

TABLE 8.1 - Project Budget					
Proposal Title: Upper Sacramento, McCloud, and Lower Pit 2015 IRWM Grant Proposal					
Project Title: City of Mt. Shasta Big Lakes Water Line Replacement Project					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Funding Sources	Total Cost
(a)	Direct Project Administration Costs (See Tables 8.6 and 8.6a as all administration costs are included in Project 6: Grant Administration)				
Task 1	Project Management	\$0	\$0	\$0	\$0
Task 2	Labor Compliance Program	\$0	\$0	\$0	\$0
Task 3	Reporting	\$0	\$0	\$0	\$0
	Rounded Subtotal:	\$0	\$0	\$0	\$0
(b)	Land Purchase/Easement (See Table 8.1b)				
Task 4	Property/ROW/Site and Easement Acquisition	\$25,928	\$0	\$0	\$25,928
	Rounded Subtotal:	\$25,900	\$0	\$0	\$25,900
(c)	Planning/Design/Engineering/ Environmental Documentation (See Table 8.1c)				
Task 5	Feasibility Studies	\$0	\$0	\$0	\$0
Task 6	CEQA Documentation	\$7,002	\$0	\$0	\$7,002
Task 7	Permitting	\$4,356	\$0	\$0	\$4,356
Task 8	Design	\$95,320	\$0	\$0	\$95,320
Task 9	Project Performance Monitoring Plan	\$6,324	\$0	\$0	\$6,324
	Rounded Subtotal:	\$113,000	\$0	\$0	\$113,000
(d)	Construction/Implementation				
Task 10	Contract Services (See Table 8.1d)	\$13,376	\$0	\$0	\$13,376
Task 11	Construction Administration (See Table 8.1d)	\$83,657	\$0	\$0	\$83,657
Task 12	Construction/Implementation Activities (See Table 8.1d.12)	\$813,000	\$0	\$0	\$813,000
Task 13	Construction/Implementation Contingency (See Table 8.1d.12)	\$162,000	\$0	\$0	\$162,000
	Rounded Subtotal:	\$1,072,000	\$0	\$0	\$1,072,000
(e)	USR Implementation Costs (See Table 8.1e)				
Task 14	USR Implementation Task	\$29,300	\$0	\$0	\$29,300
	Rounded Subtotal:	\$29,300	\$0	\$0	\$29,300
(f)	Grand Total	\$1,240,200	\$0	\$0	\$1,240,200

TABLE 8.1b
CITY OF MT. SHASTA
BIG LAKES WATER LINE REPLACEMENT PROJECT
LAND PURCHASE/EASEMENT

WORK TASK	WORK HOURS									Category Subtotal
	Project Mngr/Managing Engr	Assoc Engr E-4	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff	
TASK 4 - PROPERTY/ROW/SITE AND EASEMENT ACQUISITION (By PACE and Environmental Consultant)										
a. Research/acquire record maps	2					8		4		\$2,032
b. Prepare legal descriptions & deed pages for two easements	2	4				16		8	8	\$4,804
c. Coordination/negotiation with property owners/ City staff	4	8								\$1,912
d. Obtain two preliminary title reports (@ \$600 ea plus PACE mark-up at 10%)										\$1,320
e. Recording fees (@ \$100 plus PACE mark-up at 10%)										\$110
f. Property appraisal for two properties (@ \$2,500 ea plus PACE mark-up at 10%)										\$13,750
g. Purchase two easements (@ 1,000 ea)										\$2,000
									Subtotal Task 4:	\$25,928
									TASK 4 PACE COST:	\$23,928
									TOTAL LAND PURCHASE/EASEMENT COSTS:	\$25,928
TOTAL PERSON HOURS (Not including Tasks 1 and 3)	8	12	0	0	0	24	0	12	8	
LABOR \$/HOUR	\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION	\$1,504	\$1,740	\$0	\$0	\$0	\$3,648	\$0	\$1,320	\$536	
									TOTAL PACE COSTS	\$23,928

TABLE 8.1c
CITY OF MT. SHASTA
BIG LAKES WATER LINE REPLACEMENT PROJECT
PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION

WORK TASK	WORK HOURS									Category Subtotal	
	Project Mngr/Managing Engr	Assoc Engr	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff		
TASK 5 - FEASIBILITY STUDIES - Not Required											
TASK 6 - CEQA DOCUMENTATION (By PACE & Enviro Consultant)											
a.	Coordination with Enviro Consultant	4	16			8					\$3,952
b.	Enviro Consultant for preparing CEQA Exemption (Includes site visit to evaluate alignments and prepare opinion on enviro impacts)									\$2,500	
c.	Processing fees (Assume \$550 plus PACE mark-up at 10%)									\$550	
Subtotal Task 6:		4	16	0	0	8	0	0	0	0	\$7,002
TASK 7 - PERMITTING (By PACE)											
a.	Coordination with permit agencies	2	4			6					\$1,616
b.	Prepare permit applications		4			6					\$1,240
c.	Pay permit fees (CDFW - includes PACE mark-up at 10%)									\$1,500	
Subtotal Task 7:		2	8	0	0	12	0	0	0	0	\$4,356
TASK 8 - DESIGN (By PACE)											
a.	Project Coordination/Management/Principal-in-Charge	48									\$9,024
b.	Utility coordination		24			24					\$6,120
c.	Hydraulic modelling	2	4			8					\$1,836
d.	Design topographic and boundary surveying	2	8			4	16	24			\$12,424
e.	Mapping		4				4		24		\$3,828
f.	Preliminary water main and service layout	16	60			120					\$24,908
g.	Prepare 50% design plans	4	40			60					\$13,152
h.	Prepare 90% design plans		20			30					\$6,200
i.	Prepare contract and bid documents	16	32			40				16	\$13,120
j.	Prepare documents for bidding	4	16			10				8	\$4,708
Subtotal Task 8:		92	208	0	0	296	20	24	24	24	\$95,320
TASK 9 - PROJECT PERFORMANCE MONITORING PLAN (By PACE AND Owner Staff)											
a.	Consultation with Owner's staff	2	4								\$956
b.	Develop Plan		8			8				4	\$2,308
c.	Assist Owner staff with collecting/preparing data		6			9					\$1,860
d.	Owner Staff Time (30 hours @ \$60/hour)									\$1,200	
Subtotal Task 9:		2	18	0	0	17	0	0	0	4	\$6,324
TASK 9 PACE COST:										\$5,124	
TOTAL PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION:										\$113,002	
TOTAL PERSON HOURS (not including Tasks 7, 8, and 9)		100	250	0	0	333	20	24	24	28	
LABOR \$/HOUR		\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION		\$18,800	\$36,250	\$0	\$0	\$36,630	\$3,040	\$8,016	\$2,640	\$1,876	

TABLE 8.1d
CITY OF MT. SHASTA
BIG LAKES WATER LINE REPLACEMENT PROJECT
CONSTRUCTION/IMPLEMENTATION

WORK TASK	WORK HOURS									Category Subtotal	
	Project Mngr/Managing Engr	Assoc Engr	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff		
TASK 10 - CONTRACT SERVICES (By PACE)											
a.	Set-up for bid advertisement on CIPList			2		4				2	\$834
b.	Prepare addendums	6		10		8				8	\$3,844
c.	Attend Pre-Bid conference	6		6		6					\$2,568
d.	Attend Bid opening & review/evaluate bids	4		12							\$2,312
e.	Recommend award	1		2							\$448
f.	Issue Notice of Award to Contractor	1		4		2				2	\$1,062
g.	Review and approve Contractor's bonds and insurance	1		5		4					\$1,278
h.	Issue contract execution documents to contractor	2		4						2	\$1,030
Subtotal Task 10:		21	0	45	0	24	0	0	0	14	\$13,376
TASK 11 - CONSTRUCTION ADMINISTRATION (By PACE)											
a.	Project Coordination/Management/Principal-in-Charge	40									\$7,520
b.	Organize and attend pre-construction conference	6	8			6				1	\$3,015
c.	Maintain daily communication with construction observer		40								\$5,800
d.	Prepare monthly partial payment requests		18			24					\$5,250
e.	Prepare corrective-type contract change orders	4	12			6					\$3,152
f.	Respond to Contractor's Request for Information (RFIs) - 10 max	2	12								\$2,116
g.	Progress meetings with City and Contractor	4	16								\$3,072
h.	Start-up and Testing		8			8					\$2,040
i.	Attend final inspection	6	6								\$1,998
j.	Prepare recommendation of acceptance and Notice of Completion	1	6			2				2	\$1,412
k.	Prepare record drawings		4			16					\$2,340
l.	Construction Observation (Prevailing Wage) (\$1,248/day for 34 days)										\$42,432
m.	Construction Observation per diem (Prevailing Wage) (\$130/day for 27 days)										\$3,510
Subtotal Task 11:		63	130	0	0	62	0	0	0	3	\$83,657
TOTAL CONSTRUCTION/IMPLEMENTATION COST:											\$97,033
TOTAL PERSON HOURS (not including Task 11)		84	130	45	0	86	0	0	0	17	
LABOR \$/HOUR		\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION		\$15,792	\$18,850	\$5,850	\$0	\$9,460	\$0	\$0	\$0	\$1,139	
TOTAL PACE COSTS											\$97,033

TABLE 8.1d.12

City of Mt. Shasta

Big Lakes Water Line Replacement Project**CONSTRUCTION COST ESTIMATE**

DESCRIPTION	QTY	UNITS	UNIT COST	TOTAL COST
12" Water Main w/A1 Backfill	1530	LF	\$115	\$175,950
12" Water Main w/A4 Backfill	640	LF	\$95	\$60,800
12" Water Main w/B Backfill	280	LF	\$90	\$25,200
12" Water Main w/C Backfill	150	LF	\$80	\$12,000
12" Water Main HDD	50	LF	\$300	\$15,000
8" Water Main w/A1 Backfill	470	LF	\$85	\$39,950
8" Water Main w/A4 Backfill	730	LF	\$65	\$47,450
6" Water Main w/A1 Backfill	100	LF	\$80	\$8,000
2" Water Main w/A1 Backfill	250	LF	\$60	\$15,000
2" Water Main w/A4 Backfill	220	LF	\$45	\$9,900
12" Gate Valves	7	EA	\$4,000	\$28,000
8" Gate Valves	2	EA	\$3,000	\$6,000
6" Gate Valves	2	EA	\$2,200	\$4,400
2" Gate Valve	1	EA	\$1,000	\$1,000
Fire Hydrants	3	EA	\$5,500	\$16,500
Connect to Exist FH	1	EA	\$3,000	\$3,000
8" PRV/PSV Station	1	LS	\$80,000	\$80,000
1" Water Service w/A4 Backfill	160	LF	\$50	\$8,000
3/4" Water Service w/A1 Backfill	50	LF	\$60	\$3,000
3/4" Water Service w/A4 Backfill	130	LF	\$50	\$6,500
3/4" Water Service on private property (backfill/surface restoration v	3100	LF	\$47	\$145,700
Relocate water meters/risers/shutoff/boxes	18	EA	\$800	\$14,400
Blow-off	3	EA	\$5,000	\$15,000
Trench Cut-offs	6	EA	\$600	\$3,600
Tie to existing system	9	EA	\$4,200	\$37,800
Subtotal Construction Cost:				\$782,150
Inflation @ 4% to May 2016 Dollars:				\$31,286
TASK 12 - CONSTRUCTION/IMPLEMENTATION ACTIVITIES:				\$813,000

TASK 13 - CONSTRUCTION/IMPLEMENTATION CONTINGENCY: \$162,000

TABLE 8.1e
CITY OF MT. SHASTA
BIG LAKES WATER LINE REPLACEMENT PROJECT
USR IMPLEMENTATION TASK 14

WORK TASK		Hours	Salary (\$/Hour)	Total Cost
14.1	Grant Preparation			
	RWVG Member Representatives - meeting hours	94.0	58.21	\$ 5,470
	RWVG Member Representatives - non-meeting hours	20.0	58.21	\$ 1,160
Subtask 14.1 Rounded Total				\$ 6,630
14.2	Data Management			
	RWVG Coordinator	10.4	75.00	\$ 780
	Administrative Director	12.8	60.00	\$ 768
	Project Director Consultant Services	16.0	75.00	\$ 1,200
	Materials - Technology and Licenses	Lump Sum		\$ 2,000
Subtask 14.2 Rounded Total				\$ 4,750
14.3	USR Website Upgrade			
	RWVG Coordinator	9.6	75.00	\$ 720
	Administrative Director	12.8	60.00	\$ 768
	Project Director Consultant Services	32.0	85.00	\$ 2,720
	Materials - Technology and Licenses	Lump Sum		\$ 200
Subtask 14.3 Rounded Total				\$ 4,410
14.4	Public Project Presentation and Field Trip			
	RWVG Coordinator	26.4	75.00	\$ 1,980
	Administrative Director	18.0	60.00	\$ 1,080
	Project Director Consultant Services	38.0	85.00	\$ 3,230
	Videographer Production Consultant Services	19.2	171.25	\$ 3,288
	Videographer Post Production Consultant Services	19.2	85.63	\$ 1,644
	Presenters	9.6	150.00	\$ 1,440
	Materials - Facility Rental and Cleaning	Lump Sum		\$ 440
	Materials - Technology	Lump Sum		\$ 160
	Materials - 150 Fliers	Lump Sum		\$ 180
Subtask 14.4 Rounded Total				\$ 13,450
Task 14 Total				\$ 29,300

City of Mt. Shasta Big Lakes Water Line Replacement Project Budget Description:

- (a) Refer to the Grant Administration Project for a description of all direct project administration costs as shown in Tables 8.6 and 8.6a.
- (b) The land purchase/easement requested grant amount of \$25,900 is based on number of work hours and associated fees anticipated to acquire record maps, prepare legal descriptions and deed pages, and coordinate with property owners and City staff. Additionally, costs are included to obtain title reports, pay recording fees, complete property appraisals, and purchase two easements. Refer to Table 8.1b for detailed hourly cost breakdowns.
- (c) The planning/design/engineering/environmental documentation requested grant amount of \$113,000 is 10.5% of the anticipated total construction cost of \$1,072,000. According to the American Society of Civil Engineers (ASCE) Manuals and Reports on Engineering Practice No. 45, Updated Edition, Graph 4 indicates the total fee for a construction project of this size and average complexity modifying an existing facility is approximately 15% of the overall construction cost. This information was based on a survey completed by ASCE of consulting firm practices in which consultants were asked to submit data on their completed projects relating the cost of various phases of their engineering services to the construction costs. Data from more than 1,000 projects were submitted and used to compile survey results. Additionally, these percentages have since been verified using information from comparable projects completed in the area where construction contracts were competitively bid. Refer to Table 8.1c for detailed hourly cost breakdowns for completion of all items included in Tasks 6 through 9.
- (d) Project construction and implementation costs were based upon similar, recent prevailing wage rate projects completed in northern California. Implementation costs include contract services, construction administration, and construction observation anticipated to be approximately \$97,000. Refer to Table 8.1d for hourly breakdowns of these tasks and all items included.

As shown in Table 8.1d.12, water main construction costs were projected forward to construction in year 2016, based upon the typical yearly increase in the Engineering News Record – Construction Cost Index (ENR CCI), which presently stands at 10037 for July 2015. The ENR CCI has been in place since 1908 and indexes the cost of construction taking into account 200 hours of common labor at a rate averaged over 20 cities, plus 25 cwt of standard structural steel shapes, 1.128 tons of Portland cement, and 1,088 board-ft of 2x4 lumber. As such, total construction and implementation costs are anticipated to be approximately \$1,072,000, including a 20% construction contingency.

- (e) Project-related costs anticipated to be spent toward USR Implementation Subtasks are approximately 2.5% of the overall project cost. This is more than reasonable in order to complete project-specific grant preparation, data management, USR website upgrade, and the public project presentation and field trip. As shown in Table 8.1e, costs were developed based on number of work hours anticipated for each task directly related to the project and associated labor cost per hour.

TABLE 8.2 - Project Budget					
Proposal Title: Upper Sacramento, McCloud, and Lower Pit 2015 IRWM Grant Proposal					
Project Title: City of Dunsmuir South Dunsmuir Water Main Replacement Project					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Funding Sources	Total Cost
(a)	Direct Project Administration Costs (See Tables 8.6 and 8.6a as all administration costs are included in Project 6: Grant Administration)				
Task 1	Project Management	\$0	\$0	\$0	\$0
Task 2	Labor Compliance Program	\$0	\$0	\$0	\$0
Task 3	Reporting	\$0	\$0	\$0	\$0
	Rounded Subtotal:	\$0	\$0	\$0	\$0
(b)	Land Purchase/Easement - (N/A)				
Task 4	Property/ROW/Site and Easement Acquisition	\$0	\$0	\$0	\$0
	Rounded Subtotal:	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/ Environmental Documentation (See Table 8.2c)				
Task 5	Feasibility Studies - N/A	\$0	\$0	\$0	\$0
Task 6	CEQA Documentation - N/A	\$0	\$0	\$0	\$0
Task 7	Permitting - N/A	\$0	\$0	\$0	\$0
Task 8	Design	\$19,996	\$0	\$0	\$19,996
Task 9	Project Performance Monitoring Plan	\$6,324	\$0	\$0	\$6,324
	Rounded Subtotal:	\$26,300	\$0	\$0	\$26,300
(d)	Construction/Implementation				
Task 10	Contract Services (See Table 8.2d)	\$13,376	\$0	\$0	\$13,376
Task 11	Construction Administration (See Table 8.2d)	\$57,598	\$0	\$0	\$57,598
Task 12	Construction/Implementation Activities (See Table 8.2d.12)	\$313,000	\$0	\$0	\$313,000
Task 13	Construction/Implementation Contingency (See Table 8.2d.12)	\$64,000	\$0	\$0	\$64,000
	Rounded Subtotal:	\$448,000	\$0	\$0	\$448,000
(e)	USR Implementation Costs (See Table 8.2e)				
Task 14	USR Implementation Task	\$11,900	\$0	\$0	\$11,900
	Rounded Subtotal:	\$11,900	\$0	\$0	\$11,900
(f)	Grand Total	\$486,200	\$0	\$0	\$486,200

TABLE 8.2c
CITY OF DUNSMUIR
SOUTH DUNSMUIR WATER MAIN REPLACEMENTS
PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION

WORK TASK	WORK HOURS									Category Subtotal
	Project Mngr/Managing Engr	Assoc Engr	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff	
TASK 5 - FEASIBILITY STUDIES - <i>Not Required</i>										
TASK 6 - CEQA DOCUMENTATION (Completed)										
TASK 7 - PERMITTING (Completed)										
TASK 8 - DESIGN (By PACE)										
a. Finalize existing design	8	20			20					\$6,604
b. Prepare contract and bid documents	8	30			20				26	\$9,796
c. Prepare documents for bidding		12			12				8	\$3,596
Subtotal Task 8:	16	62	0	0	52	0	0	0	34	\$19,996
TASK 9 - PROJECT PERFORMANCE MONITORING PLAN (by PACE and Owner staff)										
a. Consultation with Owner's staff	2	4								\$956
b. Develop plan		8			8				4	\$2,308
c. Assist Owner staff with collecting/preparing data		6			9					\$1,860
d. Owner staff time (30 hours @ \$60/hour)										\$1,200
Subtotal Task 9:	2	18	0	0	17	0	0	0	4	\$6,324
TASK 9 PACE COST:										\$5,124
TOTAL PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION:										\$26,320
TOTAL PERSON HOURS	18	80	0	0	69	0	0	0	38	
LABOR \$/HOUR	\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION	\$3,384	\$11,600	\$0	\$0	\$7,590	\$0	\$0	\$0	\$2,546	

TABLE 8.2d
CITY OF DUNSMUIR
SOUTH DUNSMUIR WATER MAIN REPLACEMENTS
CONSTRUCTION/IMPLEMENTATION

WORK TASK	WORK HOURS									Category Subtotal	
	Project Mngr/Managing Engr	Assoc Engr	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff		
TASK 10 - CONTRACT SERVICES (by PACE)											
a.	Set-up for bid advertisement on CIPList			2		4				2	\$834
b.	Prepare addendums	6		10		8				8	\$3,844
c.	Attend Pre-Bid conference	6		6		6					\$2,568
d.	Attend Bid opening & review/evaluate bids	4		12							\$2,312
e.	Recommend award	1		2							\$448
f.	Issue Notice of Award to Contractor	1		4		2				2	\$1,062
g.	Review and approve Contractor's bonds and insurance	1		5		4					\$1,278
h.	Issue contract execution documents to Contractor	2		4						2	\$1,030
Subtotal Task 10:		21	0	45	0	24	0	0	0	14	\$13,376
TASK 11 - CONSTRUCTION ADMINISTRATION (by PACE)											
a.	Organize and attend pre-construction conference		6								\$870
b.	Maintain daily communication with construction observer		30								\$4,350
c.	Prepare monthly partial payment requests		12			8					\$2,620
d.	Prepare corrective-type contract change orders		10								\$1,450
e.	Respond to Contractor's Request for Information (RFIs) - 10 max		10								\$1,450
f.	Progress meetings with City and Contractor		12								\$1,740
g.	Start-up and Testing		8								\$1,160
h.	Attend final inspection		6								\$870
i.	Prepare recommendation of acceptance and Notice of Completion		6							2	\$1,004
j.	Prepare record drawings		2			10				2	\$1,524
k.	Construction Observation (Prevailing Wage) (\$1,248/day for 30 days)										\$37,440
l.	Construction Observation per diem (Prevailing Wage) (\$130/day for 24 days)										\$3,120
Subtotal Task 11:		0	102	0	0	18	0	0	0	4	\$57,598
TOTAL CONSTRUCTION/IMPLEMENTATION COST:											
\$70,974											
TOTAL PERSON HOURS		21	102	45	0	42	0	0	0	18	
LABOR \$/HOUR		\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION		\$3,948	\$14,790	\$5,850	\$0	\$4,620	\$0	\$0	\$0	\$1,206	
										TOTAL PACE COSTS	\$70,974

TABLE 8.2d.12
City of Dunsmuir
South Dunsmuir Water Main Replacements
CONSTRUCTION COST ESTIMATE

DESCRIPTION	QTY	UNITS	UNIT COST	TOTAL COST
Oak Street				
8" Water Main w/A1 Bkfl	200	LF	\$90	\$18,000
8" Gate Valve	2	EA	\$2,800	\$5,600
3/4" Water Service w/A1 Bkfl	80	LF	\$60	\$4,800
1" Water Service Box, Complete	2	EA	\$1,800	\$3,600
Tie-in to Exist Water System	2	LS	\$4,200	\$8,400
Subtotal Oak Street:				\$40,400
Welsh Street				
6" Water Main w/A1 Bkfl	320	LF	\$80	\$25,600
6" Gate Valve	1	EA	\$2,200	\$2,200
Fire Hydrant	1	EA	\$5,500	\$5,500
3/4" Water Service w/A1 Bkfl	30	LF	\$60	\$1,800
3/4" Water Service Box, Complete	1	EA	\$1,800	\$1,800
6" Water Main - HDD	40	LF	\$300	\$12,000
Tie-in to Exist Water System	1	LS	\$4,200	\$4,200
Subtotal Welsh Street:				\$53,100
Third Street				
6" Water Main w/A1 Bkfl	420	LF	\$80	\$33,600
6" Gate Valve	1	EA	\$2,200	\$2,200
Fire Hydrant	1	EA	\$5,500	\$5,500
3/4" Water Service w/A1 Bkfl	15	LF	\$60	\$900
3/4" Water Service Box, Complete	1	EA	\$1,800	\$1,800
Blow-off, Complete	1	EA	\$5,000	\$5,000
Subtotal Third Street:				\$49,000
Marion Street				
6" Water Main w/A1 Bkfl	560	LF	\$80	\$44,800
6" Gate Valve	6	EA	\$2,200	\$13,200
Fire Hydrant	1	EA	\$5,500	\$5,500
3/4" Water Service w/A1 Bkfl	90	LF	\$60	\$5,400
3/4" Water Service w/A4 Bkfl	40	LF	\$50	\$2,000
3/4" Water Service Box, Complete	8	EA	\$1,800	\$14,400
Tie-in to Exist Water System	1	LS	\$4,200	\$4,200
Subtotal Marion Street:				\$89,500
Second Street				
6" Water Main w/A1 Bkfl	400	LF	\$80	\$32,000
6" Water Main (Class 200 Adder)	20	LF	\$30	\$600
6" Gate Valve	3	EA	\$2,200	\$6,600
Fire Hydrant	1	EA	\$5,500	\$5,500
3/4" Water Service w/A1 Bkfl	90	LF	\$60	\$5,400
3/4" Water Service w/A4 Bkfl	35	LF	\$50	\$1,750
3/4" Water Service Box, Complete	7	EA	\$1,800	\$12,600
Tie-in to Exist Water System	1	LS	\$4,200	\$4,200
Subtotal Second Street:				\$68,650
Total Construction Cost:				\$300,650
Inflation at 4% to May 2016 Dollars:				\$12,026
Total Construction Cost:				\$313,000
Construction Contingency:				\$64,000

TABLE 8.2e
CITY OF DUNSMUIR
South Dunsmuir Water Main Replacement Project
USR IMPLEMENTATION TASK 14

WORK TASK		Hours	Salary (\$/Hour)	Total Cost
14.1	Grant Preparation			
	RWVG Member Representatives - meeting hours	38.2	58.21	\$ 2,230
	RWVG Member Representatives - non-meeting hours	8.1	58.21	\$ 470
Subtask 14.1 Rounded Total				\$ 2,700
14.2	Data Management			
	RWVG Coordinator	4.2	75.00	\$ 317
	Administrative Director	5.2	60.00	\$ 312
	Project Director Consultant Services	6.5	75.00	\$ 488
	Materials - Technology and Licenses	Lump Sum		\$ 814
Subtask 14.2 Rounded Total				\$ 1,930
14.3	USR Website Upgrade			
	RWVG Coordinator	3.9	75.00	\$ 293
	Administrative Director	5.2	60.00	\$ 312
	Project Director Consultant Services	13.0	85.00	\$ 1,106
	Materials - Technology and Licenses	Lump Sum		\$ 81
Subtask 14.3 Rounded Total				\$ 1,790
14.4	Public Project Presentation and Field Trip			
	RWVG Coordinator	10.7	75.00	\$ 805
	Administrative Director	7.3	60.00	\$ 439
	Project Director Consultant Services	15.5	85.00	\$ 1,314
	Videographer Production Consultant Services	7.8	171.25	\$ 1,337
	Videographer Post Production Consultant Services	7.8	85.63	\$ 669
	Presenters	3.9	150.00	\$ 586
	Materials - Facility Rental and Cleaning	Lump Sum		\$ 179
	Materials - Technology	Lump Sum		\$ 65
	Materials - 150 Fliers	Lump Sum		\$ 73
Subtask 14.4 Rounded Total				\$ 5,470
Task 14 Total				\$ 11,900

City of Dunsmuir South Dunsmuir Water Main Replacement Project Budget Description:

- (a) Refer to the Grant Administration Project for a description of all direct project administration costs as shown in Tables 8.6 and 8.6a.
- (b) There is no land purchase or easements required for this project; therefore, no funds will be required for this budget category.
- (c) The planning/design/engineering/environmental documentation requested grant amount of \$26,300 is 5.9% of the anticipated total construction cost of \$448,000. According to the American Society of Civil Engineers (ASCE) Manuals and Reports on Engineering Practice No. 45, Updated Edition, Graph 4 indicates the total fee for a construction project of this size and average complexity modifying an existing facility is approximately 17% of the overall construction cost. This information was based on a survey completed by ASCE of consulting firm practices in which consultants were asked to submit data on their completed projects relating the cost of various phases of their engineering services to the construction costs. Data from more than 1,000 projects were submitted and used to compile survey results. Additionally, these percentages have since been verified using information from comparable projects completed in the area where construction contracts were competitively bid. The amount being requested for funding is much lower than that indicated by ASCE given that all of the preliminary engineering has already been completed, as well as a large portion of the final design. Refer to Table 8.2c for detailed hourly cost breakdowns for completion of all items included in Tasks 8 and 9.
- (d) Project construction and implementation costs were based upon similar, recent prevailing wage rate projects completed in northern California. Implementation costs include contract services, construction administration, and construction observation anticipated to be approximately \$71,000. Refer to Table 8.2d for hourly breakdowns of these tasks and all items included.

As shown in Table 8.2d.12, water main construction costs were projected forward to construction in year 2016, based upon the typical yearly increase in the Engineering News Record – Construction Cost Index (ENR CCI), which presently stands at 10037 for July 2015. The ENR CCI has been in place since 1908 and indexes the cost of construction taking into account 200 hours of common labor at a rate averaged over 20 cities, plus 25 cwt of standard structural steel shapes, 1.128 tons of Portland cement, and 1,088 board-ft of 2x4 lumber. As such, total construction and implementation costs are anticipated to be approximately \$448,000, including a 20% construction contingency.

- (f) Project-related costs anticipated to be spent toward USR Implementation Subtasks are approximately 2.5% of the overall project cost. This is more than reasonable in order to complete project-specific grant preparation, data management, USR website upgrade, and the public project presentation and field trip. As shown in Table 8.2e, costs were developed based on number of work hours anticipated for each task directly related to the project and associated labor cost per hour.

TABLE 8.3 - Project Budget					
Proposal Title: Upper Sacramento, McCloud, and Lower Pit 2015 IRWM Grant Proposal					
Project Title: City of Dunsmuir North Dunsmuir Water Main Replacement Project					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Funding Sources	Total Cost
(a)	Direct Project Administration Costs (See Tables 8.6 and 8.6a as all administration costs are included in Project 6: Grant Administration)				
Task 1	Project Management	\$0	\$0	\$0	\$0
Task 2	Labor Compliance Program	\$0	\$0	\$0	\$0
Task 3	Reporting	\$0	\$0	\$0	\$0
	Rounded Subtotal:	\$0	\$0	\$0	\$0
(b)	Land Purchase/Easement - (N/A)				
Task 4	Property/ROW/Site and Easement Acquisition	\$0	\$0	\$0	\$0
	Rounded Subtotal:	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/ Environmental Documentation (See Table 8.3c)				
Task 5	Feasibility Studies - N/A	\$0	\$0	\$0	\$0
Task 6	CEQA Documentation	\$2,056	\$0	\$0	\$2,056
Task 7	Permitting	\$4,796	\$0	\$0	\$4,796
Task 8	Design	\$49,898	\$0	\$0	\$49,898
Task 9	Project Performance Monitoring Plan	\$6,324	\$0	\$0	\$6,324
	Rounded Subtotal:	\$63,100	\$0	\$0	\$63,100
(d)	Construction/Implementation				
Task 10	Contract Services (See Table 8.3d)	\$13,376	\$0	\$0	\$13,376
Task 11	Construction Administration (See Table 8.3d)	\$57,598	\$0	\$0	\$57,598
Task 12	Construction/Implementation Activities (See Table 8.3d.12)	\$456,000	\$0	\$0	\$456,000
Task 13	Construction/Implementation Contingency (See Table 8.3d.12)	\$91,000	\$0	\$0	\$91,000
	Rounded Subtotal:	\$618,000	\$0	\$0	\$618,000
(e)	USR Implementation Costs (See Table 8.3e)				
Task 14	USR Implementation Task	\$17,400	\$0	\$0	\$17,400
	Rounded Subtotal:	\$17,400	\$0	\$0	\$17,400
(f)	Grand Total				
		\$698,500	\$0	\$0	\$698,500

TABLE 8.3c
CITY OF DUNSMUIR
NORTH DUNSMUIR WATER MAIN REPLACEMENTS
PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION

WORK TASK	WORK HOURS									Category Subtotal
	Project Mngr/Managing Engr	Assoc Engr	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff	
TASK 5 - FEASIBILITY STUDIES - Not Required										
TASK 6 - CEQA DOCUMENTATION (by PACE & Enviro Consultant)										
a. Coordination with Enviro Consultant	2	4								\$956
b. Enviro Consultant for preparing CEQA Exemption										\$550
c. Processing fees										\$550
Subtotal Task 6:	2	4	0	0	0	0	0	0	0	\$2,056
TASK 7 - PERMITTING (by PACE)										
a. Coordination with permit agencies	2	4			8					\$1,836
b. Prepare permit applications		4			8					\$1,460
c. Pay permit fees (Caltrans and CDFW)										\$1,500
Subtotal Task 7:	2	8	0	0	16	0	0	0	0	\$4,796
TASK 8 - DESIGN (by PACE)										
a. Utility coordination	4	12			18					\$4,472
b. Hydraulic modelling	2	4			8					\$1,836
c. Design topographic and boundary surveying	2					8	16			\$6,936
d. Mapping		8			16			16		\$4,680
e. Preliminary water main and service layout	8	24			48					\$10,264
f. Prepare 50% design plans	4	20			40					\$8,052
g. Prepare 90% design plans		10			20					\$3,650
h. Prepare contract and bid documents	8	24							16	\$6,056
i. Prepare documents for bidding	4	16			8					\$3,952
Subtotal Task 8:	32	118	0	0	158	8	16	16	16	\$49,898
TASK 9 - PROJECT PERFORMANCE MONITORING PLAN (by PACE and Owner staff)										
a. Consultation with Owner's staff	2	4								\$956
b. Develop plan		8			8				4	\$2,308
c. Assist Owner staff with collecting/preparing data		6			9					\$1,860
d. Owner staff time (30 hours @ \$60/hour)										\$1,200
Subtotal Task 9:	2	18	0	0	17	0	0	0	4	\$6,324
TASK 9 PACE COST:										\$5,124
TOTAL PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION:										\$63,074
TOTAL PERSON HOURS	38	148	0	0	191	8	16	16	20	
LABOR \$/HOUR	\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION	\$7,144	\$21,460	\$0	\$0	\$21,010	\$1,216	\$5,344	\$1,760	\$1,340	

TABLE 8.3d
CITY OF DUNSMUIR
NORTH DUNSMUIR WATER MAIN REPLACEMENTS
CONSTRUCTION/IMPLEMENTATION

WORK TASK	WORK HOURS									Category Subtotal
	Project Mngr/Managing Engr	Assoc Engr	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff	
TASK 10 - CONTRACT SERVICES (by PACE)										
a. Set-up for bid advertisement on CIPList			2		4				2	\$834
b. Prepare addendums	6		10		8				8	\$3,844
c. Attend Pre-Bid conference	6		6		6					\$2,568
d. Attend Bid opening & review/evaluate bids	4		12							\$2,312
e. Recommend award	1		2							\$448
f. Issue Notice of Award to Contractor	1		4		2				2	\$1,062
g. Review and approve Contractor's bonds and insurance	1		5		4					\$1,278
h. Issue contract execution documents to Contractor	2		4						2	\$1,030
Subtotal Task 10:	21	0	45	0	24	0	0	0	14	\$13,376
TASK 11 - CONSTRUCTION ADMINISTRATION (by PACE)										
a. Organize and attend pre-construction conference		6								\$870
b. Maintain daily communication with construction observer		30								\$4,350
c. Prepare monthly partial payment requests		12			8					\$2,620
d. Prepare corrective-type contract change orders		10								\$1,450
e. Respond to Contractor's Request for Information (RFIs) - 10 max		10								\$1,450
f. Progress meetings with City and Contractor		12								\$1,740
g. Start-up and Testing		8								\$1,160
h. Attend final inspection		6								\$870
i. Prepare recommendation of acceptance and Notice of Completion		6							2	\$1,004
j. Prepare record drawings		2			10				2	\$1,524
k. Construction Observation (Prevailing Wage) (\$1,248/day for 30 days)										\$37,440
l. Construction Observation per diem (Prevailing Wage) (\$130/day for 24 days)										\$3,120
Subtotal Task 11:	0	102	0	0	18	0	0	0	4	\$57,598
TOTAL CONSTRUCTION/IMPLEMENTATION COST:										\$70,974
TOTAL PERSON HOURS	21	102	45	0	42	0	0	0	18	
LABOR \$/HOUR	\$188	\$145	\$130	\$122	\$110	\$152	\$334	\$110	\$67	
LABOR COST PER CLASSIFICATION	\$3,948	\$14,790	\$5,850	\$0	\$4,620	\$0	\$0	\$0	\$1,206	
TOTAL PACE COSTS										\$70,974

TABLE 8.3d.12**City of Dunsmuir
North Dunsmuir Water Main Replacements****CONSTRUCTION COST ESTIMATE**

DESCRIPTION	QTY	UNITS	UNIT COST	TOTAL COST
Dunsmuir Avenue				
18" Water Main w/A1 Bkfl	190	LF	\$200	\$38,000
18" Water Main w/A4 Bkfl	50	LF	\$180	\$9,000
12" Water Main w/A1 Bkfl	1000	LF	\$115	\$115,000
3/4" Water Service w/A1 Bkfl	100	LF	\$55	\$5,500
3/4" Water Service w/A4 Bkfl	100	LF	\$45	\$4,500
3/4" Water Service w/C (Landscaping) Bkfl	200	LF	\$75	\$15,000
New Water Services, Meters, & Box	18	EA	\$2,500	\$45,000
Concrete Removal & Replacement	360	SF	\$35	\$12,600
Fire Hydrant	5	EA	\$5,000	\$25,000
12" Gate Valve	3	EA	\$3,000	\$9,000
6" Gate Valve	6	EA	\$2,000	\$12,000
Tie-in to existing water system at 3 locations	3	LS	\$5,000	\$15,000
Subtotal Dunsmuir Avenue:				\$305,600
Prospect Avenue (Partial)				
10" Water Main w/A1 Bkfl	550	LF	\$105	\$57,750
10" Water Main w/A4 Bkfl	40	LF	\$95	\$3,800
10" Class 200 Adder	40	LF	\$15	\$600
6" Water Main w/A1 Bkfl	40	LF	\$70	\$2,800
4" Water Main w/A1 Bkfl	125	LF	\$55	\$6,875
2" Water Main w/A4 Bkfl	8	LF	\$45	\$360
3/4" Water Service w/A1 Bkfl	100	LF	\$55	\$5,500
3/4" Water Service w/A4 Bkfl	40	LF	\$45	\$1,800
Fire Hydrant	2	EA	\$5,000	\$10,000
New Water Services, Meters, & Box	8	EA	\$2,000	\$16,000
10" Gate Valve	2	EA	\$2,500	\$5,000
6" Gate Valve	2	EA	\$2,000	\$4,000
4" Gate Valve	2	EA	\$1,500	\$3,000
Tie-in to existing water system at 4 locations	3	LS	\$5,000	\$15,000
Subtotal Prospect Avenue:				\$132,485
Total Construction Cost w/o Contingency:				\$438,000
Inflation @ 4% to May 2016 Dollars:				\$17,520
TASK 12 - CONSTRUCTION/IMPLEMENTATION ACTIVITIES:				\$456,000

TASK 13 - CONSTRUCTION/IMPLEMENTATION CONTINGENCY: \$91,000

TABLE 8.3e
CITY OF DUNSMUIR
North Dunsmuir Water Main Replacement Project
USR IMPLEMENTATION TASK 14

WORK TASK		Hours	Salary (\$/Hour)	Total Cost
14.1	Grant Preparation			
	RWVG Member Representatives - meeting hours	55.9	58.21	\$ 3,260
	RWVG Member Representatives - non-meeting hours	11.9	58.21	\$ 690
Subtask 14.1 Rounded Total				\$ 3,950
14.2	Data Management			
	RWVG Coordinator	6.2	75.00	\$ 464
	Administrative Director	7.6	60.00	\$ 457
	Project Director Consultant Services	9.5	75.00	\$ 714
	Materials - Technology and Licenses	Lump Sum		\$ 1,190
Subtask 14.2 Rounded Total				\$ 2,830
14.3	USR Website Upgrade			
	RWVG Coordinator	5.7	75.00	\$ 428
	Administrative Director	7.6	60.00	\$ 457
	Project Director Consultant Services	19.0	85.00	\$ 1,618
	Materials - Technology and Licenses	Lump Sum		\$ 119
Subtask 14.3 Rounded Total				\$ 2,620
14.4	Public Project Presentation and Field Trip			
	RWVG Coordinator	15.7	75.00	\$ 1,178
	Administrative Director	10.7	60.00	\$ 643
	Project Director Consultant Services	22.6	85.00	\$ 1,922
	Videographer Production Consultant Services	11.4	171.25	\$ 1,956
	Videographer Post Production Consultant Services	11.4	85.63	\$ 978
	Presenters	5.7	150.00	\$ 857
	Materials - Facility Rental and Cleaning	Lump Sum		\$ 262
	Materials - Technology	Lump Sum		\$ 95
	Materials - 150 Fliers	Lump Sum		\$ 107
Subtask 14.4 Rounded Total				\$ 8,000
Task 14 Total				\$ 17,400

City of Dunsmuir North Dunsmuir Water Main Replacement Project Budget Description:

- (a) Refer to the Grant Administration Project for a description of all direct project administration costs as shown in Tables 8.6 and 8.6a.
- (b) There is no land purchase or easements required for this project; therefore, no funds will be required for this budget category.
- (c) The planning/design/engineering/environmental documentation requested grant amount of \$63,100 is 10.2% of the anticipated total construction cost of \$618,000. According to the American Society of Civil Engineers (ASCE) Manuals and Reports on Engineering Practice No. 45, Updated Edition, Graph 4 indicates the total fee for a construction project of this size and average complexity modifying an existing facility is approximately 16% of the overall construction cost. This information was based on a survey completed by ASCE of consulting firm practices in which consultants were asked to submit data on their completed projects relating the cost of various phases of their engineering services to the construction costs. Data from more than 1,000 projects were submitted and used to compile survey results. Additionally, these percentages have since been verified using information from comparable projects completed in the area where construction contracts were competitively bid. Refer to Table 8.3c for detailed hourly cost breakdowns for completion of all items included in Tasks 6 through 9.
- (d) Project construction and implementation costs were based upon similar, recent prevailing wage rate projects completed in northern California. Implementation costs include contract services, construction administration, and construction observation anticipated to be approximately \$71,000. Refer to Table 8.3d for hourly breakdowns of these tasks and all items included.

As shown in Table 8.3d.12, water main construction costs were projected forward to construction in year 2016, based upon the typical yearly increase in the Engineering News Record – Construction Cost Index (ENR CCI), which presently stands at 10037 for July 2015. The ENR CCI has been in place since 1908 and indexes the cost of construction taking into account 200 hours of common labor at a rate averaged over 20 cities, plus 25 cwt of standard structural steel shapes, 1.128 tons of Portland cement, and 1,088 board-ft of 2x4 lumber. As such, total construction and implementation costs are anticipated to be approximately \$618,000, including a 20% construction contingency.

- (g) Project-related costs anticipated to be spent toward USR Implementation Subtasks are approximately 2.5% of the overall project cost. This is more than reasonable in order to complete project-specific grant preparation, data management, USR website upgrade, and the public project presentation and field trip. As shown in Table 8.3e, costs were developed based on number of work hours anticipated for each task directly related to the project and associated labor cost per hour.

Table 8.4 – Project Budget

Proposal Title: Upper Sacramento, McCloud, and Lower Pit 2015 IRWM Grant Proposal
 Project Title: Trout Unlimited Groundwater Elevation and Habitat Restoration Planning Project
 Project serves a need of a DAC?: Yes
 Funding Match Waiver request?: Yes

Category	(a)	(b)	(c)	(d)
	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
(a) Direct Project Administration Costs - Tasks 1-3 (See Tables 8.6 and 8.6a as all administration costs are included in Project 6: Grant Administration)				
(b) Land Purchase/Easement - N/A	\$0	\$0	\$0	\$0
(c) Planning/Design/Engineering/ Environmental Documentation - Tasks 4-10 (See Table 8.4c)	\$168,940	\$0	\$0	\$168,940
(d) Construction/Implementation - N/A	\$0	\$0	\$0	\$0
(e) USR Implementation Task 11 (See Table 8.4e)	\$5,300	\$0	\$0	\$5,300
(f) Grand Total (Sum rows (a) through (e) for each column)	\$174,240	\$0	\$0	\$174,240

*List sources of funding: *Use as much space as required*

TABLE 8.4c

TROUT UNLIMITED

Groundwater Elevation and Habitat Restoration Planning Project

PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION

	Project Manager	Project Coordinator	Technician	GIS/Survey Specialist	Tribe Cultural Specialist	Project Admin	Accounting	Total Labor Hours	Total Labor Costs	Other Direct Costs	Total Project Funds Requested
Billing Rate	\$125.00	\$95.00	\$90.00	\$85.00	\$80.00	\$60.00	\$70.00				
4 Task 4: Project Set-up and Initiation (15% completion)	20	24	12	28	36	12	8	140	\$ 12,400.00	\$ -	\$ 12,400.00
4.1 Establish administrative procedures and controls for voluntary CASGEM reporting group	4	8				8	4	24.0	\$ 2,020.00	\$ -	
4.2 Kickoff meeting, define project roles, tasks, and objectives.	4	4	4	4	4	4	4	28.0	\$ 2,460.00	\$ -	
4.3 Project technician and volunteer training - open to the public	8	8	8		8			32.0	\$ 3,200.00	\$ -	
4.4 Prepare scaled area map and project schematic	4	4		24				32.0	\$ 2,920.00	\$ -	
4.5 Cultural consideration and review - Winnemem Wintu Tribe, Pit River Tribe, Modoc Nation					24			24.0	\$ 1,920.00	\$ -	
5 Task 5: Well Identification, Workplan Compile and Approval (30% completion)	40	64	16	44	64	60	12	300.0	\$ 25,820.00	\$ -	\$ 25,820.00
5.1 Well location identification, owner contact, access coordination	12	24	16	8	16	32	8	116.0	\$ 9,660.00	\$ -	
5.2 Identification of data gaps, CASGEM compliance issues, and appropriate locations for new monitoring wells	8	12		4	4	8		36.0	\$ 3,280.00	\$ -	
5.3 Owner release of DWR well construction data, submittal, coordination	4	16			8	12		40.0	\$ 3,380.00	\$ -	
5.4 Project mapping update and completion				12				12.0	\$ 1,020.00	\$ -	
5.5 Cultural consideration and review - Winnemem Wintu Tribe, Pit River Tribe, Modoc Nation					36				\$ 2,880.00	\$ -	
5.6 Workplan compilation	8	8		16		8		40.0	\$ 3,600.00	\$ -	
5.7 Workplan revision and approval	8	4		4			4	20.0	\$ 2,000.00	\$ -	
6 Task 6: Monitoring Well Installation (40% completion)	48	36	36	24	0	12	4	160.0	\$ 15,700.00	\$ 12,150.00	\$ 27,850.00
6.1 Project coordination and mobilization	16	4						20.0	\$ 2,380.00	\$ -	
6.2 Permits and permitting	4	8	4	4				20.0	\$ 1,960.00	\$ 1,450.00	
6.3 Installation of three (3) groundwater monitoring wells	8	4	24			4		40.0	\$ 3,780.00	\$ 10,700.00	
6.4 Data compile and preliminary reporting				8				8.0	\$ 680.00	\$ -	
6.5 Report compilation	12	16	8	8		8		52.0	\$ 4,900.00	\$ -	
6.6 Report revision and approval	8	4		4			4	20.0	\$ 2,000.00	\$ -	
7 Task 7: CASGEM Compliant Well Survey Completion, Initial Well Measurement (Quarter 1 - 60% completion)	68	80	64	56	8	40	4	320.0	\$ 29,940.00	\$ 3,570.00	\$ 33,510.00
7.1 Notify and coordinate well shutdown with owner	16	32	16		8	16		88.0	\$ 7,440.00	\$ -	
7.2 Travel to well and establish benchmark - Topo and GPS elevation, photo document per DWR. Measure depth to water, quality control and documentation.	32	40	40	16				128.0	\$ 12,760.00	\$ -	
7.3 Per Diem (3 people/day x 3 days x \$130.00/day)								0.0	\$ -	\$ 1,170.00	
7.4 GPS Survey equipment rental									\$ -	\$ 2,400.00	
7.5 Data compilation and preliminary review	8		8	24		12		52.0	\$ 4,480.00	\$ -	
7.6 Upload CASGEM data to DWR	4	8						12.0	\$ 1,260.00	\$ -	
7.7 Progress reporting: Publish report, regulatory compliance	4			16		12	4	40.0	\$ 3,360.00	\$ -	
8 Task 8: CASGEM Compliant Quarterly Measurement (Quarter 2 - 70% completion)	56	44	64	32	8	24	4	232.0	\$ 22,020.00	\$ 260.00	\$ 22,280.00
8.1 Notify and coordinate well shutdown with owner	8	24	16		8	4		60.0	\$ 4,960.00	\$ -	
8.2 Measure depth to water, quality control and documentation	32	8	40					80.0	\$ 8,360.00	\$ -	
8.3 Per Diem (2 people/day x 1 day x \$130.00/day)								0.0	\$ -	\$ 260.00	
8.4 Data compilation and preliminary review	8		8	24		12		52.0	\$ 4,480.00	\$ -	
8.5 Upload CASGEM data to DWR	4	8						12.0	\$ 1,260.00	\$ -	
8.6 Progress reporting: Publish report, regulatory compliance	4	4		8		8	4	28.0	\$ 2,520.00	\$ -	
9 Task 9: CASGEM Compliant Quarterly Measurement (Quarter 3 - 80% completion)	56	44	64	32	8	24	4	232.0	\$ 22,020.00	\$ 260.00	\$ 22,280.00
9.1 Notify and coordinate well shutdown with owner	8	24	16		8	4		60.0	\$ 5,620.00	\$ -	
9.2 Measure depth to water, quality control and documentation	32	8	40					80.0	\$ 8,360.00	\$ -	
9.3 Per Diem (2 people/day x 1 day x \$130.00/day)								0.0	\$ -	\$ 260.00	
9.4 Data compilation and preliminary review	8		8	24		12		52.0	\$ 4,780.00	\$ -	
9.5 Upload CASGEM data to DWR	4	8						12.0	\$ 1,260.00	\$ -	
9.6 Progress reporting: Publish report, regulatory compliance	4	4		8		8	4	28.0	\$ 2,520.00	\$ -	
10 Task 10: CASGEM Compliant Quarterly Measurement - Final (Quarter 4 - 100% completion)	64	44	56	32	8	24	36	264.0	\$ 24,540.00	\$ 260.00	\$ 24,800.00
10.1 Notify and coordinate well shutdown with owner	8	16	16		8	4		52.0	\$ 4,860.00	\$ -	
10.2 Measure depth to water, quality control and documentation	32	8	32					72.0	\$ 7,640.00	\$ -	
10.3 Per Diem (2 people/day x 1 day x \$130.00/day)								0.0	\$ -	\$ 260.00	
10.4 Data compilation and preliminary review	8		8	24		12		52.0	\$ 4,780.00	\$ -	
10.5 Upload CASGEM data to DWR	4	8						12.0	\$ 1,260.00	\$ -	
10.6 Final reporting: Publish Report, Regulatory Compliance	8	4		8		4	4	28.0	\$ 2,680.00	\$ -	
10.7 Final reporting: Financial Audit Prep, Audit	4	8				4	32	48.0	\$ 3,840.00	\$ -	
Hours:	352.0	336.0	312.0	248.0	132.0	196.0	72.0	1,648.0	\$ 152,440.00	\$ 16,500.00	\$ 168,940.00
Total Cost:	\$44,000.00	\$31,920.00	\$28,080.00	\$21,080.00	\$10,560.00	\$11,760.00	\$5,040.00				

TABLE 8.4e
TROUT UNLIMITED
Groundwater Elevation and Habitat Restoration Planning Project
USR IMPLEMENTATION TASK 11

WORK TASK		Hours	Salary (\$/Hour)	Total Cost
11.1	Grant Preparation			
	RWMG Member Representatives - meeting hours	17.0	58.21	\$ 990
	RWMG Member Representatives - non-meeting hours	3.6	58.21	\$ 210
Subtask 11.1 Rounded Total				\$ 1,200
11.2	Data Management			
	RWMG Coordinator	1.885	75.00	\$ 141
	Administrative Director	2.32	60.00	\$ 139
	Project Director Consultant Services	2.9	75.00	\$ 218
	Materials - Technology and Licenses	Lump Sum		\$ 363
Subtask 11.2 Rounded Total				\$ 860
11.3	USR Website Upgrade			
	RWMG Coordinator	1.74	75.00	\$ 131
	Administrative Director	2.32	60.00	\$ 139
	Project Director Consultant Services	5.8	85.00	\$ 493
	Materials - Technology and Licenses	Lump Sum		\$ 36
Subtask 11.3 Rounded Total				\$ 800
11.4	Public Project Presentation and Field Trip			
	RWMG Coordinator	4.785	75.00	\$ 359
	Administrative Director	3.3	60.00	\$ 196
	Project Director Consultant Services	6.9	85.00	\$ 585
	Videographer Production Consultant Services	3.48	171.25	\$ 596
	Videographer Post Production Consultant Services	3.48	85.63	\$ 298
	Presenters	1.74	150.00	\$ 261
	Materials - Facility Rental and Cleaning	Lump Sum		\$ 80
	Materials - Technology	Lump Sum		\$ 29
	Materials - 150 Fliers	Lump Sum		\$ 33
Subtask 11.4 Rounded Total				\$ 2,440
Task 11 Total				\$ 5,300

Trout Unlimited Groundwater Elevation and Habitat Restoration Planning Project Budget Description:

- (a) Refer to the Grant Administration Project for a description of all direct project administration costs as shown in Tables 8.6 and 8.6a.
- (b) There is no land purchase or easements required for this project; therefore, no funds will be required for this budget category.
- (c) This is a planning project, therefore all costs fall under this category with the exception of project administration and project-specific USR Implementation costs. Refer to Table 8.4c for detailed hourly cost breakdowns for completion of all items included in Tasks 4 through 10.
- (d) There is no construction/implementation required for this planning project; therefore, no funds will be required for this budget category.
- (e) Project-related costs anticipated to be spent toward USR Implementation Subtasks are approximately 2.9% of the overall project cost. This is more than reasonable in order to complete project-specific grant preparation, data management, USR website upgrade, and the public project presentation and field trip. As shown in Table 8.4e, costs were developed based on number of work hours anticipated for each task directly related to the project and associated labor cost per hour.

Table 8.5 – Project Budget					
Proposal Title: <u>Upper Sacramento, McCloud, and Lower Pit 2015 IRWM Grant Proposal</u>					
Project Title: <u>Pacific Forest Trust Mt. Shasta Headwaters Forest Conservation Easement (Phase1) Project</u>					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category	(a)	(b)	(c)	(d)	
	Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Fund Source*	Total Cost	
(a)	Direct Project Administration Costs - Tasks 1-3 (See Tables 8.6 and 8.6a as all administration costs are included in Project 6: Grant Administration)				
(b)	Land Purchase/Easement - Task 4	\$292,500	\$200,000	\$11,207,500	\$11,700,000
(c)	Planning/Design/Engineering/ Environmental Documentation - Tasks 5-8	\$0	\$250,000	\$0	\$250,000
(d)	Construction/Implementation - N/A	\$0	\$0	\$0	\$0
(e)	USR Implementation Task 9 (See Table 8.5e)	\$7,500	\$1,700	\$0	\$9,200
(f)	Grand Total (Sum rows (a) through (e) for each column)	\$300,000	\$451,700	\$11,207,500	\$11,959,200
*List sources of funding: Non-State Fund Source - PFT (fees, charitable contributions); State Fund Source - Wildlife Conservation Board (\$9,000,000 - granted), CA Natural Resource Agency Environmental Enhancement and Mitigation Program (\$350,000 - granted), CA Dept. Fish and Wildlife Prop. 1 Watershed Restoration Program (\$1,857,500 - proposed).					

Cost Assumptions

- Task 4: The purchase price of the conservation easement is determined by an independent, state-approved appraisal.
- Tasks 1-3, 5-9: PFT costs for categories (a), (c) and (e) are direct costs of personnel, including salary and benefits, and contractor fees, with an overhead rate of 15

TABLE 8.5e
PACIFIC FOREST TRUST
Mt. Shasta Headwaters Forest Conservation Easement (Phase1) Project
USR IMPLEMENTATION TASK 9

WORK TASK		Hours	Salary (\$/Hour)	Total Cost
9.1	Grant Preparation			
	RWGM Member Representatives - meeting hours	29.6	58.21	\$ 1,720
	RWGM Member Representatives - non-meeting hours	6.3	58.21	\$ 370
Subtask 9.1 Rounded Total				\$ 2,090
9.2	Data Management			
	RWGM Coordinator	3.3	75.00	\$ 246
	Administrative Director	4.0	60.00	\$ 242
	Project Director Consultant Services	5.0	75.00	\$ 378
	Materials - Technology and Licenses	Lump Sum		\$ 630
Subtask 9.2 Rounded Total				\$ 1,490
9.3	USR Website Upgrade			
	RWGM Coordinator	3.0	75.00	\$ 227
	Administrative Director	4.0	60.00	\$ 242
	Project Director Consultant Services	10.1	85.00	\$ 856
	Materials - Technology and Licenses	Lump Sum		\$ 63
Subtask 9.3 Rounded Total				\$ 1,390
9.4	Public Project Presentation and Field Trip			
	RWGM Coordinator	8.3	75.00	\$ 623
	Administrative Director	5.7	60.00	\$ 340
	Project Director Consultant Services	12.0	85.00	\$ 1,017
	Videographer Production Consultant Services	6.0	171.25	\$ 1,035
	Videographer Post Production Consultant Services	6.0	85.63	\$ 517
	Presenters	3.0	150.00	\$ 453
	Materials - Facility Rental and Cleaning	Lump Sum		\$ 138
	Materials - Technology	Lump Sum		\$ 50
	Materials - 150 Fliers	Lump Sum		\$ 57
Subtask 9.4 Rounded Total				\$ 4,230
Task 9 Total				\$ 9,200

Pacific Forest Trust Mt. Shasta Headwaters Forest Conservation Easement (Phase 1) Project Budget Description:

- (a) Refer to the Grant Administration Project for a description of all direct project administration costs as shown in Tables 8.6 and 8.6a.
- (b) This is a land easement acquisition project, therefore most grant requested costs fall under this category, with the exception of project administration and project specific USR Implementation costs. A large portion of the total overall easement acquisition, as well as some planning costs, will be paid for via a funding match as described in Table 8.5. The purchase price of the conservation easement is determined by an independent, state-approved appraisal.
- (c) Grant funds for easement acquisition planning costs are not being requested herein, and will instead be paid for via a funding match as described in Table 8.5.
- (d) There is no construction/implementation required for this easement acquisition project; therefore, no funds will be required for this budget category.
- (f) Project-related costs anticipated to be spent toward USR Implementation Subtasks are approximately 3% of the overall grant requested project cost. This is more than reasonable in order to complete project-specific grant preparation, data management, USR website upgrade, and the public project presentation and field trip. As shown in Table 8.5e, costs were developed based on number of work hours anticipated for each task directly related to the project and associated labor cost per hour.

TABLE 8.6 - Project Budget					
Proposal Title: Upper Sacramento, McCloud, and Lower Pit 2015 IRWM Grant Proposal					
Project Title: Grant Administration					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Funding Sources	Total Cost
(a)	<i>Direct Project Administration Costs (See Table 8.6a)</i>				
Task 1	Project Management	\$26,580	\$1,700	\$0	\$28,280
Task 2	Labor Compliance Program	\$50,900	\$250	\$0	\$51,150
Task 3	Reporting	\$17,480	\$2,250	\$0	\$19,730
Task 4	Agreement Administration	\$2,000	\$0	\$0	\$2,000
Task 5	Invoicing	\$2,000	\$0	\$0	\$2,000
Task 6	Progress Reports and Project Completion Reports	\$1,900	\$0	\$0	\$1,900
(b)	<i>Land Purchase/Easement - N/A</i>				
(c)	<i>Planning/Design/Engineering/ Environmental Documentation - N/A</i>				
(d)	<i>Construction/Implementation - N/A</i>				
(e)	<i>USR Implementation Costs - N/A</i>				
(f)	<i>Grand Total</i>	\$100,860	\$4,200	\$0	\$105,060

TABLE 8.6a
CITY OF MT. SHASTA
USR 2015 IRWM GRANT PROPOSAL
GRANT ADMINISTRATION COST

WORK TASK	WORK HOURS									Category Subtotal	
	Project Mngr/Managing Engr	Assoc Engr E-4	Staff Engr E-3	Staff Engr E-2	Staff Engr E-1	Survey Supervisor	2-Man Survey Crew	CADD Tech/Staff Engr T-3	Admin Staff		
TASK 1 - PROJECT MANAGEMENT											
a.	City of Mt. Shasta Big Lakes Water Line Replacement Project Administration and Management	4	20			12				8	\$5,508
b.	City of Mt. Shasta Big Lakes Water Line Replacement Project Owner Staff time (71 hours @ \$60/hour)										\$4,280
c.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Administration and Management	4	14			6				5	\$3,777
d.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Owner Staff time (34 hours @ \$60/hour)										\$2,040
e.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Administration and Management	4	16			8				5	\$4,287
f.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Owner Staff time (42 hours @ \$60/hour)										\$2,520
g.	Trout Unlimited Groundwater Elevation and Habitat Restoration Planning Project Management Time (69 hours @ \$60/hour)										\$4,160
										Subtotal Task 1:	\$26,572
h.	PFT Mt. Shasta Headwaters Forest Conservation Easement Project Management Time (41.5 hours @ \$60/hour) - Funding Match										\$1,700
TASK 2 - LABOR COMPLIANCE PROGRAM											
a.	City of Mt. Shasta Big Lakes Water Line Replacement Project Certified payroll review		40							40	\$8,480
b.	City of Mt. Shasta Big Lakes Water Line Replacement Project Monthly onsite interviews of contractor's labor staff (4 hrs/visit)										\$2,900
c.	City of Mt. Shasta Big Lakes Water Line Replacement Project Correspondence with Contractor and Labor Board		30							30	\$6,360
d.	City of Mt. Shasta Big Lakes Water Line Replacement Project Reporting		16							16	\$3,392
e.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Certified payroll review		20							22	\$4,374
f.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Monthly onsite interviews of contractor's labor staff (4 hrs/visit)										\$1,740
g.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Correspondence with Contractor and Labor Board		20							30	\$4,910
h.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Reporting		10							12	\$2,254
i.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Certified payroll review		30							30	\$6,360
j.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Monthly onsite interviews of contractor's labor staff (4 hrs/visit)										\$2,320
k.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Correspondence with Contractor and Labor Board		20							30	\$4,910
l.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Reporting		12							12	\$2,544
m.	Trout Unlimited Groundwater Elevation and Habitat Restoration Planning Project Labor Code Compliance Time (6 hours @ \$60/hour)										\$360
										Subtotal Task 2:	\$50,904
n.	PFT Mt. Shasta Headwaters Forest Conservation Easement Project Labor Code Compliance Time (4 hours @ \$60/hour) - Funding Match										\$250
TASK 3 - REPORTING											
a.	City of Mt. Shasta Big Lakes Water Line Replacement Project Progress Reports	2	15			10				8	\$4,187
b.	City of Mt. Shasta Big Lakes Water Line Replacement Project Owner Staff Time (30 hours @ \$60/hour)										\$1,800
c.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Progress Reports	2	8			8				6	\$2,818
d.	City of Dunsmuir South Dunsmuir Water Main Replacement Project Owner Staff Time (20 hours @ \$60/hour)										\$1,200
e.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Progress Reports	2	8			10				6	\$3,038
f.	City of Dunsmuir North Dunsmuir Water Main Replacement Project Owner Staff Time (20 hours @ \$60/hour)										\$1,200
g.	Trout Unlimited Groundwater Elevation and Habitat Restoration Planning Project Reporting Time (54 hours @ \$60/hour)										\$3,240
										Subtotal Task 3:	\$17,483
h.	PFT Mt. Shasta Headwaters Forest Conservation Easement Project Reporting Time (37.5 hours @ \$60/hour) - Funding Match										\$2,250
TASK 4 - AGREEMENT ADMINISTRATION											
a.	City of Mt. Shasta Staff Time (33 hours @ \$60/hour)										\$2,000
TASK 5 - INVOICING											
a.	City of Mt. Shasta Staff Time (33 hours @ \$60/hour)										\$2,000
TASK 6 - PROGRESS REPORTS AND PROJECT COMPLETION REPORTS											
a.	City of Mt. Shasta Staff Time (32 hours @ \$60/hour)										\$1,900
										TOTAL DIRECT PROJECT ADMINISTRATION COSTS:	\$100,859

Grant Administration Project Budget Description:

- (a) The direct project administration requested grant amount of \$100,860 is approximately 3.3% of the total grant proposal requested amount. This is more than reasonable in order for all project proponents to complete Tasks 1 through 3 of the Work Plan including reporting forms and project updates to DWR, Labor Code Compliance verification, and quarterly and final progress reports; and for the City of Mt. Shasta to complete Tasks 4 through 6 of the Work Plan including agreement administration, invoicing, and compilation of progress reports. Costs were developed based on number of work hours anticipated for each task and associated labor cost per hour as shown in Table 8.6a.