

Attachment 4 Budget

Attachment 4 provides required budget estimates for each Work Plan Task for each of the projects included in the Implementation Grant Proposal and additionally contains a Proposal Budget Summary.

This Attachment 4 includes the following Sections:

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ATTACHMENT 4
BUDGET NARRATIVES
UPPER SANTA MARGARITA WATERSHED PLANNING REGION
IRWM PROP 84 ROUND 1 IMPLEMENTATION PROPOSAL

The Upper Santa Margarita Watershed Planning Region IRWM Implementation Proposal includes a suite of five high-priority projects that when combined provide multiple water supply, water quality, environmental, and economic benefits to the region.

The requested amount in the Proposal is \$4,315,708. The total cost of the Proposal is \$21,471,088 with a 78 percent Funding Match equal to \$16,705,380. Sources of the Funding Match are presented in each project's budget sheet in Att04_IG1_Pin#_Budget_1 of 2, which confirms numerous funding partnerships to carry the projects forward. This investment by multiple funding partners demonstrates significant commitment within the Region, throughout Southern California and the State to the multiple and integrated benefits that will result from implementation of the Upper Santa Margarita Watershed IRWM Plan and Proposal.

The following pages provide required budget estimates for each Work Plan Task for each of the projects included in this Implementation Grant Proposal

Section 1 Project 1 Vail Lake Stabilization and Conjunctive Use Project – Rancho California Water District

The Vail Lake Stabilization and Conjunctive Use Project include several elements that will take advantage of additional imported water during wet years for storage and use during dry years. The Project includes construction of the Vail Lake Transmission Main (pipeline) and Pump Station (VLTM&PS) to convey imported water from MWD Pipeline No. 6 at the EM-21 connection (turnout) to Vail Lake allowing for seasonal storage and conjunctive use storage. The Project also includes construction of Quagga Mussel Control Facilities and native vegetation restoration. The total project budget is as follows:

- » Total Project: \$17,695,010
- » Match Share: \$15,746,510
- » State Share: \$ 1,948,500

Table A	
Vail Lake Stabilization and Conjunctive Use Project	Total
VLTM&PS	\$13,775,035
Quagga Mussel Control Facilities	\$2,598,000
Native Vegetation Restoration	\$1,321,975
Total Project	\$17,695,010

The Project began with feasibility studies, design, and environmental documentation of the VLTM&PS in 2005 through 2009. Bid solicitation and construction of the VLTM&PS began in late 2009, and construction was complete in November 2010. The Quagga Mussel Control Facilities and native vegetation restoration elements of the project remain to be constructed. The proposed Project budget detail includes total costs for the Project, while identifying elements that are complete. The Economic Analysis, Attachment 7, details the costs by years that were incurred prior to and after September 30, 2008 (allowable funding for cost match), summarized as follows:

- » Total Project Costs \$17,695,010
- » Costs Prior to September 8, 2008 \$ 972,950
- » Costs After September 8, 2008 \$16,722,060 Matching Funds

The non-state share of the budget is funded through an agreement with the U.S. Bureau of Reclamation for American Recovery and Reinvestment Act (ARRA) funds for approximately \$6.1 million, and the balance is funded from the RCWD 2010A Bond issue and RCWD Debt Service Construction Fund. a borrowing vehicle repaid by water rates and other revenues of the District.

Labor Compliance Program costs are not broken out separately but included in direct project administration.

Following is budget narrative and data supporting the Budget Categories provided in Table 7a in Appendix A and shown here as Table B.

Table B (Table 7 from PSP) Total Project Budget for Vail Lake Stabilization and Conjunctive Use Project (Project 1)						
Budget Category		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used**	Total	% Funding Match
(a)	Direct Project Administration Costs	\$237,500	\$67,500	\$0	\$305,000	77.9%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%
(c)	Planning/Design/Engineering/Environmental Documentation	2,572,830	153,750	\$0	2,726,580	94.4%
(d)	Construction/Implementation	9,193,640	1,567,125	\$0	10,760,765	85.4%
(e)	Environmental Compliance/Mitigation/Enhancement	1,256,975	\$0	\$0	1,256,975	100.0%
(f)	Construction Administration	490,625	121,875	\$0	612,500	80.1%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	12,750	38,250	\$0	51,000	25.0%
(h)	Construction/Implementation Contingency	1,982,190	\$0	\$0	1,982,190	100.0%
(i)	Grand Total	\$15,746,510	\$1,948,500	\$0	\$17,695,010	89.0%

* Sources of funding:

Of the \$15,746,510 shown as the Non-State Share amount, an agreement with the U.S. Bureau of Reclamation for American Recovery and Reinvestment Act (ARRA) funds is providing approximately \$6.1 million, and the balance is funding from the Rancho California Water District 2010A Bond Issue (\$12,999,999) and the Rancho California Water District Debt Service Construction Fund.

Budget Categories

(a) Direct Project Administration Costs

- » Total: \$305,000
- » Match Share: \$237,500
- » State Share: \$ 67,500 (0.38% of project costs)

The \$237,500 Funding Match is an in-kind contribution from the lead agency, the Rancho California Water District (RCWD/District), acting as project manager. Components of the administrative costs are primarily identified in Work Plan Tasks 1 and 2. The staff time required coordinating the deliverables identified in Tasks 2 – 10 also fall within this budgetary line item.

Administrative Costs for this project were calculated using a similar costs rate as other capital projects that RCWD has completed. The State Share of \$67,500 includes an allocation for Grant Administration. Total state share equals less than 0.4 percent of total project costs.

Costs are estimated for a RCWD staff at an average of \$195 per hour for a total of approximately 1,564 hours over the term of the Project, or approximately 795 hours during the term of the Grant Agreement. Total projected hours for the project includes the following:

Table C			
Project Administration	Hours	Rate/Hr*	Total
VLTM&PS	769	\$195	\$150,000
Chief Engineer	20	\$314	
Engineering Manager	375	\$265	
Engineering Secretary	170	\$139	
Contracts Coordinator	125	\$120	
Engineering Clerk	79	\$87	
Quagga Mussel Control Facilities	461	\$195	\$90,000
Director of Planning	5	\$329	
Water Resources Planner	10	\$156	
Chief Engineer	15	\$314	
Engineering Manager	240	\$265	
Engineering Secretary	100	\$139	
Contracts Coordinator	50	\$120	
Engineering Clerk	41	\$87	
Native Vegetation Restoration	333	\$195	\$65,000
Chief Engineer	10	\$314	
Engineering Manager	175	\$265	
Engineering Secretary	75	\$139	
Contracts Coordinator	45	\$120	
Engineering Clerk	28	\$87	
TOTAL	1,564		\$305,000

*Hourly rate of \$195 is an average of all classifications and include salaries, benefits, and overhead.

(b) Land Purchase/Easement

No land is acquired for this project therefore no land purchase costs are included.

(c) Planning/Design/Engineering/Environmental Documentation

- » Total: \$2,726,580
- » Match Share: \$2,572,830
- » State Share: \$ 153,750

This budget category includes costs for Work Plan Tasks 3, 4, 5 and 6, as shown in the following table and narrative:

Table D			
Planning/Design/Engineering/Environmental Documentation	Hours	Rate/Hr*	Total
VLTM&PS			
Kennedy/Jenks Consultants – Design			\$2,521,580
<i>Current Scope</i>			\$1,332,580
<i>Contingency</i>			\$14,000
<i>Permits</i>			\$1,155,000
<i>Misc. & Legal</i>			\$20,000
Quagga Mussel Control Facilities			
<i>Bid Solicitation</i>			
Engineering Manager	2	\$265	\$530

Table D (Continued)			
Planning/Design/Engineering/Environmental Documentation	Hours	Rate/Hr*	Total
Quagga Mussel Control Facilities			
Contract Manager	10	\$234	\$2,340
Engineering Secretary	20	\$139	\$2,780
Contracts Coordinator	10	\$120	\$1,200
Engineering Clerk	8	\$82	\$656
Labor Subtotal	50		\$7,506
Kennedy/Jenks Consultants – Design			\$197,494
CEQA - Amended IS/MND			\$30,310
Preliminary Design			\$64,617
Facility Design			\$102,567
TOTAL			\$2,726,580

*Hourly rates include salaries, benefits, and overhead.

The following table presents Budget line item (c) by Task:

Table E	
Planning/Design/Engineering/Environmental Documentation	Total
Task 3 – Assessment and Evaluation	\$513,019
Task 4 – Permitting	\$1,169,849
Task 5 – Final Design	\$824,900
Task 6 – Environmental Documentation	\$218,812
TOTAL	\$2,726,580

For Task 3, Assessment and Evaluation, costs for the feasibility study were not included in the Vail Lake Stabilization and Conjunctive Use Project proposed budget. This is because the RCWD, in cooperation with the Eastern Municipal Water District and Western Municipal Water District, completed the feasibility study in July 2007 for supplying alternative water supplies to two agricultural areas within the RCWD service area. The feasibility study, *Demineralization and Non-Potable Water Conversion Feasibility Study Project*, includes multiple projects including the Vail Lake Transmission Main and Pump Station Project.

For Task 6, Environmental Documentation, the Initial Study [IS]/MND for the VLTM&PS was completed in April 2007 by Kennedy/Jenks Consultants. The Conceptual Mitigation Plan (September 2007) and a Compensatory Mitigation Plan (August 2009) for the VLTM&PS were completed to comply with CEQA, and the presumed requirements of the environmental permits, including Section 404 Authorization requested from the Army Corps of Engineers (ACOE), the Lake or Streambed Alteration Notification submitted to the California Department of Fish and Game (CDFG), and the Section 401 Certification of Water Quality request submitted to the Regional Water Quality Control Board (RWQCB). The Compensatory Mitigation Plan was also completed by Kennedy/Jenks Consultants. As of December 2010, total costs for Environmental Documentation for the VLTM&PS is \$188,493. Remaining environmental documentation includes preparing an amendment to the IS/MND for the VLTM&PS to include the chlorination and dechlorination facilities.

(d) Construction/Implementation

- » Total: \$10,760,765
- » Match Share: \$ 9,193,640
- » State Share: \$ 1,567,125

Total Construction/Implementation costs of \$10,760,765 are for construction of the Vail Lake Transmission Main and Pump Station and the Quagga Mussel Control Facilities, and include Work Plan Tasks 7 and 8. Native Vegetation Restoration is included in Task 10, Budget line item (e) Environmental Compliance/Mitigation/Enhancement, and Construction Contingency is included in Budget Line item (i) Construction/Implementation Contingency.

Table F	
Construction/Implementation	Total
VLTM&PS	\$8,701,265
General (survey, soils, etc.): BHA, Inc., Sladden Engineering	457,355
Transmission Main: L.H. Woods & Sons	4,763,850
Pump Station: L.H Woods & Sons	2,774,350
Engineering in Construction: Kennedy/Jenks Consultants	705,710
Quagga Mussel Control Facilities	\$1,607,300
Construction Contractor (TBD)	\$1,607,300
TOTAL	\$10,760,765

Construction costs for the VLTM&PS are expended and will be used for matching funds (non-state share) after September 30, 2008. Attached are supporting project documents from project completion. Actual contractor costs for the matching costs will be provided.

Kennedy/Jenks Consultants prepared an Opinion of Probable Construction Costs (December 2010) for the Quagga Mussel Control Facilities. The following tables provide detail on the probable construction costs:

Table G

Construction/Implementation Costs	
Opinion of Probable Construction Costs for the Quagga Mussel Control Facilities	Total
Contractor Activities	
MWD Turnout EM-2: Screens and Chlorination System	\$1,215,053
Vail Lake Pump Station Dechlorination System	\$234,559
Electrical	\$78,844
Instrumentation and Control	\$78,844
Total Costs	\$1,607,300

Table H

Detail of Opinion of Probable Construction Costs for Quagga Mussel Control Facilities			Materials		Installation		Subcontractors		Total Costs
	#	Unit	\$/Unit	Total	\$/Unit	Total	\$/Unit	Total	\$1,215,053
MWD Turnout EM-21: Screens and Chlorination System									
12.5% Sodium Hypochlorite Double Walled Storage Tank	2	EA	\$ 29,000	\$ 58,000	\$ 6,000	\$ 12,000			\$ 70,000
Recessed Installation	70	CY					\$ 500	\$ 35,000	\$ 35,000
Sump Pump and Drainage Piping	1	EA	\$ 3,000	\$ 3,000	\$ 750	\$ 750			\$ 3,750
Chemical Feed Pump	2	EA	\$ 7,500	\$ 15,000	\$ 2,250	\$ 4,500			\$ 19,500
Chemical Feed Piping	100	LF	\$ 25	\$ 2,500	\$ 10	\$ 1,000			\$ 3,500
Sodium Hypochlorite Feed System Components	1	LS	\$ 3,000	\$ 3,000	\$ 1,000	\$ 1,000			\$ 4,000
48" Static Mixer	1	EA	\$ 37,785	\$ 37,785	\$ 9,446	\$ 9,446			\$ 47,231
Chlorine Analyzer	1	EA	\$ 3,200	\$ 3,200	\$ 750	\$ 750			\$ 3,950
Chlorine Sample Line (1" PVC)	100	LF	\$ 5.55	\$ 555	\$ 9.70	\$ 970			\$ 1,525
Chlorine Sample Discharge Piping (4" PVC)	100	LF	\$ 33.50	\$ 3,350	\$ 16.30	\$ 1,630			\$ 4,980
200-Micron Filters and Controllers	1	LS	\$ 150,000	\$ 150,000	\$ 25,000	\$ 25,000			\$ 175,000
18" BFV	6	EA	\$ 24,000	\$ 144,000	\$ 6,000	\$ 36,000			\$ 180,000
BW Piping to Lower VCD Ponds	1,320	LF	\$ 50	\$ 66,000	\$ 30.00	\$ 39,600			\$ 105,600
36" CML&C Piping/Fittings	150	LF	\$ 135	\$ 20,250	\$ 33.75	\$ 5,063			\$ 25,313
36" BFV	3	EA	\$ 64,000	\$ 192,000	\$ 16,000	\$ 48,000			\$ 240,000
Subtotal for Chlorination System				\$ 698,640		\$ 185,709		\$ 35,000	\$ 919,349
30% Calcium Thiosulfate Double Walled Storage Tank	2	EA	\$ 29,000	\$ 58,000	\$ 6,000	\$ 12,000			\$ 70,000
Chemical Feed Pump (progressive feed cavity, 35 gph)	2	EA	\$ 6,500	\$ 13,000	\$ 1,950	\$ 3,900			\$ 16,900
Chemical Feed Piping (Sch 80 PVC, double contained)	100	LF	\$ 15	\$ 1,500	\$ 5	\$ 500			\$ 2,000
Calcium Thiosulfate Feed System Components	1	LS	\$ 2,000	\$ 2,000	\$ 750	\$ 750			\$ 2,750
Concret Pad (15' x 30' x1")	17	CY					\$ 300	\$ 5,100	\$ 5,100
Chlorine Analyzer	2	EA	\$ 3,200	\$ 6,400	\$ 750	\$ 1,500			\$ 7,900
Chlorine Sample Line (1" PVC)	1000	LF	\$ 5.55	\$ 5,550	\$ 9.70	\$ 9,700			\$ 15,250
Chlorine Sample Discharge Piping (4" PVC)	100	LF	\$ 33.50	\$ 3,350	\$ 16.30	\$ 1,630			\$ 4,980
Subtotal for Dechlorination System				\$ 89,800		\$ 29,980		\$ 5,100	\$ 124,880
Project Subtotal				\$ 788,440		\$ 215,689		\$ 40,100	\$ 1,044,229
Overall									
Electrical(10% of total bare materials cost)	1	LS					\$ 78,844	\$ 78,844	\$ 78,844
I&C(10% of total bare materials cost)	1	LS					\$ 78,844	\$ 78,844	\$ 78,844
Project Subtotal								\$ 197,788	\$ 1,201,917
Division 1 Costs @ 10%			0.10	\$ 78,844	0.10	\$ 21,568.88	0.10	\$ 19,778.80	
Project Subtotal				\$ 867,284		\$ 237,257.63		\$ 217,566.80	\$ 1,322,108
Taxes - Materials Costs @8.75%			0.0875	\$ 75,887					
Project Subtotal				\$ 943,171		\$ 237,258		\$ 217,567	\$ 1,397,996
Taxes - Labor Costs @ 5%					0.05	\$ 11,862.88			
Project Subtotal				\$ 943,171		\$ 249,120.51		\$ 217,567	\$ 1,409,859
Contractor Markup for Sub @ 12%							0.12	\$ 26,108.02	
Project Subtotal				\$ 943,171		\$ 249,120.51		\$ 243,674.82	\$ 1,435,967
Contractor OH&P @ 15%			0.15	\$ 141,476	0.15	\$ 37,368.08	0.15	\$ 36,551.22	
PROJECT TOTAL				\$ 1,084,647		\$ 286,488.58		\$ 280,226.04	\$ 1,651,362
Project Total Adjusted for Rounding and Margins									\$ 1,607,300

(e) Environmental Compliance/Mitigation/Enhancement

- » Total: \$1,256,975
- » Match: \$1,256,975
- » State: \$ 0

Total Environmental Compliance/Mitigation/Enhancement costs of \$1,256,975 are for implementation of the native vegetation restoration phase of the Project, included in Work Plan Task 10.

Natures Image Inc. will conduct all aspects of site preparation and native vegetation restoration for the VLTM&PS Project.

LSA Associates, Inc. will provide all seed, container plants and cuttings for use by Natures Image to install. LSA will conduct biological monitoring of the mitigation site during all phases of site preparation, installation of plant and seed material, and plant warranty period maintenance to

ensure compliance with the Compensatory Mitigation Plan (CMP). Monitoring activities will be documented and a memorandum prepared daily during the eight days of monitoring. LSA will also prepare an as-built status report following completion of mitigation site preparation and planting to describe the as-built status of the site in accordance with the Regional Water Quality Control Board Mitigation Measure RWQCB-37 in the CMP. Finally, LSA will prepare a memorandum, in accordance with Special Condition 6 of the U.S. Army Corps of Engineers Section 404 Permit, including overview of mitigation installation, schedule for future monitoring, summary of compliance status with each Special Condition, color photographs, and a copy of the as-built drawings.

Costs for RCWD staff to oversee all aspects of work by the contractors including site preparation, planting, monitoring and reporting are included in Task 1, Direct Project Administrative Costs.

Table I	
Environmental Compliance / Mitigation Enhancement	Total
Natures Image Inc.	\$1,149,000
LSA Associates, Inc.	\$82,975
Contractor (TBD) - Survey	\$15,000
LCP, Inc. - Labor Compliance	\$10,000
TOTAL	\$1,256,975

(g) Construction Administration/Implementation

- » Total: \$612,500
- » Match: \$490,625
- » State: \$121,875

The Construction Administration/Implementation budget includes costs associated with Construction Management, Work Plan Task 9, which includes field inspection, contract oversight, and operation integration and construction management.

Table J			
Construction Administration	Hours	Rate/Hr*	Total
VLTM&PS			\$424,446
Chief Engineer	36	\$314	\$11,306
Contracts Manager	100	\$234	\$23,400
Engineering Manager	100	\$225	\$45,000
Construction Inspection Supervisor	250	\$163	\$40,760
Inspector	300	\$151	\$45,300
Engineering Secretary	225	\$139	\$31,280
Contracts Coordinator	250	\$120	\$30,000
Engineering Clerk	200	\$87	\$17,400
Labor Subtotal			\$244,446
Kennedy/Jenks Consultants			\$180,000
Quagga Mussel Control Facilities			\$188,054
Field Inspection/Contract Oversight		3% of Construction	\$62,685
Chief Engineer	10	\$314	\$3,140
Engineering Manager	20	\$265	\$5,300
Contract Manager	53	\$234	\$12,402
Construction Inspection Supervisor	75	\$163	\$12,225

Table J			
Construction Administration	Hours	Rate/Hr*	Total
Inspector	150	\$151	\$22,650
Engineering Secretary	35	\$139	\$4,865
Contracts Coordinator	30	\$120	\$3,600
Engineering Clerk	20	\$87	\$1,640
Operational Integration		1.5% of Construction	\$31,342
Electrical Service Supervisor	22	\$187	\$4,114
Water Quality Supervisor	24	\$187	\$4,488
Water System Supervisor	25	\$180	\$4,500
Instrumentation Control Tech	51	\$147	\$7,497
Water Quality Tech I/II	39	\$137	\$5,343
Water Operator	40	\$135	\$5,400
Labor Subtotal			\$94,027
Kennedy/Jenks Consultants			\$99,696
TOTAL			\$612,500

*Hourly rates include salaries, benefits, and overhead.

(h) Other Costs

- » Total: \$51,000
- » Match: \$12,750
- » State: \$38,250

The Other Costs budget of \$51,000 is included in activities related to Work Plan Task 9, Construction Management. Costs are estimated at 2 percent of total project costs for the Quagga Mussel Control Facilities (\$2,597,910) for construction management activities that are unforeseen. This 'Other Costs' percentage is appropriate for this project and in line with other similar construction projects conducted by RCWD.

(i) Construction/Implementation Contingency

- » Total: \$1,982,190
- » Match: \$1,982,190
- » State: \$ 0

Construction contingency includes \$1,500,000, equal to 15 percent of the bid amount plus a No Excuse Bonus to meet the tight schedule required by the ARRA funding on the VLTM&PS. Contingency also includes an estimated 30 (\$482,190) of construction costs (\$1,607,300) for the Quagga Mussel Control Facilities, during the design stage of the project. Total Construction Contingency equal approximately 18.5 percent of total Construction/Implementation [Budget line (d)] costs for the project. This contingency percentage is appropriate for this project and in line with other similar construction projects conducted by RCWD.

Section 2

Project 2. Agricultural Irrigation Efficiency Program – Rancho California Water District

The Agricultural Irrigation Efficiency Program’s (Program) goal is to aid in sustaining regional agriculture by reducing agricultural water requirements for 2,000 acres of irrigated land by 2,115 AFY through implementation of on-farm water use efficiency strategies.

The Program’s cost estimate totals \$1,289,760. The cost proposal includes a 25 percent match for each budget category. The non-state share of the budget will be funded using agricultural penalty monies collected from agricultural water users as per Rancho California Water District’s (RCWD) Agricultural Penalty Fund, referred to as GL 50/50 Plan (Ag Penalty Fund is paid by users who use more that their calculated allotment).

- » Total Project: \$ 1,289,760
- » Match Share: \$ 322,440
- » State Share: \$ 967,320

Labor Compliance Program costs are not included in this project because it does not qualify under the requirements in the IRWM Guidelines.

Following is budget narrative and data supporting the Budget Categories provided in Table 7b in Appendix A and shown here as Table K.

Table K (Table 7 from PSP)						
Total Project Budget for Agricultural Irrigation Efficiency Program (Project 2)						
Budget Category		(a)	(b)	(c)	(d)	(e)
		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$14,830	\$44,490	\$0	\$59,320	25.0%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$71,280	\$213,840	\$0	\$285,120	25.0%
(d)	Construction/Implementation	\$228,250	\$684,750	\$0	\$913,000	25.0%
(e)	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0.0%
(f)	Construction Administration	\$8,080	\$24,240	\$0	\$32,320	25.0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$0	\$0	\$0	\$0	0.0%
(h)	Construction/Implementation Contingency	\$0	\$0	\$0	\$0	0.0%
(i)	Grand Total	\$322,440	\$967,320	\$0	\$1,289,760	25.0%
<p>* Sources of funding: Of the \$206,059 shown as the Non-State Share amount, the entire amount will be funded by the Rancho California Water District GL 50/50 (Ag Penalty Fund).</p>						

(a) Direct Project Administration Costs

- » Total: \$ 59,320
- » Match Share: \$ 14,830
- » State Share: \$ 44,490 (3.45% of project costs)

The Direct Administration Costs are for activities in Work Plan Tasks 1 and 2. Costs are based on RCWD’s experience in implementing similar projects. Activities include tracking expenditures, preparing invoices, and submitting quarterly reports.

The \$14,830 Funding Match is an in-kind contribution from the lead agency, the Rancho California Water District (RCWD/District), acting as project manager. Components of the administrative costs are primarily identified in Work Plan Tasks 1 and 2. The staff time required coordinating the deliverables identified in Tasks 2 – 10 also fall within this budgetary line item. Over the Program’s three year implementation period, 2.5 hours per week will be divided among an RCWD Analyst and an Administrative Assistant as per the following table. Over this same period, equipment costs totaling \$6,000 are needed for completing project administrative activities.

The State Share of \$44,490 includes an allocation for Grant Administration. Total state share equals less than 3.5 percent of total project costs.

Table L			
Direct Admin. Costs	Hours	Rate/Hr*	Total
Analyst	350	\$140	\$49,000
Admin Asst.	40	\$108	\$4,320
Labor Subtotal			\$53,320
Equipment			\$6,000
TOTAL			\$59,320

**Hourly rates include salary, benefits and overhead.*

(b) Land Purchase/Easement

No land is acquired for this project so land costs are not included.

(c) Planning/Design/Engineering/Environmental Documentation

- » Total: \$ 285,120
- » Match Share: \$ 71,280
- » State Share: \$ 213,840

Costs associated with Work Plan Tasks 3, 4, and 5 are included in this budget line item. Activities include water budget development, site identification, and contractor procurement.

For water budget development and site identification activities, GIS imagery and infrared data estimated at \$150,000 will be purchased. A GIS Coordinator will organize the implementation of these tools, and both a GIS support technician and an Analyst will utilize the tools for water budget development and site identification. Contractor procurement will require minimal staff time since a contractor has already been retained by RCWD for performing construction/implementation activities and a simple contract extension will be required for completing this task. The following presents the cost detail for this budget line item:

Table M			
Planning/Design Costs	Hours	Rate/Hr*	Total
GIS Coordinator	40	\$151	\$6,040
GIS Support	862	\$140	\$120,680
Analyst	60	\$140	\$8,400
Labor Subtotal			\$135,120
GIS IMAGERY			\$100,000
INFRARED DATA			\$50,000
TOTAL			\$285,120

*Hourly rates include salary, benefits and overhead.

(d) Construction/Implementation

- » Total: \$ 913,000
- » Match Share: \$ 228,250
- » State Share: \$ 684,750

Costs associated with Work Plan Tasks 6, 7, and 8 are included in this budget line item.

Activities include pre- and post-retrofit site evaluations/audits, program assessment of performance measures, and providing financial incentives.

Pre- and post-retrofit site evaluations/audits will be performed by the contractor procured during the program planning stage. The remainder of implementation activities will be completed by a RCWD analyst. The projected construction/implementation cost of the Program is \$913,000.

Table N			
Implementation	Hours	Rate/Hr*	Total
Analyst	200	\$140	\$28,000
Pre-retrofit audit	100	\$500	\$50,000
Post-retrofit audit	100	\$350	\$35,000
Incentives	2,000	\$400	\$800,000
TOTAL			\$913,000

*Hourly rates include salary, benefits and overhead.

(e) Environmental Compliance/Mitigation/Enhancement

Program implementation does not require environmental compliance activities. Therefore, no costs are included for this budget category.

(f) Construction Administration

- » Total: \$ 32,320
- » Match Share: \$ 8,080
- » State Share: \$ 24,240

Costs associated with Work Plan Task 9 are included in this budget line item. Activities include coordination of customer participation, contractor oversight, review of site audit reports, program advertisement, management of customer application materials, and general customer correspondence. In total, 2.4 hours per participating site was divided among an Analyst and an Administrative Assistant for completing these tasks.

Table O			
Construction Admin.	Hours	Rate/Hr*	Total
Analyst	200	\$140	\$28,000
Admin Asst	40	\$108	\$4,320
TOTAL			\$32,320

**Hourly rates include salary, benefits and overhead.*

(g) Other

No other costs are included.

(h) Construction/Implementation Contingency

No Implementation Contingency is included. Normally, contingency costs are included for projects to handle unknown conditions encountered during construction or implementation. Although the proposed program involves both construction and implementation, costs for these activities (i.e. pre- and post-retrofit site audits, program assessment of performance measures, and providing financial incentives) are known. There are no construction designs funded through the proposed program, and therefore, no contingency costs are included.

Section 3 Project 3. WR-34 Hydroelectric Power Generation Project

The WR-34 Hydroelectric Power Generation Project will produce electrical power that will be sold to Southern California Edison for use throughout their service area. The Project will enhance water supply reliability, environment along the Santa Margarita River, and ensures compliance with water requirements in the river under the Santa Margarita River Cooperative Water Resource Management Agreement between Rancho California Water District and the U.S. on behalf of Camp Pendleton Marine Corps Base.

The Project includes construction of hydroelectric turbine generator incorporated into the WR-34 Turnout Facility for imported water to utilize the 400 feet of excess head in the flow prior to discharge to the River.

- » Total Project: \$ 1,341,392
- » Match Share: \$ 335,348
- » State Share: \$ 1,006,044

The non-state share of the budget would be funded by the RCWD Debt Service Construction Fund, a borrowing vehicle repaid by water rates and other revenues of the District.

Labor Compliance Program costs are not broken out separately but included in direct project administration.

Following is budget narrative and data supporting the Budget Categories provided in Table 7c in Appendix A and shown here as Table P.

Table P (Table 7 from PSP)						
Total Project Budget for WR-34 Hydroelectric Power Generation Project (Project 3)						
		(a)	(b)	(c)	(d)	(e)
	Budget Category	Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used*	Total	% Funding Match
(a)	Direct Project Administration Costs	\$11,250	\$33,750		\$45,000	25.0%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%
(c)	Planning/Design/Engineering/Environmental Documentation	\$87,500	\$262,500		\$350,000	25.0%
(d)	Construction/Implementation	\$196,203	\$588,609		\$784,812	25.0%
(e)	Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0.0%
(f)	Construction Administration	\$11,541	\$34,624		\$46,165	25.0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$0	\$0	\$0	\$0	0.0%
(h)	Construction/Implementation Contingency	\$28,854	\$86,561		\$115,415	25.0%
(i)	Grand Total	\$335,348	\$1,006,044	\$0	\$1,341,392	25.0%

* Sources of funding:
Of the \$335,348 shown as the Non-State Share amount, the entire amount will be funded by the Rancho California Water District Dept Service Construction Fund.

(a) Direct Project Administration Costs

- » Total: \$ 45,000
- » Match Share: \$ 11,250
- » State Share: \$ 33,750 (2.52% of project costs)

The \$11,250 Funding Match is an in-kind contribution from the lead agency, the Rancho California Water District (RCWD/District), acting as project manager. Components of the administrative costs are primarily identified in Work Plan Tasks 1 and 2. The staff time required coordinating the deliverables identified in Tasks 2 – 10 also fall within this budgetary line item.

Administrative Costs for this project were calculated using a similar costs rate as other capital projects that RCWD has completed. The State Share of \$33,750 includes an allocation for Grant Administration. Total state share equals approximately 2.5 percent of total project costs.

Table Q			
Direct Admin. Costs	Hours	Rate/Hr*	Total**
Director of Planning	5	\$329	\$1,645
Water Resources Planner	10	\$156	1,560
Chief Engineer	5	\$314	\$1,570
Engineering Manager	145	\$225	\$31,050
Engineering Secretary	50	\$139	\$5,560
Contracts Coordinator	14	\$120	\$1,800
Engineering Clerk	25	\$87	\$1,827
TOTAL			\$45,000

*Hourly rates include salary, benefits and overhead.

**Totals rounded.

(b) Land Purchase/Easement

No costs.

(c) Planning/Design/Engineering/Environmental Documentation

- » Total: \$ 350,000
- » Match Share: \$ 87,500
- » State Share: \$ 262,500

Black & Veatch prepared a cost estimate of engineering activities in February 2010 for the WR-34 Hydroelectric Power Generation Facility. Engineering activities include the following Work Plan Tasks:

- » Task 3, Assessment and Evaluation: Pre-Design Evaluation (completed July 26, 2010), Site Investigations, and Turbine-Generator Procurement Package
- » Task 4: Final Design
- » Task 5: Environmental Documentation
- » Task 6: Permitting

The following table presents the detailed engineering cost estimates as provided by Black & Veatch:

Table R			
Planning/Design/Engineering/Environmental Documentation Costs	Consultant Hours	Rate/Hr*	Total Costs**
Black & Veatch Contract		2010 Rates	\$350,000
Task 3: Assessment and Evaluation			
Pre-Design Evaluation	600	\$75-\$220 ¹	102,000
Site Investigations	72	\$145-\$225 ²	12,500
Turbine-Generator Procurement Package	148	\$175-\$195 ³	27,300
Indirect Expenses	[820]	\$8.75	7,200
Direct Expenses (travel, printing, etc.)	-	LS	2,000
Subconsultants	-	LS	23,100
Task 3 Subtotal			\$174,100
Task 4: Final Design	746	\$75-\$225 ⁴	118,000
Indirect Expenses	[746]	\$8.75	6,500
Direct Expenses (travel, printing, etc.)	-	LS	4,700
Task 4 Subtotal			\$129,485
Task 5: Environmental Documentation	36	\$105-\$225 ⁵	4,900
Indirect Expenses	[36]	\$8.75	300
Subconsultants	-	LS	19,600
Task 5 Subtotal			\$24,800
Task 6: Permitting	104	\$145-\$195 ⁶	16,500
Indirect Expenses	[104]	\$8.75	900
Direct Expenses (travel, printing, etc.)	-	LS	4,500
Task 6 Subtotal			\$22,090
TOTAL			\$350,000

*Hourly rates include salary, benefits and overhead.

** Rounded to nearest ten or hundred dollars for some calculations.

Consultant Classifications and Hours:

¹ Admin Staff	8 hours	\$ 75/hr
FERC Permitting	16 hours	\$175/hr
Senior Structural	12 hours	\$185/hr
Senior I&C	12 hours	\$175/hr
Senior Electrical	28 hours	\$195/hr
Senior Mechanical	12 hours	\$195/hr
Civil Staff	152 hours	\$145/hr
Project Engineer	100 hours	\$195/hr
Technical Advisors/QA/QC	8 hours	\$200/hr
Project Manager	8 hours	\$195/hr
² CADD	8 hours	\$105/hr
Senior Geotechnical	16 hours	\$225/hr
Civil Staff	24 hours	\$145/hr
Project Engineer	24 hours	\$195/hr
³ Senior I&C	16 hours	\$175/hr
Senior Electrical	24 hours	\$195/hr
Senior Mechanical	32 hours	\$195/hr
Civil Staff	24 hours	\$145/hr
Project Engineer	40 hours	\$195/hr
Technical Advisors/QA/QC	8 hours	\$200/hr
⁴ Admin Staff	4 hours	\$ 75/hr
CADD	194 hours	\$105/hr
HVAC/Plumbing	40 hours	\$175/hr
Architect	64 hours	\$175/hr
Structural Staff	24 hours	\$120/hr
Senior Structural	20 hours	\$185/hr
Senior I&C	32 hours	\$175/hr
Senior Electrical	96 hours	\$195/hr
Senior Mechanical	40 hours	\$195/hr
Senior Geotechnical	4 hours	\$225/hr
Civil Staff	96 hours	\$145/hr
Project Engineer	88 hours	\$195/hr
Technical Advisors/QA/QC	24 hours	\$200/hr
Project Manager	20 hours	\$195/hr
⁵ CADD	20 hours	\$105/hr
Senior Geotechnical	4 hours	\$225/hr
Civil Staff	8 hours	\$145/hr
Project Engineer	4 hours	\$195/hr
⁶ CADD	16 hours	\$105/hr
FERC Permitting	8 hours	\$175/hr
Civil Staff	40 hours	\$145/hr
Project Engineer	32 hours	\$195/hr
Project Manager	8 hours	\$195/hr

(d) Construction/Implementation

- » Total: \$ 784,812
- » Match Share: \$ 87,500
- » State Share: \$ 262,500

Black & Veatch's Pre-Design Evaluation Report (July 2006) includes an Opinion of Probably Construction Costs. The following tables provide detail on the probable construction costs as included in the July 2006 report:

Table S	
Construction/Implementation Costs	
Opinion of Probable Construction Costs	Total
Contractor Activities	
Mobilization and Demobilization	\$32,000
Site Work	\$36,400
Hydroelectric Building	\$133,000
Mechanical Work	\$239,782
Electrical Work	\$175,000
Instrumentation and Control	\$50,000
Bond and Insurance	\$15,388
TOTAL	\$784,812

Table T				
Detail of Opinion of Probable Construction Costs	Quantity	Unit	Unit Cost	Total Costs*
Mobilization and Demobilization				\$32,000
Supervision		LS		7,000
Temporary Facilities		LS		7,000
Temporary Utilities		LS		1,000
Equipment Rental & Misc.		LS		2,000
Site Work				\$36,400
Earthwork – Clear and Grub	0.04	AC	\$19,150	800
Earthwork – Excavation	150	CY	\$25	3,800
Earthwork – Compacted Fill	30	CY	\$25	800
Retaining Wall		LS		6,000
Site Improvements		LS		10,000
Relocation of Chemical Storage Tank		LS		5,000
Relocation and Salvage of 6" Pipe and Appurtenances		LS		10,000
Hydroelectric Building				\$133,000
Concrete – Foundation	11	CY	\$800	8,800
Concrete – Slab-on-Grade	25	CY	\$900	22,500
Concrete Encasement	15	CY	\$500	7,500
Concrete – Miscellaneous	15	CY	\$500	7,500
Masonry – 8" Smooth Face CMU	1,588	SF	\$15	23,700
Metals - Miscellaneous		LS		15,000
Thermal & Moisture Protection – Roof - Plywood	700	SF	\$5.50	3,900
Thermal & Moisture Protection – Roof – Insulation	700	SF	\$3.00	2,100
Thermal & Moisture Protection – Roof – Clay Tiles	8	SQ	\$484	4,000
Thermal & Moisture Protection – Roof – Miscellaneous		LS		5,000
Powerhouse Doors – Hollow Metal	1	EA	\$2,000	2,000
Powerhouse Doors – Hollow Metal, Double Door	1	EA	\$4,000	4,000
Powerhouse Doors – Door Hardware		LS		2,000
Powerhouse Finishes – Acoustical Panels	1,000	SF	\$5.00	5,000
Mechanical Work				\$239,782
Pelton Turbine & Generator Package	1	EA	\$223,782	\$223,782

Table T (Continued)				
Detail of Opinion of Probable Construction Costs	Quantity	Unit	Unit Cost	Total Costs*
Mechanical Work				\$239,782
16" Pipe (CMLWS)	20	LF	\$215	4,300
6" Pipe (CMLWS)	20	LF	\$85	1,700
Tie-in Connection		LS		10,000
Electrical Work				\$175,000
Tie-in Connection to SCE Grid		LS		145,000
Electrical		LS		30,000
Instrumentation and Control				\$50,000
I&C		LS		50,000
Bond and Insurance				\$15,388
B&I		LS		15,388
TOTAL				\$784,812

*Costs are shown rounded to the nearest hundred dollars.

(e) Environmental Compliance/Mitigation/Enhancement

The physical environmental compliance effort and cost is anticipated to be minimal as this project is being developed within an existing operational facility. Therefore, upon completion of environmental documentation in Task 5, any mitigation that may be required would be included in the Contingency budget in Budget Line Item (h).

As discussed in Work Task 5 of the Work Plan, CEQA documentation will include an Initial Study Environmental Checklist, Environmental Assessment Form, Mitigated Negative Declaration (MND) and Mitigation Monitoring Program.

(f) Construction Administration/Management

- » Total: \$ 46,165
- » Match Share: \$ 11,541
- » State Share: \$ 34,624

Black & Veatch's Pre-Design Evaluation Report (July 2006) includes an Opinion of Probably Construction Costs, including Construction Management. Construction Management is estimated at 6 percent of total Construction Costs (\$784,812*0.06=\$46,165). This percentage of the construction costs is based engineering judgment of similar projects and on the size and complexity of the construction elements.

The following table provides detail on the probable construction management costs as included in the July 2006 report:

Table U			
Construction Administration/Management	Hours	Rate/Hr*	Total**
Chief Engineer	4	\$314	\$1,260
Contracts Manager	25	\$234	\$5,850
Engineering Manager	25	\$225	\$5,630
Construction Inspection Supervisor	50	\$163	\$8,155
Inspector	85	\$151	\$12,845
Engineering Secretary	25	\$139	\$3,475
Contracts Coordinator	60	\$120	\$7,210
Engineering Clerk	20	\$87	\$1,740
TOTAL			\$46,165

*Hourly rates include salary, benefits and overhead.

**Totals rounded.

(g) Other Costs

There have been no other costs determined for this type of project. Any extras would be covered in the Construction/Implementation Contingency costs.

(h) Construction/Implementation Contingency

- » Total: \$ 115,415
- » Match Share: \$ 28,854
- » State Share: \$ 86,561

Construction Contingency is estimated at 15 percent of total construction without the Bond and Insurance costs (\$784,812-\$15,388*0.15=\$115,415) (see Budget Line Item (d) Construction/Implementation). This percentage of the construction costs is based upon engineering judgment of similar projects.

Table V		
Construction Contingency	Rate	Total
Construction Management Contract	15% of Construction Costs less Bonds and Insurance	\$115,415
TOTAL		\$115,415

Section 4

Project 4. Water Quality Enhancements in Riverside County – Riverside County Flood Control and Conservation District

The Water Quality Enhancements in Riverside County – Phase 1 project results in guidance documents to better manage runoff reducing contaminants tributary to downstream receiving waters, preserving existing natural habitat and implementing water conservation practices throughout the Santa Margarita River watershed.

Labor Compliance Program costs are not included in this project because it does not qualify under the requirements in the IRWM Guidelines.

- » Total Project: \$ 456,925
- » Match Share: \$ 114,281
- » State Share: \$ 342,644

Table W (Table 7 from PSP)						
Total Project Budget for Water Quality Enhancements in Riverside County (Project 4)						
Budget Category		(a)	(b)	(c)	(d)	(e)
		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used**	Total	% Funding Match
(a)	Direct Project Administration Costs	\$5,500	\$16,300	\$0	\$21,800	25%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	\$108,781	\$326,344	\$0	\$435,125	25%
(d)	Construction/Implementation	\$0	\$0	\$0	\$0	0%
(e)	Environmental Compliance/ Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%
(f)	Construction Administration	\$0	\$0	\$0	\$0	0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$0	\$0	\$0	0%	0%
(i)	Grand Total	\$114,281	\$342,644	\$0	\$456,925	25%

* Sources of funding:

- Match of \$114,281 cash contribution to be provided by Permittees through collected Benefit Assessment Funds.

Following is narrative and data supporting the Budget Categories provided in Table 7d in Appendix A:

(a) Direct Project Administration Costs

- » Total: \$ 21,800
- » Match Share: \$ 5,500
- » State Share: \$ 16,300 (3.57% of project costs)

Task 1: Administration and Reporting: The Riverside County Flood Control and Water Conservation District (District) and other Permittees (County of Riverside, Cities of Temecula, Wildomar and Murrieta), and Rancho California Water District will carry out project administration tasks relating to direct project administration and reporting for this project.

The State Share of \$16,300 is requested to cover Rancho California Water District’s (RCWD) administration costs for coordination with the state. Total State Share equals approximately 3.75 percent of the total project costs. The 1.25 percent match accounts for the District’s administration costs for the project. Because the State Share of the administrative costs is to fund RCWD’s role as grant administrator, costs were calculated using Rancho California Water District’s rates for administration.

Table X			
Direct Admin. Costs	Hours	Rate/Hr*	Total
Chief Engineer	3	\$314	\$942
Engineering Manager	65	\$225	\$13,500
Engineering Secretary	30	\$139	\$5,282
Contracts Coordinator	10	\$120	\$1,200
Engineering Clerk	10	\$87	\$870
TOTAL			\$21,800

*Hourly rates include salary, benefits and overhead.

**Totals rounded.

(b) Land Purchase/Easement

No land is acquired for this project so no land costs are provided.

(c) Planning/Design/Engineering/Environmental Documentation

- » Total: \$ 435,125
- » Match Share: \$ 108,781
- » State Share: \$ 326,344

Engineering activities include the following Work Plan Tasks:

- Task 2 Identification of Retrofit Opportunities in the Santa Margarita Watershed
 - Includes labor costs to assess, identify and prioritize retrofit opportunities on both public and private land within the Santa Margarita Watershed and includes labor costs to produce a GIS Map or Guidance document to aid in implementation of these projects.
- Task 3: EMARCD Education and Outreach to HOAs
 - This task involves labor costs for the development of the presentation that will be given to each HOA Board and home owners on the benefits of water conservation and infiltration as well as the development of a post-presentation survey (to be conducted a number of months after the presentation was conducted). This task also involves conducting the actual presentation and conducting a follow up survey to determine effectiveness of the effort. It is anticipated that 40 presentations will be given. Handouts will be provided at the workshop and will be made available to the residents.
- Task 4: Hydromodification Management
 - Includes labor costs to assess and identify areas in need of hydromodification restoration and produce a guidance document for new development and redevelopment projects.

The following table presents the engineering cost estimate broken down by task and subtask:

Table Y			
Planning/Design/Engineering/Environmental Documentation Costs	Consultant Hours	Rate/Hr*	Total Costs
Black & Veatch Contract		2010 Rates	\$350,000
Task 2: Identification of Retrofit Opportunities in the Santa Margarita Watershed			
Research areas of existing development	104	\$130-\$215 ¹	14,800
Inventory and prioritize retrofit opportunities	880	\$130-\$215 ²	125,840
Create GIS Map/Guidance	148	\$130-\$157 ³	29,940
Task 2 Subtotal			\$170,580
Task 3: EMARCD Education and Outreach to HOAs			
Prepare Materials	1,920	\$14.50 - \$19.50 ⁴	31,040
Conduct 40 workshops, distribute materials, and conduct survey	896	\$19.50	16,950
Materials associated with workshops and survey	-	LS	10,000
Task 4 Subtotal			\$57,990
Task 4: Hydromodification Management			
Literature Review		\$140-\$215 ⁵	10,830
Geomorphic stability of streams		\$80-\$215 ⁶	29,630
BMP Selection and Sizing Criteria		\$130-\$215 ⁷	49,060
Develop a Hydromodification Management Plan		\$130-\$215 ⁸	101,620
Training Workshops		\$130-\$215 ⁹	15,415
Task 5 Subtotal			\$206,555
TOTAL			\$435,125

*1 *Hourly rates include salary, benefits and overhead.*

Consultant Classifications and Rates (based on previous contracts) and estimated hours:

¹ GIS/Database Designer	40 hours	\$130/hr
Project Engineer	40 hours	\$140/hr
Senior Engineer	20 hours	\$157/hr
Principal Engineer	4 hours	\$215/hr
² GIS/Database Designer	240 hours	\$130/hr
Project Engineer	480 hours	\$140/hr
Senior Engineer	120 hours	\$157/hr
Principal Engineer	40 hours	\$215/hr
³ GIS/Database Designer	120 hours	\$130/hr
Project Engineer	80 hours	\$140/hr
Senior Engineer	20 hours	\$157/hr
⁵ Project Engineer	60 hours	\$140/hr
Senior Engineer	10 hours	\$157/hr
Principal Engineer	4 hours	\$215/hr
⁶ Field Technician	200 hours	\$ 80/hr
Project Engineer	80 hours	\$140/hr
Senior Engineer	10 hours	\$157/hr
Principal Engineer	4 hours	\$215/hr

⁷	GIS/Database Designer	260 hours	\$130/hr
	Project Engineer	60 hours	\$140/hr
	Senior Engineer	30 hours	\$157/hr
	Principal Engineer	10 hours	\$215/hr
⁸	GIS/Database Designer	260 hours	\$130/hr
	Project Engineer	60 hours	\$140/hr
	Senior Engineer	30 hours	\$157/hr
	Principal Engineer	10 hours	\$215/hr
⁹	GIS/Database Designer	260 hours	\$130/hr
	Project Engineer	60 hours	\$140/hr
	Senior Engineer	30 hours	\$157/hr
	Principal Engineer	10 hours	\$215/hr

(d) Construction/Implementation

No costs.

(e) Environmental Compliance/Mitigation/Enhancement

No costs.

(g) Construction Administration/Management

No costs.

(h) Other Costs

No costs.

(i) Construction/Implementation Contingency

No costs.

Section 5

Project 5. Implementing Nutrient Management in the Santa Margarita River Watershed – Phase I – *Riverside County Flood Control and Irrigation District*

This project will involve establishing nutrient water quality objectives for the Santa Margarita River estuary (Phase 1), which will be used in subsequent phases to reduce nutrients and implement water conservation practices throughout the Santa Margarita River watershed. Funding for the project involves two aspects of project implementation: grant administration and planning/design/engineering/environmental documentation.

The total cost associated with the *Implementing Nutrient Management in the Santa Margarita River Watershed* project is \$690,000. Of these total costs, \$67,500 is being requested for grant funding through the IRWM Implementation Grant Program. The remaining \$172,500 will be funded by non-State funding sources, of which \$7,500 will be provided by Camp Pendleton MCB, \$70,000 will be provided from San Diego County Co-permittees to the Stormwater NPDES Permit no. 97-001, and \$72,500 will be provided from the Santa Margarita River Estuary Monitoring Project. In total, this amount constitutes 20 percent of the total project cost, meaning that the non-State share of the total project cost (funding match) is 25 percent for this project. Table Z below provides a more detailed break-down of the total project budget (also included as Table 7e in Appendix A).

Table Z (Table 7 from PSP)						
Total Project Budget for Implementing Nutrient Management in the Santa Margarita River Watershed-Phase I (Project 5)						
Budget Category		(a)	(b)	(c)	(d)	(e)
		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used**	Total	% Funding Match
GA	SDCWA Grant Administration	\$0	\$2,025	\$13,500	\$13,500	0%
(a)	Direct Project Administration Costs	\$0	\$0	\$0	\$0	0%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	\$172,500	\$65,475	\$436,500	\$674,475	26%
(d)	Construction/Implementation	\$0	\$0	\$0	\$0	0%
(e)	Environmental Compliance/ Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%
(f)	Construction Administration	\$0	\$0	\$0	\$0	0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$0	\$0	\$0	\$0	0%
(h)	Construction/Implementation Contingency	\$0	\$0	\$0	0%	0%
(i)	Grand Total	\$172,500	\$67,500	\$450,000	\$690,000	25%

* Sources of funding:

- Match of \$30,000, with \$7,500 for the San Diego Proposal and \$22,500 to the Upper Santa Margarita Proposal, for the preparation of the Sample and Analysis Plan, QAPP, Project Assessment and Evaluation Plan (PAEP), and CEQA/ NEPA documentation from MCB Camp Pendleton
- Match of \$70,000 for Bight '08 Estuaries and Coastal Wetlands Study from San Diego County Copermittees to the Stormwater NPDES Permit no. 97-0001
- Match of \$72,500 from Santa Margarita River Estuary Investigation from project proponents in response to Investigative Order No R9-2006-0076.

** Other State Funds are assumed to include IRWM grant funding made available to the San Diego Region for this shared project.

The Implementation Grant Proposal is requesting funding for one project tasks identified within the *Implementing Nutrient Management in the Santa Margarita River Watershed-Phase I* project Work Plan (refer to Attachment 3). These tasks are listed below in Table AA in relation to their respective budget category (row) identified in the Table Z.

Table AA
Cost Breakdown by Work Plan Task and Subtask

Row/Task	Category	Total
GA	SDCWA Grant Administration	\$15,525
Row (c)	Planning/Design/Engineering/Environmental Documentation	\$674,475
Task 4	Assessment and Evaluation	\$674,475
Task 4A	Form and Facilitate Stakeholder Advisory Group	\$76,737
Task 4B	Conduct Field and Special Studies	\$170,239
Task 4C	Develop Nutrient WQOs for SMR Estuary	\$427,500
Row (i)	Grand Total	\$690,000

The sections below provide detailed descriptions of each of the row and task budgets (where applicable) shown in the summary table above (Table AA). In addition, each description below describes how cost estimates for each of the tasks or rows were calculated.

Grant Administration (GA)

This Upper Santa Margarita IRWM Implementation Grant Proposal includes \$2,025 in grant request for grant administration of this shared project.

Our Tri-County FACC partner San Diego County Water Authority, also includes a requirement that each of their local project sponsors shall dedicate 3 percent of their grant funds to the San Diego County Water Authority for administration and processing of the Implementation Grant. For that grant, the *Implementing Nutrient Management in the Santa Margarita River Watershed* project will contribute \$13,500 to this administration cost.

Row (a) Direct Project Administration Costs

Task 1: Project Administration: The County of San Diego will carry out project administration tasks relating to direct project administration and reporting for this project. However, staff costs for those tasks are not included within the proposed Budget.

Task 2: Labor Compliance Program: Labor Compliance Program costs are not included in this project because it does not qualify under the requirements in the IRWM Guidelines.

Task 3: Reporting: The County of San Diego will carry out project administration tasks relating to direct project administration and reporting for this project. However, staff costs for those tasks are not included within the proposed Budget.

Row (b) Land Purchase/Easement

Not applicable.

Row (c) Planning/Design/Engineering/Environmental Documentation

The total planning/design/engineering/environmental documentation costs for the project are \$676,500. Table BB provides a detailed listing of all applicable costs. This cost total is based on the following:

Task 4: Assessment and Evaluation: The total cost for this task is \$676,500 and includes costs for the following:

- » **Task 4A: Form and Facilitate Stakeholder Advisory Group:** This task has been mostly paid for in full by the County of San Diego and other stakeholder, and expenses include all funds necessary to form and facilitate a stakeholder advisory group. Costs for a scientist from Southern California Coastal Water Research Project (SCCWRP) to attend are included in the budget.
- » **Task 4B: Conduct Field and Special Studies:** Costs for this task include labor costs necessary to conduct field and special studies, as well as a lump sum for laboratory analysis, supplies, and travel. These costs were estimated by SCCWRP for conducting the monitoring special studies (see budget in Appendix C).
- » **Task 4C: Develop Nutrient WQOs for Santa Margarita River Estuary:** Costs for this task include labor costs necessary to conduct technical modeling of the Santa Margarita River Estuary that will lead to the development of nutrient water quality objectives for the SMR estuary. These costs were estimated by SCCWRP (see budget in Attachment C).

Task 5: Final Design: Not applicable.

Task 6: Not applicable.

Task 7: Permitting: Not applicable.

Row (d) Construction/Implementation

The project will not involve construction and will therefore not require funds relating to construction contracting, construction, implementation, or construction administration.

Task 8: Construction Contracting: Not applicable.

Task 9: Construction: Not applicable.

Task 11: Construction Administration: Not applicable.

Row (g) Other Costs

Not applicable.

Row (h) Construction/Implementation Contingency

Not applicable.

Row (i) Grand Total

The Grand Total for the project (\$690,000) was calculated as the sum of rows (GA) through (h) for each column (Table CC).

Table BB
Row (d) Planning/Design/Engineering/Environmental Documentation Costs

Discipline	Hourly Wage (\$/hr)	San Diego Proposal			Upper Santa Margarita Proposal			TOTAL COSTS		
		Number of Hours	Total	Funding Match	Grant Request	Number of Hours	Total		Funding Match	Grant Request
Task 4A: Form and Facilitate Stakeholder Advisory Group										
Senior Scientist, QAPP Preparation	\$148.40	50.5	\$7,500	\$7,500	\$0	151.6	\$22,500	\$22,500	\$0	\$30,001
Principal Scientist, 10 meetings	\$187.40	N/A	\$0	\$0	\$0	120	\$22,488	\$0	\$22,488	\$22,488
Supervising Scientist, 10 meetings	\$148.40	N/A	\$0	\$0	\$0	120	\$17,808	\$0	\$17,808	\$17,808
Miscellaneous Support, Supplies, and Travel	Lump Sum	N/A	\$0	\$0	\$0	N/A	\$4,463	\$0	\$4,463	\$4,463
San Diego RWQCB, 10 meetings	\$32.95	N/A	\$0	\$0	\$0	60	\$1,977	\$0	\$1,977	\$1,977
Subtotal			\$7,500	\$7,500	\$0		\$69,236	\$22,500	\$46,736	\$76,737
Task 4B: Conduct Field and Special Studies										
Principal Scientist	\$187.40	120	\$22,488	\$0	\$22,488	10	\$1,874	\$0	\$1,874	\$24,362
Senior Scientist	\$148.40	80	\$11,872	\$0	\$11,872	4	\$594	\$0	\$594	\$12,466
Senior Research Technician	\$106.00	500	\$53,000	\$0	\$53,000	0	\$0	\$0	\$0	\$53,000
Research Technician	\$84.80	466	\$39,516	\$0	\$39,516	0	\$0	\$0	\$0	\$39,516
Laboratory Analysis, Supplies, and Travel	Lump Sum	N/A	\$24,624	\$0	\$24,624	N/A	\$16,271	\$0	\$16,271	\$40,895
Subtotal			\$151,500	\$0	\$151,500		\$18,739	\$0	\$18,739	\$170,239
Task 4C: Develop Nutrient WQOs for Santa Margarita River Estuary										
Santa Margarita River Estuary Investigation	Lump Sum	N/A	\$72,500	\$72,500	\$0	N/A	\$0	\$0	\$0	\$72,500
Big '08 Estuaries and Coastal Wetlands Study	Lump Sum	N/A	\$70,000	\$70,000	\$0	N/A	\$0	\$0	\$0	\$70,000
San Diego RWQCB	\$32.95	911	\$30,000	\$0	\$30,000	0	\$0	\$0	\$0	\$30,000
Principal Scientist	\$180.19	120	\$21,623	\$0	\$21,623	0	\$0	\$0	\$0	\$21,623
Senior Scientist	\$148.40	1168	\$173,337	\$0	\$173,337	0	\$0	\$0	\$0	\$173,337
Scientist	\$127.20	472	\$60,040	\$0	\$60,040	0	\$0	\$0	\$0	\$60,040
Subtotal			\$427,500	\$150,000	\$285,000		\$0	\$0	\$0	\$427,500
Total			\$586,500	\$150,000	\$436,500		\$87,975	\$22,500	\$65,475	\$674,475

Table CC
Row (i) Grand Total Costs

Row	Budget Category	Total Costs
GA	SDCWA Grant Administration	\$15,525
(a)	Direct Project Administration Costs	\$0
(b)	Land Purchase Easement	\$0
(c)	Planning/Design/Engineering/Environmental Documentation	\$674,475
(d)	Construction/Implementation	\$0
(e)	Environmental Compliance/ Mitigation/Enhancement	\$0
(f)	Construction Administration	\$0
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$0
(h)	Construction/Implementation Contingency	\$0
(i)	Grant Total	\$690,000

Section 6 Budget Summary

Table DD below provides a summary of the five budgets by budget category. This table can also be found in Appendix A at Table 7f.

Table DD Sum of Budgets for Projects 1 through 5						
Budget Category		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used**	Total	% Funding Match
(a)	Direct Project Administration Costs	\$269,080	\$164,065	\$13,500	\$446,645	60.2%
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%
(c)	Planning/Design/Engineering/ Environmental Documentation	\$3,012,892	\$1,021,909	\$436,500	\$4,471,301	67.4%
(d)	Construction/Implementation	\$9,618,093	\$2,840,484	\$0	\$12,458,577	77.2%
(e)	Environmental Compliance/ Mitigation/Enhancement	\$1,256,975	\$0	\$0	\$1,256,975	100.0%
(f)	Construction Administration	\$510,246	\$180,739	\$0	\$690,985	73.8%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$12,750	\$38,250	\$0	\$51,000	25.0%
(h)	Construction/Implementation Contingency	\$2,011,044	\$86,561	\$0	\$2,097,605	95.9%
(i)	Grand Total	\$16,691,080	\$4,332,008	\$450,000	\$21,473,088	77.7%

Total Project Administration and Grant Administration costs are less than 2.5% of the total project cost for this Implementation Grant Proposal.

Further, the Summary Budget (Table 8 from PSP) is shown below in Table EE. This table summarizes the total costs for each individual project and provides a grand total. This table can also be found in Appendix A at Table 8.

Table EE (Table 8 from PSP) Summary Budgets						
Budget Category		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used**	Total	% Funding Match
(a)	Vail Lake Stabilization and Conjunctive Use Project	\$15,746,510	\$1,948,500	\$0	\$17,695,010	89.0%
(b)	Agricultural Irrigation Efficiency Program	\$322,440	\$967,320	\$0	\$1,289,760	25.0%
(c)	WR-34 Hydroelectric Power Generation Project	\$335,348	\$1,006,044	\$0	\$1,341,392	25.0%
(d)	Water Quality Enhancements in Riverside County	\$114,281	\$342,644	\$0	\$456,925	25.0%
(e)	Implementing Nutrient Management in the Santa Margarita River Watershed - Phase II, Additional Monitoring	\$172,501	\$67,500	\$450,000	\$690,001	25.0%
(i)	Grand Total	\$16,691,080	\$4,332,008	\$450,000	\$21,473,088	77.7%

**Appendix A to Attachment 4
Budget Tables**

Table 8 Summary Budget Upper Santa Margarita Watershed IRWM Proposal - Prop 84 Implementation Grant, Round 1 - Summary Budget of All Projects					
Individual Project Title	Non-State Share (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	
1 Vail Lake Stabilization and Conjunctive Use Project	\$15,746,510.0	\$1,948,500.0	\$0.0	\$17,695,010.0	
2 Agricultural Irrigation Efficiency Program	\$322,440.0	\$967,320.0	\$0.0	\$1,289,760.0	
3 WR-34 Hydroelectric Power Generation Project	\$335,348.0	\$1,006,044.0	\$0.0	\$1,341,392.0	
4 Water Quality Enhancements in Riverside County	\$114,281.0	\$342,644.0	\$0.0	\$456,925.0	
5 Implementing Nutrient Management in the Santa Margarita River Watershed - Phase II, Additional Monitoring	\$172,501.0	\$67,500.0	\$450,000.0	\$690,001.0	
Total Projects	\$16,691,080	\$4,332,008	\$450,000	\$21,473,088	

Table 7a						
Upper Santa Margarita Watershed IRWM Proposal						
1. Vail Lake Stabilization and Conjunctive Use Project						
Budget Category	Non-state Share (Funding Match)*	Requested Grant Funding	Other State Funds	Total	% Funding Match	
(a) Direct Project Administration Costs	\$237,500	\$67,500	\$0	\$305,000	77.9%	
(b) Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%	
(c) Planning/Design/Engineering/Environmental Documentation	\$2,572,830	\$153,750	\$0	\$2,726,580	94.4%	
(d) Construction/Implementation	\$9,193,640	\$1,567,125	\$0	\$10,760,765	85.4%	
(e) Environmental Compliance/Mitigation/Enhancement	\$1,256,975	\$0	\$0	\$1,256,975	100.0%	
(f) Construction Administration	\$490,625	\$121,875	\$0	\$612,500	80.1%	
(g) Other Costs	\$12,750	\$38,250	\$0	\$51,000	25.0%	
(h) Construction/Implementation Contingency	\$1,982,190	\$0	\$0	\$1,982,190	100.0%	
(i) Grant Total [Sum rows (a) through (h) for each column]	\$15,746,510	\$1,948,500	\$0	\$17,695,010	89.0%	
* List source(s) of funding for Non-State Share:						
Of the \$15,746,510 shown as the Non-State Share amount, an agreement with the U.S. Bureau of Reclamation for American Recovery and Reinvestment Act (ARRA) funds is providing approximately \$6.1 million, and the balance is funding from the Rancho California Water District 2010A Bond Issue (\$12,999,999) and the Rancho California Water District Debt Service Construction Fund.						

Table 7b						
Upper Santa Margarita Watershed IRWM Proposal						
2. Agricultural Irrigation Efficiency Program						
Budget Category	Non-state Share (Funding Match)*	Requested Grant Funding	Other State Funds	Total	% Funding Match	
(a) Direct Project Administration Costs	\$14,830	\$44,490	\$0	\$59,320	25%	
(b) Land Purchase/Easement	\$0	\$0	\$0	\$0	0%	
(c) Planning/Design/Engineering/Environmental Documentation	\$71,280	\$213,840	\$0	\$285,120	25%	
(d) Construction/Implementation	\$228,250	\$684,750	\$0	\$913,000	25%	
(e) Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0%	
(f) Construction Administration	\$8,080	\$24,240	\$0	\$32,320	25%	
(g) Other Costs	\$0	\$0	\$0	\$0	0%	
(h) Construction/Implementation Contingency	\$0	\$0	\$0	\$0	0%	
(i) Grant Total [Sum rows (a) through (h) for each column]	\$322,440	\$967,320	\$0	\$1,289,760	25%	
* List source(s) of funding for Non-State Share (Funding Match):						
Of the \$322,440 shown as the Non-State Share amount, the entire amount will be funded by the Rancho California Water District GL 50/50 (Ag Penalty Fund).						

Table 7c						
Upper Santa Margarita Watershed IRWM Proposal						
3. WR-34 Hydroelectric Power Generation Project						
Budget Category	Non-state Share (Funding Match)*	Requested Grant Funding	Other State Funds	Total	% Funding Match	
(a) Direct Project Administration Costs	\$11,250	\$33,750		\$45,000	25.0%	
(b) Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%	
(c) Planning/Design/Engineering/Environmental Documentation	\$87,500	\$262,500		\$350,000	25.0%	
(d) Construction/Implementation	\$196,203	\$588,609		\$784,812	25.0%	
(e) Environmental Compliance/Mitigation/Enhancement	\$0	\$0	\$0	\$0	0.0%	
(f) Construction Administration	\$11,541	\$34,624		\$46,165	25.0%	
(g) Other Costs	\$0	\$0	\$0	\$0	0.0%	
(h) Construction/Implementation Contingency	\$28,854	\$86,561		\$115,415	25.0%	
(i) Grant Total [Sum rows (a) through (h) for each column]	\$335,348	\$1,006,044	\$0	\$1,341,392	25.0%	
* List source(s) of funding for Non-State Share (Funding Match):						
Of the \$335,348 shown as the Non-State Share amount, the entire amount will be funded by the Rancho California Water District Debt Service Construction Fund.						

Table 7d						
Upper Santa Margarita Watershed IRWM Proposal						
4. Water Quality Enhancements in Riverside County						
Budget Category	Non-state Share (Funding Match)*	Requested Grant Funding	Other State Funds	Total	% Funding Match	
(a) Direct Project Administration Costs	\$5,500	\$16,300		\$21,800	25.2%	
(b) Land Purchase/Easement					0.0%	
(c) Planning/Design/Engineering/Environmental Documentation	\$108,781	\$326,344		\$435,125	25.0%	
(d) Construction/Implementation					0.0%	
(e) Environmental Compliance/Mitigation/Enhancement					0.0%	
(f) Construction Administration					0.0%	
(g) Other Costs					0.0%	
(h) Construction/Implementation Contingency					0.0%	
(i) Grant Total [Sum rows (a) through (h) for each column]	\$114,281	\$342,644	\$0	\$456,925	25.0%	
* List source(s) of funding for Non-State Share (Funding Match):						
Of the \$128,581 shown as the Non-State Share amount, the entire amount will be funded by the in-kind services provided by Riverside County Food Control and Conservation District and the Eisinore Murrieta Anza Resource Conservation District (EMARCD).						

17,132

Table 7e						
Upper Santa Margarita Watershed IRWM Proposal						
5. Implementing Nutrient Management in the Santa Margarita Margarita River Watershed - Phase I						
Budget Category	Non-state Share (Funding Match)*	Requested Grant Funding	Other State Funds	Total	% Funding Match	
(a) Direct Project Administration Costs		\$2,025	\$13,500	\$15,525	0.0%	
(b) Land Purchase/Easement					0.0%	
(c) Planning/Design/Engineering/Environmental Documentation	\$172,501	\$65,475	\$436,500	\$674,476	25.6%	
(d) Construction/Implementation					0.0%	
(e) Environmental Compliance/Mitigation/Enhancement					0.0%	
(f) Construction Administration					0.0%	
(g) Other Costs					0.0%	
(h) Construction/Implementation Contingency					0.0%	
(i) Grant Total [Sum rows (a) through (h) for each column]	\$172,501	\$67,500	\$450,000	\$690,001	25.0%	

***List sources of funding for Non-State Share (Funding Match):** Use as much space as required. (c) match of \$30,000, with \$7,500 credited to San Diego Proposal and \$22,500 credited to Upper Santa Margarita Region, prior to June 1, 2010 for the preparation of the Sample and Analysis Plan, QAPP, Project Assessment and Evaluation Plan (PAEP), and CEQA/ NEPA documentation will be provided by MCB Camp Pendleton; match of \$70,000 for Wetland Eutrophication Study of SMR Estuary from San Diego County Copermittes to the Stormwater NPDES Permit no. 97-0001 and \$35,000 from SMR River Lagoon Monitoring Project in response to Investigative Order No R9-2006-0076.

****** Other State Funds are assumed to include IRWM grant funding made available to the San Diego Region for this shared project.

Table 7f Total of Individual Project Budgets (Tables 7a through 7e) Upper Santa Margarita Watershed IRWM Proposal - Prop 84 Implementation Grant, Round 1 - All Projects						
Budget Category	Non-state Share (Funding Match)*	Requested Grant Funding	Other State Funds	Total	% Funding Match	
(a) Direct Project Administration Costs	\$269,080	\$164,065	\$13,500	\$446,645	60.2%	
(b) Land Purchase/Easement	\$0	\$0	\$0	\$0	0.0%	
(c) Planning/Design/Engineering/Environmental Documentation	\$3,012,892	\$1,021,909	\$436,500	\$4,471,301	67.4%	
(d) Construction/Implementation	\$9,618,093	\$2,840,484	\$0	\$12,458,577	77.2%	
(e) Environmental Compliance/Mitigation/Enhancement	\$1,256,975	\$0	\$0	\$1,256,975	100.0%	
(f) Construction Administration	\$510,246	\$180,739	\$0	\$690,985	73.8%	
(g) Other Costs	\$12,750	\$38,250	\$0	\$51,000	25.0%	
(h) Construction/Implementation Contingency	\$2,011,044	\$86,561	\$0	\$2,097,605	95.9%	
(i) Grant Total [Sum rows (a) through (h) for each column]	\$16,691,080	\$4,332,008	\$450,000	\$21,473,088	77.7%	