Estimated Cost: $550,000

Background

The Lake Cachuma Intake Tower is accessed by a paved road accessed from State Highway 154. During 2002, staff expanded the road by encroaching into the hillside in reaction to erosion and sliding on the outside section of the road. Since the initial work in 2002, destabilization of the hillside has continued, making portions of the road potentially hazardous.

Need for Project

Ongoing regular use of the road is necessary to access the North Portal area. Subsequent to 2002, additional interim methods of stabilization on the road had been implemented which produced a short term benefit. Since that initial work during 2002, the existing lake level has provided a visual indication that the slope continues to suffer significantly from stability issues.

Description

Engineering services would be retained to conduct a Geotechnical Study/ Design, to identify and design a plan to stabilize the slope and ensure road protection and access.

Phase I (Fiscal Year 2017-18): Engineering

Phase II (Fiscal Year 2018-19): Slope Stabilization and Remediation (based on design plan completed in Phase I).

Regulatory Compliance

N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 17-18 (Phase I)	$ 50,000
Fiscal Year 18-19 (Phase II)	$500,000
Total	**$550,000**

Tecolote Tunnel Concrete Deterioration Investigation (2005-2-55)

Project Ranking
52%

Total Estimated Cost: $100,000

Background

The Tecolote Tunnel was completed in 1956 to divert water from Lake Cachuma to the South Coast Conduit. The tunnel provides water delivery through the mountain to the South Portal. The tunnel structure consists of a modified circular horse-shoe shaped cross section constructed of steel encased in 12 inches of concrete and operates in open channel flow that is approximately 7' inside and is 6.4 miles long with a gradual shallow slope to enable gravity feed. The only ingress and egress are at the North Portal and South Portal. During an inspection by the USBR in 2012, deterioration was discovered due to long-term exposure to hydrogen sulfide.

Need for Project

Hydrogen sulfide has caused some deterioration of the concrete lining of the tunnel. In areas, the interior concrete surface has peeled in sheets approximately 3/8 of an inch thick and fallen into the invert, creating sediment. The majority of the tunnel is in acceptable condition. However, a few locations exhibit small areas where leaching could affect the structural integrity of the concrete. Review is necessary.

Description

The Tecolote Tunnel is a 6.4 mile long tunnel which is considered a "confined space" location. The evaluation will require an engineer to identify the locations and extent of the concrete deterioration, severity of damage within the Tecolote Tunnel and recommend appropriate remediation.

Regulatory Compliance

This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 17-18	$100,000
Total	**$100,000**

Clean Clogged Weep Holes in Tecolote Tunnel (2005-2-31)

(To be performed in conjunction with Tecolote Tunnel Investigation Project)

Project Ranking

52%

Total Estimated Cost: $200,000

Background

Included in the construction of the Tecolote Tunnel were a series of "weep holes" that allow ground water to flow into the tunnel. The weep holes serve two purposes: 1) to relieve the ground water pressure on the outside of the tunnel structure and 2) provide for the importation of usable ground water into the tunnel.

Need for Project

There are numerous weep holes within the Tecolote Tunnel that have been subjected to mineral accumulation creating deposits. Hydrogen sulfide has contributed to corrosion of the concrete structure adjacent to the weep holes. The mineral accumulation and corrosion have eliminated or reduced the ability of the weep holes to function, thereby potentially affecting the stability of the structure. The weep holes need to be cleaned to allow proper water drainage into the tunnel to protect the Tunnel structure.

Description

The project would be conducted concurrent with the concrete lining repair and will require a shutdown of the tunnel and all safety precautions necessary for tunnel access because of hydrogen sulfide exposure and confined space issues.

Regulatory Compliance

This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule — Internal Staff Estimate

Fiscal Year	**Cost**
Fiscal Year 17-18	$200,000
Total	**$200,000**

Investigate Structural Requirements of the Steel Collar between Outlet Works and 48-inch Intake Pipe at Lauro Tunnel (2013-2-41)

Project Ranking
49%

Total Estimated Cost: $30,000

Background
The intake piping of the Lauro Reservoir outlet works intake structure includes a steel collar connection between the intake structure and intake pipe.

The intake component was replaced during 1981 by added a steel pipe that extends through the outlet works and through the top of the original concrete intake structure. A ¾ inch thick steel circular collar was installed on top of the existing intake structure to cover the opening between the intake structure and vertical pipe for either protection from debris intrusion, structural support or both. It is unknown if the steel collar is attached to the vertical steel pipe to connect the two components. The 2013 dive report, prepared by USBR, states the intake structure is in satisfactory condition with the exception of the steel collar. The Bureau was silent on the purpose of the collar and has been unable to verify the purpose the collar serves over and above simply providing a sealed connection between the two structures.

Need for Project
The collar has deteriorated because of corrosion and poses an operational risk for both the protection against outside intrusion of elements penetrating through the opening or potentially structural support.

Description
Engineering services will be retained determine the collar's expected level of performance (protection from outside element intrusion or structural). Engineering will need to be conducted by a structural engineer to determine if the steel collar is necessary for support and if required, a method to design a repair that will allow for continued structural support of intake structure. The reservoir will need to be lowered to accommodate inspections and repairs.

Regulatory Compliance
This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule **Internal Staff Estimate**

Fiscal Year	Cost
Fiscal Year 17-18	$30,000
Total	**$30,000**

Waterproof Gate Shaft in the North Portal (1999-2-53)

Project Ranking
45%

Total Estimated Cost: $70,000

Background

The North Portal Elevator Shaft was constructed in the 1950s. The shaft extends approximately 125 feet below the control house. Water intrudes into the elevator shaft at construction joints and through cracks in the concrete structure. This moisture creates a corrosive environment for electrical and mechanical equipment.

Need for Project

The project anticipates either eliminating or reducing seepage into the elevator shaft and will protect the asset by extending its useful life and reducing maintenance costs.

Description

The work will require the retention of a contractor. Discussions with contractors have concluded the grout in all seams would be removed and a water stop polymer will be injected to eliminate water intrusion in the leaking seams and cracks. The top of the elevator car will be used as a work platform, and will require a certified elevator operator on site to move the work platform during the repair. Per contractor discussions, the work requires seepage to be visible to enable directing the polymer injection to the appropriate location in the shaft. Therefore, this work would be most successfully accomplished once the water table has increased in elevation.

Regulatory Compliance

This is a USBR Category 2 Recommendation.

Budget & Schedule — Contractor Estimates

Fiscal Year	Cost
Fiscal Year 18-19	$70,000
Total	**$70,000**

Locate Discharge Pipe; Outfalls at Four Blow-off Stations (2013-2-43)

Project Ranking
39%

Total Estimated Cost: $40,000

Background

Blow-off valves exist on all low points of a water system. Along the South Coast Conduit (SCC), these valves function to dewater the SCC should it be necessary to shut down a section to perform essential work. Certain valves and associated piping are over fifty years in age and in poor condition. The blow-off valve is located within a concrete structure and the discharge pipe extends to the outside from the vault.

Need for Project

Staff has been unable to locate point of discharge on four blow-off stations. Therefore, it appears the discharge piping has been buried in silt for an extended period of time and has no screening to prevent the migration of storm water and/or animals into the discharge pipe and subsequently into the structure.

Description

This project would locate and replace inoperable blow-off valve discharge piping and install flap valves on the discharge pipe within the identified Lower Reach blow-off stations. It is anticipated that the proposed work will be conducted by COMB Operations staff.

Regulatory Compliance

This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule **Internal Staff Estimate**

Fiscal Year	Cost
Fiscal Year 17-18	$40,000
Total	**$40,000**

Lauro Office Building Replacement (2014-C-59)

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.

Total Estimated Cost: $150,000

Background

COMB Administration, Fisheries, and Reception modular offices are aging and in various stages of deterioration. The Administration office is a 1979 model (36 years old), purchased in 1993; the Fishery office is a 1997 model (18 years old), purchased in 1999; and the Reception office is a 2002 model (13 years old), purchased used in 2002. The immediate issue is the Administrative office, which has uncorrectable structural problems attributable to roof leaks.

Initial information indicates the cost of a used/refurbished modular unit is approximately $50 per square foot for a shell that would need modifications. New modular unit costs vary depending on design, ranging from $75 to $150 per square foot. Per square foot costs do not include the cost of delivery and setup cost that range from $12,000 to $19,000 for each 40 foot unit. Existing units do not have a resale value because of noncompliance with current state building codes and therefore must be demolished. The demolition cost of existing buildings is approximately $9,000 for each 12 foot section of the 40 foot unit. Demolition cost will be a separate manufacturer quote.

Need for Project

The current modular office buildings are in various stages of deterioration.

Description

Purchase one to three new modular office buildings.

Regulatory Compliance

N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 16-17	$150,000
Total	**$150,000**

Carpinteria Reservoir Security Fencing (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.

Total 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

Replacement of the fence would be performed by a contractor. The existing fence would be replaced with a 6-foot high V-shaped barb wire fencing consistent with USBR security requirements.

Regulatory Compliance

N/A

Project Budget & Schedule

Fiscal Year	**Cost**
Fiscal Year 19-20	$ 41,500
Total	**$ 41,500**

Supervisory Control and Data Acquisition (SCADA) Upgrades (2014-C-61)

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.

Total Estimated Cost: $120,000

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. The FY 2014-15 budget approved Phase 1 of the system upgrade in the amount of $22,000 to install a historian server backup, install a new cellular communication system, and update the PLC programming software.

Need for Project

Remaining system upgrades are currently under review by an engineering consultant. Therefore, defined project needs are not currently available. Identified components of system software are obsolete and no longer supported by the manufacturer and necessitate replacement.

Description

The current SCADA system is under evaluation by a consulting engineer to determine the upgrades necessary to meet minimum operational and information requirements. Phases two through ten would upgrade obsolete, critical Programmable Logic Controllers (PLC) in the field and install wireless technology communication devices to enable reliable and secure access. This approach may change based on evaluation from the engineering consultant. It is anticipated that the purchase, programming and installation of these devices would be phased over time. The cost per PLC could reach $50k. COMB operates nine PLCs.

Phase I (Fiscal Year 14-15): Install historian server backup and new cellular communication system; update PLC programming software.

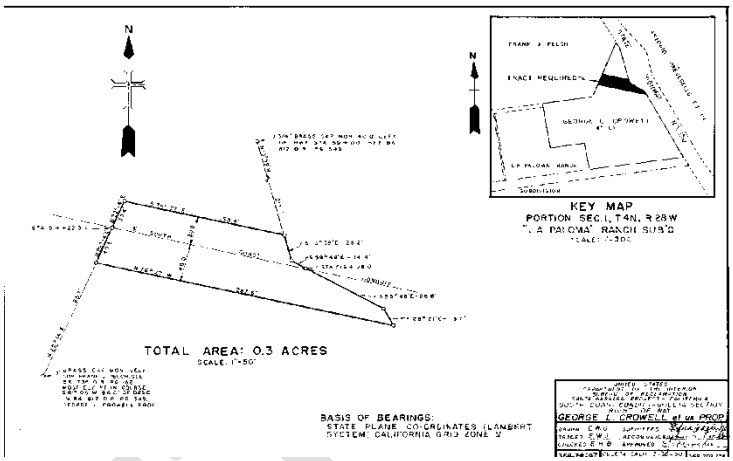
Phases II – IV (FYs 2016-2018): Update PLC Units / wireless communication devices in the field

Regulatory Compliance
N/A

Budget & Schedule — Internal Staff Estimate

Fiscal Year	Cost
Fiscal Year 14-15 (Phase I)	$ 25,000
Fiscal Year 15-16 (Phase II)	$ 25,000
Fiscal Year 16-17 (Phase III)	$ 20,000
Fiscal Year 17-18 (Phase IV)	$ 50,000
Total	**$120,000**

Right Of Way Identification Program (2014-C-72)



Project Ranking

This project is considered part of regular maintenance and is not 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: $40,000

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 South Coast Conduit (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. The 2013-14 and 2014-15 budgets included funds for this program. The program, when complete, will provide specific land use information for all sections of the USBR easement. This will include specific land owner information to enable communication on land use restrictions and permit requirements. Additionally, the program will enable the timely response to County permit processes.

Need for Project

Unpermitted and unknown encroachments on the SCC easement potentially affect 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 Geographical Information System (GIS) based and enable a more efficient and cost effective response to regular maintenance, testing, and monitoring activities. This GIS based system will largely replace 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 site inspection, expedite our ability to precisely locate and identify visible leakage, ground erosion, or new encroachments.

Phase III (Fiscal Year 2015-16): Mapping of Cachuma Project easements into GIS. Contact by letter to all easement impacted landowners regarding COMB pipeline system maintenance responsibility.

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

N/A

Budget & Schedule

Fiscal Year	Cost
Fiscal Year 15-16 (Phase III)	$20,000
Fiscal Year 16-17 (Phases IV & V)	$20,000
Total	**$40,000**

Reference

September 2006 Boyle "Phase 2 Reliability Study for South Coast Conduit Upper Reach Tecolote Tunnel to Corona Del Mar Water Treatment Plant and Carpinteria Reach South Coast Conduit Booster Pump Station to Ortega Reservoir" Page 119

Boyle April 2005 "Reliability and Alternatives Study for the South Coast Conduit Carpinteria Reach Cater Booster Pump Station to Ortega Reservoir" Page 37 and Figure 17-A
Boyle April 2003 "Reliability Alternative Study for Upper Reach of the South Coast Conduit" Page 41.

Clean and Apply Grout into Leaking Cracks Outlet Works Interior Walls at Lauro Reservoir (2010-2-8)

Project Ranking

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

Total Estimated Cost: $38,000

Background

In 1995, COMB staff attempted to seal and grout the Lauro Tunnel seams to prevent water intrusion. This and previous repairs were ineffective and have failed to prevent water intrusion over time.

Need for Project

Prevention of water intrusion in the tunnel would extend the useful life of the facility, ensure its reliability and promote a safer work environment.

Description

Removal of deteriorated grout and the injection of a water stop polymer would be conducted by a retained contractor.

Regulatory Compliance

This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule

Fiscal Year	Cost
Fiscal Year 17-18	$38,000
Total	**$38,000**

FY 2017-2021

Habitat Improvement Plan

Fisheries Division

Table of Contents

Executive Summary

The Cachuma Operation and Maintenance Board (COMB) Fisheries Division is tasked, through the U. S. Bureau of Reclamation's (USBR) operation of the Cachuma Project, with carrying out the fisheries monitoring, data analysis and tributary enhancement projects as described in the National Marine Fisheries Service's (NMFS) 2000 Biological Opinion (BiOp). A consensus based, long-term fisheries program has been developed that provides protection for steelhead/rainbow trout (*Oncorhynchus mykiss, O. mykiss)* downstream of Bradbury Dam through a combination of long-term monitoring, water releases from Bradbury Dam through the Hilton Creek Watering System and Outlet Works, 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 (LSYR). By implementing the NMFS 2000 BiOp, COMB has created significant additional habitat for steelhead within the LSYR 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 transferred from a private consultant to COMB in July of 2012. The Oak Tree Program is entering year eleven (101) 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.

USBR has entered into re-consultation with NMFS for a new Cachuma Project BiOp which is expected to contain a continuation of the fisheries monitoring program and possible enhancement projects where additional projects (and funding) could be needed.

Introduction

COMB's Five-Year Habitat Improvement Plan (HIP) identifies the needed funding for identified restoration projects slated for construction as well as on the ongoing Cachuma Lake Oak Tree Restoration Program from Fiscal Year (FY) 2016-2017 through FY 2020-2021. 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 USBR. 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 COMB Board for approval in preparation of the annual Fisheries Budget.

Table 1: 5-Year HIP financial matrix for Fiscal Years 2016-17 through 2020-21; in years with two construction projects, there is a possibility of one of the projects slipping to the following year due to permits or design approval delays.

Project Name	Fiscal Year:				
	2016-17	2017-18	2018-19	2019-20	2020-21
Quiota Creek Crossing 0 (a)	$840,000				
Quiota Creek Crossing 4	$1,120,000				
Quiota Creek Crossing 5	$30,000	$960,000			
Salsipuedes Creek Jalama Road Fish Ladder Fix	$10,000	$30,000			
Quiota Creek Crossing 8		$30,000			
Quiota Creek Crossing 9			$30,000	$930,000	
Quiota Creek Crossing 0 (b)				$30,000	$840,000
Cachuma Lake Oak Tree Restoration Program	$80,000	$75,000	$60,000	$60,000	$60,000
TOTALS:	**$2,080,000**	**$1,095,000**	**$90,000**	**$1,020,000**	**$900,000**

Quiota Creek Fish Passage Projects

Summary

Quiota Creek is a tributary of the LSYR located approximately 8.4 miles downstream of Bradbury Dam and 39.7 miles from the Pacific Ocean. 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 concrete crossings (Crossings 4, 5, and 9), bottomless arched culverts (Crossings 1, 2, 3, 6, and 7), and a temporary bridge (Crossing 8). Two additional crossing 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 with full span bottomless arched culverts that span well beyond bank full width of the creek and provide complete passage for juvenile and adult *O. mykiss* passage. Those projects were completed by COMB in 2013, 2011, 2015, 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. USBR through 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 and matching funds from COMB, hence a project cannot be built without grant funding. Eash of these projects is described below.

Background

The Quiota Creek watershed, a tributary of the LSYR, is considered by 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 address. Refugio Road crosses 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 crossings, and used that information to provide a guidance document for future restoration efforts that determined the prioritized 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, in 2013 Crossing 1 was replaced with a 60-foot bottomless arched culvert, and in 2015 Crossing 3 was replaced with a 53-foot bottomless arched culvert. Crossings 0 (a & b), 4, 5, 8, and 9 are scheduled to be fixed within the next 5-7 years, depending on funding availability. Crossings 0a & 0b are on private property and not on Refugio Road where there are two low flow crossings (a & b) in close proximity.

Need for Projects

The Quiota Creek projects described below are part of the proposed actions in the Cachuma Project BiOp (NMFS, 2000). NMFS designated Quiota Creek as 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 actions 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 habitat for rearing and spawning. 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 LSYR mainstem that was genetically typed to be from Quiota Creek, suggesting that the anadromous gene persists in the watershed (Garza and Clemento, 2010).

Quiota Creek Crossing 0 (a)

Project Schedule

Design –FY 2016-17, and Construction – Fall FY 2016-17

Figure 1: Lower Quiota Creek near the confluence with the Santa Ynez River showing Crossing 0 (a).

Description

The proposed fix for Crossing 0a is to replace the concrete low flow or Arizona-type concrete crossing (Figure 1) with a 55-foot bottomless arched culvert that will allow for a naturalized stream channel below. The bridge will be designed to convey the 25-year peak flow event and sustain the 100-year flow over the bridge as directed by Santa Barbara County for a rural private bridge. Also, the bridge will completely span the bankfull stream width following CDFW guidelines (CFDG, 2009). The resulting structure will provide for full juvenile and adult passage for anadromous and resident *O. mykiss* while improving road access and safety for the landowner. No trees will be removed during any portion of the construction. However, 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. The project will be constructed to meet all the applicable guidance and permit criteria by CDFW, NMFS, California Regional Water Quality Control Board (RWQCB), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), 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.

Project Budget

Fiscal Year	Cost
Fiscal Year 2016-17 (design support/bid)	$ 30,000
Fiscal Year 2016-17 (construction/permitting/inspections)	$810,000
Total	$840,000

Quiota Creek Crossing 4

Project Schedule

Design –FY 2016-17, and Construction – Fall FY 2016-17

Figure 2: 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 2) with a 54-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 the channel bed will be lined with engineered streambed material composed of native material creating 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 low flow crossing and replace it with a 54-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, CRWQCB, USACE, USFWS, 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.

Project Budget

Fiscal Year	**Cost**
Fiscal Year 2016-17 (design support/bid)	$ 30,000
Fiscal Year 2016-17 (construction/permitting/inspections)	$1,090,000
Total	$1,120,000

Quiota Creek Crossing 5

Project Schedule

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

Figure 3: 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 3) with a 59-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 approximately 2.1% and the channel bed will be lined with engineered streambed material composed of native material creating 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 low flow crossing, install a 59-foot bottomless arched culvert, construct a new road over the bottomless arched culvert, install vegetated rock slope protection around the bridge footings, place one rock riffle in the stream channel for grade control and to maintain *O. mykiss* habitat upstream, 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, CRWQCB, USACE, USFWS, 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.

Project Budget

Fiscal Year	Cost
Fiscal Year 2016-17 (design)	$ 30,000
Fiscal Year 2017-18 (design)	$ 30,000
Fiscal Year 2017-18 (construction)	$930,000
Total	$990,000

Quiota Creek Crossing 8

Project Schedule

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

Figure 4: 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 4) with a 55-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 approximately 2% and the channel bed will be lined with engineered streambed material composed of native material creating a naturalized channel bottom. The culvert will provide for a 24-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 55-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 criteria by CDFW, NMFS, CRWQCB, USACE, USFWS, CalTrans, 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. The project will be funded by a CalTrans federal grant if successful in the grant competition and will be administered by the County requiring only project oversight by COMB.

Project Budget

Fiscal Year	Cost
Fiscal Year 2017-18 (design)	$30,000
Fiscal Year 2017-18 (construction)	$50,000 (reimbursable - grant funding)
Total	$80,000

Quiota Creek Crossing 9

Project Schedule

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

Figure 5: 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 5) 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 approximately 2% and the channel bed will be lined with engineered streambed material composed of native material creating 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 low flow crossing, 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 two rock weirs in the stream for grade control and 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, CRWQCB, USACE, USFWS, 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.

Project Budget

Fiscal Year	Cost
Fiscal Year 2018-19 (design)	$ 30,000
Fiscal Year 2019-20 (design)	$ 30,000
Fiscal Year 2019-20 (construction)	$900,000
Total	$960,000

Quiota Creek Crossing 0 (b)

Project Schedule

Design – FY 2019-20, Construction – Fall FY 2020-21

Figure 6: Lower Quiota Creek near the confluence with the Santa Ynez River showing Crossing 0 (b).

Description

The proposed fix for Crossing 0b is to replace the concrete low flow or Arizona-type concrete crossing (Figure 6) with a 55-foot bottomless arched culvert that will allow for a naturalized stream channel below. The landowners have been resistant to the project to date, but the hope is that after the successful completion of Crossing 0 (a) they will come around and be supportive of this important fix. The bridge will be designed to convey the 25-year peak flow event and sustain the 100-year flow over the bridge as directed by Santa Barbara County for a rural private bridge. Also, the bridge will completely span the bank-full stream width following CDFW guidelines (CFDG, 2009). The resulting structure will provide for full juvenile and adult passage for anadromous and resident *O. mykiss* while improving road access and safety for the landowner. No trees will be removed during any portion of the construction. However, 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. The project will be constructed to meet all the applicable guidance and permit criteria by CDFW, NMFS, California Regional Water Quality Control Board (RWQCB), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), 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.

Project Budget

Fiscal Year	Cost
Fiscal Year 2019-20 (design)	$ 30,000
Fiscal Year 2020-21 (construction)	$840,000
Total	$870,000

Salsipuedes Creek Jalama Road Fish Ladder Fix

Project Schedule

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

Figure 7: 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 created a fish passage barrier to adult and juvenile steelhead. In 2004, COMB installed a fish passage structure (ladder) through that concrete apron on Salsipuedes Creek at the Jalama Road Bridge (Figure 7). This fish passage ladder was built along a bedrock outcrop capped with concrete by installing a series of three step-pools, which increased the range of flows during which juvenile and adult steelhead could migrate through the ladder. Although this fish passage ladder has successfully been passing juvenile and adult steelhead since its completion, NMFS and CDFW have requested 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 Fisheries Design Center to create preliminary design criteria and design calculations for the requested fix.

The anticipated fix will include a modification to each weir invert to reverse the angle, enhance the grade control structure to focus more flow through the fish ladder, and install two weirs downstream to increase the scour pool height for easier access to the fish ladder. 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 2017.

Project Budget

Fiscal Year	Cost
Fiscal Year 2016-17 (design)	$10,000
Fiscal Year 2017-18 (construction)	$30,000
Total	$40,000

Cachuma Lake Oak Tree Restoration Program

Project Schedule
Year round

Figure 8: Cachuma Lake Oak Tree Restoration Program showing a) training with arborist, b) newly planted oaks at Storke Flat, c) California Conservation Core planting at Lake Cachuma County Park, and d) new Year 8 oak trees.

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 BiOp (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 BiOp 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 was utilized for seven years. COMB then took over the project, working with an advising arborist. 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 since 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. Recently, more oak trees were planted in FY 2014-2015 and FY 2015-16, downstream of the dam, at Storke Flats and within the Lake Cachuma County Park. Just under 4,000 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 (Dead and At-Risk) was determined suggesting that just over a 1,100 more oak trees need to be planted to comply with the mitigation requirement. If the prediction calls for a normal to wet year, more trees will be planted in FY 2016-2017. If the mitigation requirement is met at a success rate of 2:1 for mature oak trees, the program will be completed 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 BiOp 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 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 5 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. Mulching is an ongoing effort for all planted and alive trees.

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 of each year 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. A report with financials and irrigation water usage will be prepared each year.

Budget

Fiscal Year	Cost
Fiscal Year 16-17	$80,000
Fiscal Year 17-18	$75,000
Fiscal Year 18-19	$60,000
Fiscal Year 19-20	$60,000
Fiscal Year 20-21	$60,000
Total	$335,000