Attachment 4

Budget

East Contra Costa County
Proposition 84 Round 1 Implementation Grant Proposal

ATTACHMENT 4 –
BUDGET

Summary Proposal Budget

The total cost of implementing the eight high-priority projects included within this Proposal is **$33,960,600**. Of this amount, **$21,275,600** is Non-State funding, **$25,000** is other state funding, and **$12,660,000** is being requested as part of the Proposition 84 Round 1 Implementation Grant Program. The funding match for this proposal is **61%.**

The summary tables on the following pages provide a breakdown of the overall costs for proposal implementation by budget category and project (task), respectively. Detailed cost estimates for each of the eight projects are provided in the following pages, including the budget table and supporting documentation for these estimates. In accordance with the PSP, the budget items align with the work tasks described in Attachment 3 – Work Plan and Attachment 5 – Schedule.

Summary Budget by Budget Category

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant

PROPOSAL COST SUMMARY

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match [1]
(a)	Direct Project Administration Costs	$552,750	$20,000	$0	$572,750	97%
(b)	Land Purchase/Easement	$1,503,000	$385,500	$0	$1,888,500	80%
(c)	Planning/Design/Engineering/ Environmental Documentation	$1,742,640	$32,500	$25,000	$1,800,140	97%
(d)	Construction/Implementation	$12,424,300	$11,913,000	$0	$24,337,300	51%
(e)	Environmental Compliance/ Mitigation/Enhancement	$983,000	$75,000	$0	$1,058,000	93%
(f)	Construction Administration	$1,714,600	$120,750	$0	$1,835,350	93%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	$66,000	$0	$0	$66,000	100%
(h)	Construction/Implementation Contingency	$2,289,310	$113,250	$0	$2,402,560	95%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$21,275,600**	**$12,660,000**	**$25,000**	**$33,960,600**	**61%**

Sources of Funding:

Refer to individual project budget tables for sources of funding

[1] *Refer to Task 8 note regarding funding match*

Summary Budget by Project (Task)

Table 8 - Summary Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant

PROPOSAL COST SUMMARY

	Individual Project Title	Non-State Share (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match [1]
(a)	Task 1: East County Water Conservation Program	$2,434,000	$1,320,000	$0	$3,754,000	65%
(b)	Task 2: East County Water Meter Installation Program	$221,000	$565,000	$0	$786,000	28%
(c)	Task 3: Brentwood Nonpotable Water Distribution System	$1,097,000	$1,000,000	$0	$2,097,000	52%
(d)	Task 4: Pittsburg Recycled Water Pipeline Rehabilitation Project	$375,000	$1,125,000	$0	$1,500,000	25%
(e)	Task 5: Contra Costa Canal Levee Mitigation and Flood Protection Project	$1,000,000	$3,000,000	$0	$4,000,000	25%
(f)	Task 6: Drainage Area 55 - West Antioch Creek Channel Improvements	$2,994,600	$3,000,000	$0	$5,994,600	50%
(g)	Task 7: Upper Sand Creek Basin	$12,079,000	$2,000,000	$0	$14,079,000	86%
(h)	Task 8: Watershed Protection and Restoration(1)	$1,075,000	$650,000	$25,000	$1,750,000	50%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$21,275,600**	**$12,660,000**	**$25,000**	**$33,960,600**	**61%**

[1] Refer to Task 8 note regarding funding match

Task 1 – East County Water Conservation Program

The table below presents a summary budget for the East County Water Conservation Program, which includes conservation programs for DWD and Brentwood. Following this table is a cost summary for the individual program components (one for DWD and one for Brentwood) and documentation of the basis for the cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: East County Water Conservation Program

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$40,000	$0	$0	$40,000	100%
(b)	Land Purchase/Easement	$0	$0	$0	$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$298,500	$12,000	$0	$310,500	96%
(d)	Construction/Implementation	$2,079,000	$1,303,000	$0	$3,382,000	61%
(e)	Environmental Compliance/ Mitigation/Enhancement	$0	$0	$0	$0	0%
(f)	Construction Administration	$16,500	$0	$0	$16,500	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	$0	$0	$0	$0	0%
(h)	Construction/Implementation Contingency	$0	$5,000	$0	$5,000	0%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$2,434,000**	**$1,320,000**	**$0**	**$3,754,000**	**65%**

Sources of Funding:
DWD General Fund, Brentwood General Fund

DWD Conservation Element

The table below presents the budget for the DWD programs included within the East County Water Conservation Program, including (1) a HET Rebate project and (2) a Leak Detection and Repair project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant

Project Title: DWD HET Rebate and Leak Detection & Repair Projects (part of the East County Water Conservation Program)

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$5,000			$5,000	100%
(b)	Land Purchase/Easement				$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$9,500	$12,000		$21,500	44%
(d)	Construction/Implementation	$3,000	$203,000		$206,000	1%
(e)	Environmental Compliance/ Mitigation/Enhancement				$0	0%
(f)	Construction Administration	$2,500			$2,500	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)				$0	0%
(h)	Construction/Implementation Contingency		$5,000		$5,000	0%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$20,000**	**$220,000**	**$0**	**$240,000**	**8%**

***List sources of funding:** *Use as much space as required.*
Non-State Share from DWD General Fund

Row (a) Costs: Task 1A - Project Administration

Project Administration costs for DWD's HET Rebate project and Leak Detection and Repair project, corresponding to Task 1A.1 of the Work Plan, are estimated to be $5000. This assumes project administration costs will be about 2% of the total project costs, and is based on prior experience with other conservation programs.

Row (b) Costs: Task 1B - Land Purchase/Easement

There are no costs identified for this budget item because DWD's HET Rebate project and Leak Detection and Repair Program will not require any land purchases or easements.

Row (c) Costs: Task 1C – Planning/Design/Environmental Documentation

This budget line item is estimated to cost $21,500 and includes $7,000 for Task 1C.1 – HET Public Outreach; $14,000 for 1C.2 – Leak Detection Activities; and $500 for Task 1C.3 – Leak Repair Permitting. A breakdown of the labor and expense costs associated with each of these tasks is provided below. There are no design or environmental documentation tasks associated with these projects (they are considered categorically exempt under CEQA).

Task 1C.1 HET Public Outreach

Labor Costs				**Expenses**		**Contingency[1]**		**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	%	Amount	
General Manager	$139	2	$278	Graphic Consultant	$2,000	5%	$330	$7,000
Admin Analyst	$50	4	$200	Print/Mail Flyers	$4,200			
Total			**$478**		**$6,200**		**$330**	**$7,000**

1. A 5% contingency is included to account for unexpected costs

Task 1C.2 Leak Detection Activities

Labor Costs				**Expenses**		**Contingency[1]**		**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	%	Amount	
General Manager	$139	8	$1,112	Leak Detection Consultant	$10,000	9%	$1,100	$14,000
Admin Analyst	$50	8	$400					
Assistant Superintendent	$73	19	1,387					
Total			**$2,899**		**$10,000**		**$1,100**	**$14,000**

1. A 9% contingency is included to account for unexpected costs

Task 1C.3 Leak Repair Permitting

Labor Costs[1]				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
General Manager	$139	1	$139	n/a		$500
Admin Analyst	$50	4	$200			
Assistant Superintendent	$73	2	$146			
Total			**$485**			**$500**

Row (d) Costs: Task 1D – Construction/Implementation

Implementation costs for DWD's HET Rebate project and Leak Detection and Repair Project are estimated to be $206,000. This includes $101,000 for Task 1D.1 – Issuance of HET Rebate Checks and $105,000 for Task 1D.3 – Leak Repair and Inspection. The work associated with Task 1D.2 – Proposal Solicitation for Leak Repair, is very minimal (less than 2 hours) and those costs are captured as part of the Project Administration budget. A breakdown of the labor and expense costs associated with each of these tasks is provided below.

Task 1D.1 Issuance of HET Rebate Checks

Labor Costs				Expenses				Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Item	Quantity	Unit Cost	Total	
General Manager	$139	4	$556	Rebates	490	$200 each	$98,000	101,000
Admin Analyst	$50	40	$2,000					
Assistant Superintendent	$73	4	$292					
Total			**$2,848**				**$98,000**	**$101,000**

Task 1D.2 Proposal Solicitation for Leak Repair

Costs are minimal (task involves calling 3 pre-approved contractors and requesting proposals) and are already captured under the Project Administration budget.

Task 1D.3 Leak Repair and Inspection

Labor Costs				Expenses				Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Item	Quantity	Unit Cost	Total	
General Manager	$139	8	$1,112	Repair Leaking Saddles	10	$5,500	$55,000	105,000
Admin Analyst	$50	8	$400	Repair Leaking Valves	5	$9,000	$45,000	
Assistant Superintendent	$73	43	$3,139	-	-	-	-	
Total			**$4,651**				**$100,000**	**$105,000**

Row (e) Costs: Task 1E – Environmental Compliance/Mitigation/Enhancement

There are no costs identified for this budget item. DWD's HET Rebate project and Leak Detection and Repair Projects are considered categorically exempt under CEQA, and any construction mitigation activities (e.g. traffic control) associated with the Leak Detection and Repair project have already been accounted for in the construction costs noted for Task 1D.3.

Row (f) Costs: Task 1F – Construction Administration

Construction administration costs associated with DWD's Leak Detection and Repair project, corresponding to Task 1F.1 in the Work Plan, are estimated to cost $2,500. This assumes construction administration costs will be about 1% of total construction costs, and is based on prior experience with implementing other leak repair projects.

Row (g) Costs: Task 1G – Other Costs

There are no other costs identified for this project.

Row (h) Costs: Construction/Implementation Contingency

Contingency costs for DWD's HET Rebate project and Leak Detection and Repair project are estimated to be $5,000. This assumes contingency costs will be about 2% of the total project costs, and is based on prior experience with other conservation programs.

Row (i) Costs: Grand Totals

The total estimated cost of DWD's HET Rebate project and Leak Detection and Repair project is $240,000. The project will be funded through the following mechanisms:

- $20,000 in non-State funding (funding match) from DWD's general fund
- $220,000 in requested grant funding
- $0 in other State funding

Brentwood Conservation Element

The table below presents the budget for Brentwood's SMART (ET) Irrigation Controller Conversion project, one of the elements of the East County Water Conservation Program. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: Brentwood ET ControllerProject

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$35,000			$35,000	100%
(b)	Land Purchase/Easement				$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$289,000			$289,000	100%
(d)	Construction/Implementation	$2,076,000	$1,100,000		$3,176,000	65%
(e)	Environmental Compliance/ Mitigation/Enhancement				$0	0%
(f)	Construction Administration	$14,000			$14,000	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)				$0	0%
(h)	Construction/Implementation Contingency				$0	0%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$2,414,000**	**$1,100,000**	**$0**	**$3,514,000**	**69%**

Sources of Funding:
Brentwood General Fund

Row (a) Costs: Task 1A - Project Administration

Project Administration costs for Brentwood's SMART (ET) Irrigation Controller Conversion project, corresponding to Task 1A.2 of the Work Plan, are estimated to be $35,000. This assumes project administration costs will be about 1% of the total project costs, and is based on prior experience with other conservation programs.

Row (b) Costs: Task 1B - Land Purchase/Easement

There are no costs identified for this budget item because Brentwood's SMART (ET) Irrigation Controller Conversion project will not require any land purchases or easements.

Row (c) Costs: Task 1C – Planning/Design/Environmental Documentation

This budget line item is estimated to cost $289,000 over the 5-year program life and includes work associated with Task 1C.4 – SMART (ET) Irrigation Controller Outreach Program in the work plan. A breakdown of the labor and expense costs associated with the outreach task is provided below. There are no design, permitting or environmental documentation tasks associated with this project (it is considered categorically exempt under CEQA).

Task 1C.4 SMART (ET) Irrigation Controller Outreach

Labor Costs[1]				**Expenses**		**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Engineering Manager	$248	240	$59,520	Graphic Artist	$16,000	$289,000
Project Services Specialist	$165	540	$89,100	Printing & Mailings (5 years)	$15,000	
Admin Assistant II	$114	960	$109,440			
Total			**$258,060**		**$31,000**	**$289,000**

1. Labor costs based on an assumption of Engineering Manager @ 4 hrs/month over 5 years; Project Services Specialist @ 9 hrs/month over 5 years; and Admin Assistant II @ 16 hrs/month over 5 years.

Row (d) Costs: Task 1D – Construction/Implementation

Implementation costs for Brentwood's SMART (ET) Irrigation Controller Conversion project are estimated to be $3,176,000. This includes $2,887,500 for Task 1D.5 – Purchase Irrigation Controllers; and $288,500 for Task 1D.6 – Irrigation Controller Installation and Training. The cost for purchase of the irrigation controllers, as shown in the table below, was estimated based on the purchase of 7,500 controllers at a cost of $385 each (this is the cost of a SMART ET Controller with a rain gauge included). The cost for the installation was assumed to be 10% of the purchase price. The work associated with soliciting companies to install these controllers (Task 1D.4 in the Work Plan) is very minimal (less than 4 hours) and those costs are captured as part of the Project Administration budget.

Task 1D.5 Purchase Irrigation Controllers

Expenses				**Total Cost**
Item	Quantity	Unit Cost	Total	
SMART ET Irrigation Controller	7500	$385	$2,887,500	$2,877,500

Row (e) Costs: Task 1E – Environmental Compliance/Mitigation/Enhancement

There are no costs identified for this budget item. Brentwood's SMART (ET) Irrigation Controller Conversion Project is considered categorically exempt under CEQA and no environmental mitigation measures are anticipated.

Row (f) Costs: Task 1F – Construction Administration

The Construction Administration costs for Brentwood's SMART (ET) Irrigation Controller Conversion project, corresponding to Work Plan Task 1F.2 (Irrigation Controller Construction Administration) are estimated to be about $14,000. This assumes construction administration costs will be about 5% of the contractor costs for installation of the meters ($288,500), and is based on prior experience with other conservation programs.

Row (g) Costs: Task 1G – Other Costs

There are no other costs identified for this project.

Row (h) Costs: Construction/Implementation Contingency

There are no contingencies associated with this project.

Row (i) Costs: Grand Totals

The total estimated cost of Brentwood's SMART (ET) Water Meter Installation Project is $3,514,000. The project will be funded through the following mechanisms:

- $2,359,000 in non-State funding (funding match) from Brentwood's general fund
- $1,155,000 in requested grant funding
- $0 in other State funding

Task 2 – East County Water Meter Installation Program

The table below presents a summary budget for the East County Water Meter Installation Program, which includes meter installation projects for DWD and CCWD. Following this table is a cost summary for the individual program components (one for DWD and one for CCWD) and documentation of the basis for the cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: East County Water Meter Installation Program

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$15,000	$0	$0	$15,000	100%
(b)	Land Purchase/Easement	$0	$0	$0	$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$3,000	$0	$0	$3,000	100%
(d)	Construction/Implementation	$171,000	$560,000	$0	$731,000	23%
(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	$32,000	$5,000	$0	$37,000	86%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$221,000**	**$565,000**	**$0**	**$786,000**	**28%**

Sources of Funding:
DWD General Fund, CCWD General Fund

DWD Residential Water Meter Installation Project

The table below presents the budget for DWD's residential water meter installation project, an element of the East County Water Meter Installation Program. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant

Project Title: DWD Residential Water Meter Installation Project (part of the East County Water Meter Installation Program)

	Budget Category	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$2,000			$2,000	100%
(b)	Land Purchase/Easement				$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$2,000			$2,000	100%
(d)	Construction/Implementation	$11,000	$80,000		$91,000	12%
(e)	Environmental Compliance/ Mitigation/Enhancement				$0	0%
(f)	Construction Administration				$0	0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)				$0	0%
(h)	Construction/Implementation Contingency		$5,000		$5,000	0%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$15,000**	**$85,000**	**$0**	**$100,000**	**15%**

***List sources of funding:** *Use as much space as required.*
DWD General Fund

Row (a) Costs: Task 2A - Project Administration

Project Administration costs for DWD's Residential Water Meter Installation Project, corresponding to Task 2A.1 of the Work Plan, are estimated to be $2,000. This assumes project administration costs will be about 2% of the total project costs, and is based on prior experience with other conservation programs.

Row (b) Costs: Task 2B - Land Purchase/Easement

There are no costs identified for this budget item because DWD's Residential Water Meter Installation Project will not require any land purchases or easements.

Row (c) Costs: Task 2C – Planning/Design/Environmental Documentation

This budget line item is estimated to cost $2000, corresponding to Task 2C.1 – Outreach to Affected DWD Customers. A breakdown of the labor and expense costs associated with each of these tasks is provided below. Design for the Residential Water Meter Installation project is complete, and there are no permitting or environmental documentation tasks (it is considered categorically exempt under CEQA).

Task 2C.1 Outreach to Affected DWD Customers

Labor Costs				**Expenses**		**Contingency**		**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	%	Amount	
General Manager	$139	2	$278	Print/Mail Fliers	$250	0%	$0	$2,000
Admin Analyst	$50	6	$300					
Assistant Superintendent	$74	16	$1,168					
Total			**$1,746**		**$250**		**$330**	**$2,000**

Row (d) Costs: Task 2D – Construction/Implementation

Implementation costs for DWD's Residential Water Meter Installation Project, corresponding to task 2D.1 of the Workplan, are estimated to be $91,000. This includes purchase and installation of 110 meters by DWD staff. A breakdown of the labor and expense costs associated with each of these tasks is provided below.

Task 2D.1 Purchase and Installation of DWD Meters

Labor Costs				**Expenses**				**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Item	Quantity	Unit Cost	Total	
Admin Analyst	$50	8	$400	Purchase Meters	110	$300	$33,000	91,000
Assistant Superintendent	$73	16	$1,168	Installation Materials	110	$425	$46,750	
System Worker II	$47	200	$9,400	-	-	-	-	
Total			**$10,968**				**$79,750**	**$91,000**

Row (e) Costs: Task 2E – Environmental Compliance/Mitigation/Enhancement

There are no costs identified for this budget item. DWD's Residential Water Meter Installation project is considered categorically exempt under CEQA and no environmental mitigation measures are anticipated.

Row (f) Costs: Task 2F – Construction Administration

There are no construction administration costs associated with DWD's Residential Water Meter Installation project because installation of meters will be done by DWD's staff.

Row (g) Costs: Task 2G – Other Costs

There are no other costs identified for this project.

Row (h) Costs: Construction/Implementation Contingency

Contingency costs for DWD's Residential Water Meter Installation project are estimated to be $5,000. This assumes contingency costs will be about 5% of the construction costs, and is based on prior experience with other meter installation programs.

Row (i) Costs: Grand Totals

The total estimated cost of DWD's Residential Water Meter Installation Project is $100,000. The project will be funded through the following mechanisms:

- $15,000 in non-State funding (funding match) from DWD's general fund
- $85,000 in requested grant funding
- $0 in other State funding

CCWD Untreated Water Irrigation Metering Project

The table below presents the budget for CCWD's Untreated Water Irrigation Metering Project, one of the elements of the East County Water Meter Installation Program. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: CCWD Untreated Water Irrigation Metering Project

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$13,000			$13,000	100%
(b)	Land Purchase/Easement				$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$1,000			$1,000	100%
(d)	Construction/Implementation	$160,000	$480,000		$640,000	25%
(e)	Environmental Compliance/ Mitigation/Enhancement				$0	0%
(f)	Construction Administration				$0	0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)				$0	0%
(h)	Construction/Implementation Contingency	$32,000			$32,000	100%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$206,000**	**$480,000**	**$0**	**$686,000**	**30%**

Sources of Funding:
CCWD General Fund

Row (a) Costs: Task 2A - Project Administration

Project Administration costs for CCWD's Untreated Water Irrigation Metering Project, corresponding to Task 2A.2 of the Work Plan, are estimated to be $13,000. This assumes project administration costs will be about 2% of the total project costs, and is based on prior experience with other conservation programs.

Row (b) Costs: Task 2B - Land Purchase/Easement

There are no costs identified for this budget item because CCWD's Untreated Water Irrigation Metering Project will not require any land purchases or easements.

Row (c) Costs: Task 2C – Planning/Design/Environmental Documentation

This budget line item is estimated to cost $1,000 and corresponds to Task 2C.2 – Outreach to Affected CCWD Customers of the Work Plan. A breakdown of the labor and expense costs associated with each of these tasks is provided below. CCWD will be utilizing a design completed from a previous meter installation project for this work. Also, there are no permitting or environmental documentation tasks associated with this project (it is considered categorically exempt under CEQA).

Task 2C.2 Outreach to Affected CCWD Customers

Labor Costs				Expenses		Contingency[1]		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	%	Amount	
Conservation Technician	$57	17	$976	n/a	-	-	-	$1,000
Total								**$1,000**

Row (d) Costs: Task 2D – Construction/Implementation

Implementation costs for CCWD's Untreated Water Irrigation Metering Project, corresponding to Task 2D.2 – Purchase and Installation of CCWD Meters of the Work Plan, are estimated to be $640,000. This includes purchase and installation of 106 meters by CCWD staff. A breakdown of the labor and expense costs associated with each of these tasks is provided below.

Task 2D.2 Purchase and Installation of CCWD Meters

Labor Costs				Expenses				Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Item	Quantity	Unit Cost	Total	
Crew Leader	$75	424	$31,830	2" meter	77	$1,857	$143,000	640,000
MSEO	$69	424	$29,257	4" meter	11	$ 1,904	$20,940	
Utility Worker	$57	424	$24,378	6" meter	10	$2,155	$21,550	
Water Systems Tech	$63	424	$26,659	8" meter	8	$2,358	$18,860	
Instrument Tech	$88	212	$18,596	2" backflow prevention	77	$968	$74,540	
Electrical Tech	$88	212	$18,596	4" backflow prevention	11	$5,426	$59,690	
Supervisor	$97	212	$20,596	6" backflow prevention	10	$6,468	$64,680	
				8" backflow prevention	8	$8,304	$66,430	
Total			**$169,911**				**$469,690**	**640,000**

Row (e) Costs: Task 2E – Environmental Compliance/Mitigation/Enhancement

There are no costs identified for this budget item. CCWD's Untreated Water Irrigation Metering Project is considered categorically exempt under CEQA and no environmental mitigation measures are anticipated.

Row (f) Costs: Task 2F – Construction Administration

There are no construction administration costs for CCWD's Untreated Water Irrigation Metering Project because the meters will be installed by CCWD staff.

Row (g) Costs: Task 2G – Other Costs

There are no other costs identified for this project.

Row (h) Costs: Construction/Implementation Contingency

Contingency costs for CCWD's Untreated Water Irrigation Metering Project are estimated to be $32,000. This assumes contingency costs will be about 5% of the construction costs, and is based on prior experience with other meter installation programs.

Row (i) Costs: Grand Totals

The total estimated cost of CCWD's Untreated Water Irrigation Metering project is $686,000. The project will be funded through the following mechanisms:

- $173,000 in non-State funding (funding match) from CCWD's general fund
- $513,000 in requested grant funding
- $0 in other State funding

Task 3 – Brentwood Non-Potable Water Supply Project

The table below presents the budget for the Brentwood Non-Potable Water Supply Project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: Brentwood Non-Potable Water Supply Project

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$99,000			$99,000	100%
(b)	Land Purchase/Easement	$0			$0	0%
(c)	Planning/Design/Engineering/ Environmental Documentation	$190,000			$190,000	100%
(d)	Construction/Implementation	$480,000	$1,000,000		$1,480,000	32%
(e)	Environmental Compliance/ Mitigation/Enhancement	$32,000			$32,000	100%
(f)	Construction Administration	$148,000			$148,000	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)				$0	0%
(h)	Construction/Implementation Contingency	$148,000			$148,000	100%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$1,097,000**	**$1,000,000**	**$0**	**$2,097,000**	**52%**

***List sources of funding:** *Use as much space as required.*
Non-State Share from Brenwood General Fund

Row (a) Costs: Task 3A – Project Administration

Project Administration costs for Brentwood's Non-Potable Water Supply project, corresponding to Task 3A.1 of the Work Plan, are estimated to be $99,000. This assumes project administration costs will be about 5% of the total project costs, and is based on prior experience with other recycled water implementation projects.

Row (b) Costs: Task 3B –Land Purchase/Easement

There are no costs identified for this budget item because Brentwood's Non-Potable Water Reuse Project will not require any land purchases or easements.

Row (c) Costs: Task 3C – Planning/Design/Environmental Documentation

This budget line item is estimated to cost $190,000 and includes:

- $100,000 for Task 3C.1 – Complete 90% Design;
- $45,000 for Task 3C.2 – Complete Final Design;
- $40,000 for Task 3C.3 – Complete IS/MND; and
- $5,000 for Task 3C.4 – Secure UPRR Permit.

A breakdown of the labor and expense costs associated with each of these tasks is provided below.

Task 3C.1 – Complete 90% Design

Labor Costs				**Expenses**		**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Engineering Manager	$248	20	$4,960	Consultant	$90,000	$100,000
Project Services Specialist	$165	28	$4,950			
Total			**$9,910**		**90,000**	**$100,000**

Task 3C.2 – Complete Final Design

Labor Costs				**Expenses**		**Total Cost (rounded)**
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Engineering Manager	$248	10	$2,480	Consultant	$40,000	$45,000
Project Services Specialist	$165	20	$2,475			
Total			**$4,955**		**$40,000**	**$45,000**

Task 3C.3 – Complete IS/MND

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Engineering Manager	$248	10	$2,480	Consultant	$35,000	$40,000
Project Services Specialist	$165	20	$2,475			
Total			**$4,955**		**$35,000**	**$40,000**

Task 3C.4 – Secure UPRR Permit

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Engineering Manager	$248	4	$992	Consultant	$2,500	$5,000
Project Services Specialist	$165	9	$1,485			
Total			**$2,477**		**$2,500**	**$5,000**

Row (d) Costs: Task 3D – Construction/Implementation

Implementation costs for Brentwood's Non-Potable Water Supply Project are estimated to be $1,480,000 including $8,000 for Task 3D.1 – Bid Solicitation and $1,472,000 for Task 3D.2 – Construction. The implementation costs involve construction of 9,400 linear feet of 12" recycled water pipeline and all of the service laterals. A breakdown of the labor and expense costs associated with each of these tasks is provided below.

Task 3D.1 Bid Solicitation

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Engineering Manager	$248	6	$1,488	Copies of Design Documents	$1,000	$8,000
Project Services Specialist	$165	20	$3,300	Advertisement	$500	
Admin Assistant II	$114	15	$1,710			
Total			**$6,498**		**$1,500**	**$8,000**

Task 3D.2 Construction

Activity	Description	Unit	Unit Cost	Quantity	Total
Mobilization	This activity involves the mobilization of labor and equipment to perform Contract work.	LS	$50,000	1	$50,000
Installation	This activity involves installing 9,400 LF of 12" recycled water pipe and all of the service laterals.	LS[1]	$1,222,000	1	$1,222,000
Conversion	This activity involves disconnecting the existing properties from the potable water irrigation supply and connecting those properties to the non-potable irrigation supply.	LS	$150,000	1	$150,000
Closeout	This activity involves the demobilization of labor and equipment from the project site upon completion of work.	LS	$50,000	1	$50,000
Total					**$1,472,000**

1. See detailed breakdown of these costs in table below.

Detailed Breakdown for Installation Costs

Item	Description	Quantity	Unit	Unit Cost	Total
1	12" Pipeline	9400	LF	$65	$611,000
2	20" Steel Casing for UPRR Crossing	150	LF	$600	$90,000
3	Blow off Valve Assembly	4	EA	$2,000	$8,000
4	Air Release Valve Assembly	4	EA	$2,500	$10,000
5	12" Butterfly Valve	12	EA	$2,000	$24,000
6	8" Gate Valve	14	EA	$1,500	$21,000
7	12x8 Water Cross Tee	4	EA	$500	$2,000
8	12x12x8 Water Tee	6	EA	$300	$1,800
9	Pavement Restoration	27,000	SF	$7	$189,000
10	Connect to Existing	10	EA	$3,000	$30,000
11	Sheeting and Shoring	1	LS	$50,000	$50,000
12	Cathotic Protection	1	LS	$25,000	$25,000
13	Traffic Control	1	LS	$50,000	$50,000
14	Engineering Contingency	1	%	10	$110,000
Total					**$1,221,800**

Row (e) Costs: Task 3E – Environmental Compliance/Mitigation/Enhancement

Environmental mitigation requirements for this project are currently unknown as the Environmental Documentation process (i.e., IS/MND) is not scheduled to be completed until late August 2011. However, a budget of $32,000 has been allocated to cover any environmental mitigation requirements stemming from the environmental documentation process. This budget is based on environmental mitigation costs for similar projects.

Row (f) Costs: Task 3F – Construction Administration

Construction administration costs associated with Brentwood's Non-Potable Water Supply project, corresponding to Task 3F.1 in the Work Plan, are estimated to cost $148,000. This assumes construction

administration costs will be about 10% of construction costs, and is based on prior experience with implementing other recycled water projects.

Row (g) Costs: Task 3G – Other Costs

There are no other costs associated with this project.

Row (h) Costs: Construction/Implementation Contingency

Contingency costs for Brentwood's Non-Potable Water Supply Project are estimated to be $148,000. This assumes contingency costs will be about 10% of the construction costs, and is based on prior experience with recycled water pipeline installations.

Row (i) Costs: Grand Totals

The total estimated cost of Brentwood's Non-Potable Water Supply project is $2,097,000. The project will be funded through the following mechanisms:

- $1,097,000 in non-State funding (funding match) from Brentwood's general fund
- $1,000,000 in requested grant funding
- $0 in other State funding

Task 4 – Pittsburg Recycled Water Pipeline Rehabilitation Project

The table below presents the budget for the Pittsburg Recycled Water Pipeline Project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: Pittsburg Recycled Water Pipeline Rehabilitation Project

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$30,250	$20,000		$50,250	60%
(b)	Land Purchase/Easement	$9,500	$10,500		$20,000	48%
(c)	Planning/Design/Engineering/ Environmental Documentation	$33,640	$20,500		$54,140	62%
(d)	Construction/Implementation	$213,000	$800,000		$1,013,000	21%
(e)	Environmental Compliance/ Mitigation/Enhancement		$75,000		$75,000	0%
(f)	Construction Administration	$55,000	$95,750		$150,750	36%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	$5,000	$0		$5,000	100%
(h)	Construction/Implementation Contingency	$28,610	$103,250		$131,860	22%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$375,000**	**$1,125,000**	**$0**	**$1,500,000**	**25%**

Sources of Funding:
DDSD General Fund

Row (a) Costs: Task 4A – Project Administration

Project Administration costs for the Pittsburg Recycled Water Pipeline Rehabilitation Project, corresponding to Task 4A.1 of the Work Plan, are estimated to be about $50,000. This assumes project administration costs will be about 5% of the construction costs (approximately $1M), and is based on prior experience with projects of similar scope and duration.

Row (b) Costs: Task 4B –Land Purchase/Easement

Easement costs for the Pittsburg Recycled Water Pipeline Rehabilitation Project, corresponding to Task 4A.2 of the Work Plan, are estimated to be $20,000 in 2009 dollars. DDSD may require additional easement with PG&E to rehabilitate the 20" and 30" recycled water pipeline. A breakdown of the labor and expense costs associated with this task is provided below. There are no land purchase costs associated with this project.

Task 4B.1 – Easement Acquisition

Labor Costs				Expenses		Total Cost
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Legal Counsel	$197	25	$5,000	PG&E Easement Fee (Estimated)	$10,500	$20,000
District Engineer	$148	30	$4,500			
Total			**$9,500**		**$10,500**	**$20,000**

Row (c) Costs: Task 4C – Planning/Design/Environmental Documentation

This budget line item for the Pittsburg Recycled Water Pipeline Rehabilitation is estimated to cost about $54,140 and includes:

- $15,500 for completion of the feasibility study and development of project financing (these tasks are not part of the work plan as they are complete and will be used as a funding match)
- $31,200 for completion of the design tasks, including $14,880 for Task 4C.1 – 50% Submittal; and $8,880 for Task 4C.2 – 90% Submittal; and $7,440 for Task 4C.3 – Final Submittal;
- $5,040 for completion of the Categorical Exemption for Task 4C.4 – Environmental Documentation; and
- $2,400 for permitting under Task 4C.5 – Permit Acquisition.

A breakdown of the labor and expense costs associated with each of the Work Plan tasks is provided below.

Task 4C.1 – 50% Submittal

Labor Costs				Expenses		Total Cost
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Project Manager	$150	80	$12,000	n/a		**$14,880**
Principal Engineer	$180	16	$2,880			
Total			$14,880			**$14,880**

Task 4C.2 – 90% Submittal

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Project Manager	$150	40	**$6,000**	n/a		$8,880
Principal Engineer	$180	16	**$2,880**			
Total			**$8,880**			**$8,880**

Task 4C.3 – Final Submittal

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Project Manager	$150	40	**$6,000**	n/a		$7,440
Principal Engineer	$180	8	**$1,440**			
Total			**$7,440**			**$7,440**

Task 4C.4 – Environmental Documentation[1]

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Project Manager	$150	24	**$3,600**	n/a	-	$5,040
Principal Engineer	$180	8	**$1,440**			
Total			**$5,040**			**$5,040**

1. This project is considered to be categorically exempt under CEQA so costs are minimal.

Task 4C.5 – Permit Acquisition

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Project Manager	$150	16	**$2,400**	n/a	-	$2,400
Total			**$2,400**			**$2,400**

Row (d) Costs: Task 4D – Construction/Implementation

Implementation costs for the Pittsburg Recycled Water Pipeline Rehabilitation Project are estimated to be $1,013,000 including $8,000 for Task 4D.1 – Bid Solicitation and $1,005,000 for Task 4D.2 – Construction. The implementation costs involve rehabilitation of approximately 5,240 feet of 20-inch and 30-inch asbestos cement recycled water main using Cured-In-Place Pipe. A breakdown of the labor and expense costs associated with each of these tasks is provided below.

Task 4D.1 Bid Solicitation

Labor Costs				Expenses		Total Cost (rounded)
Discipline	Rate ($/hr)	Hours	Total	Expense Item	Cost	
Project Manager	$150	24	$3,600	Copy services for Contract Documents	$1,000	**$8,000**
Administrative Support	$75	16	$1,200	Advertisement (local newspaper)	$500	
Principal Engineer	$180	8	$1,440			
Total			**$6,240**		**$1,500**	**$8,000**

Task 4D.2 Construction

Activity	Description	Unit	Unit Cost	Quantity	Total
Mobilization	This activity involves the mobilization of labor and equipment to perform Contract work.	LS	$75,000	1	$73,820
On-Site Construction	This activity involves the rehabilitation of the pipeline including ancillary work to complete the project.				
	Access Structure	EA	$15,000	10	$150,000
	Traffic Control	LS	$20,000	1	$20,000
	20" Cured In Place Pipe	LF	$109	2,980	$324,820
	20" Valve Installation	EA	$12,000	1	$12,000
	30" Cured In Place Pipe	LF	$130	2,260	$293,800
	30" Valve Installation	EA	$25,000	1	$25,000
Testing	This activity involves the testing of the materials to ensure compliance with Contract Documents.				
	Testing	LS	$60,000	1	$60,000
Demobilization	This activity involves the demobilization of labor and equipment from the project site upon completion of work.				
	Demobilization	LS	$45,000	1	$45,000
Total					**$1,005,620**

Row (e) Costs: Task 4E – Environmental Compliance/Mitigation/Enhancement

A budget of $75,000 has been allocated to cover any environmental mitigation activities required for implementation of the Pittsburg Recycled Water Pipeline Rehabilitation project.

Row (f) Costs: Task 4F – Construction Administration

Construction administration costs associated with the Pittsburg Recycled Water Pipeline Rehabilitation project, corresponding to Task 4F.1 in the Work Plan, are estimated to cost $150,750. This assumes construction administration costs will be 15% of the construction costs ($1,005,000), and is based on prior experience implementing projects of similar scope and duration.

Row (g) Costs: Task 4G – Other Costs

Other costs associated with the Pittsburg Recycled Water Pipeline Rehabilitation Project, corresponding to Task 4G.1 in the Work Plan, include $5,000 in costs for legal matters relating to securing temporary construction easements and permits for this project. This estimate is based on the assumption of 25 hours of legal counsel's time (at a rate of $200/hr) to review legal documents.

Row (h) Costs: Construction/Implementation Contingency

Contingency costs for the Pittsburg Recycled Water Pipeline Rehabilitation Project are estimated to be $131,860. This assumes contingency costs will be about 13% of the construction costs ($1,013,000). Due to the age of the Pittsburg recycled water pipeline and the lack of record drawings, it is difficult to identify the condition of the 20" and 30" pipeline. Therefore, a 13% contingency is required because the scope of work may change significantly once the pipe is exposed for inspection.

Row (i) Costs: Grand Totals

The total estimated cost of the Pittsburg Recycled Water Rehabilitation Project is $1,500,000. The project will be funded through the following mechanisms:

- $375,000 in non-State funding (funding match) from DDSD's general fund
- $1,125,000 in requested grant funding
- $0 in other State funding

Task 5 – Phase 2 Contra Costa Canal Levee Elimination and Flood Protection Project

The table below presents the budget for the Phase 2 Contra Costa Canal Levee Elimination and Flood Protection Project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant

Project Title: Phase 2 Contra Costa Canal Levee Mitigation and Flood Protection Project

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs				$0	0%
(b)	Land Purchase/Easement	$53,500			$53,500	100%
(c)	Planning/Design/Engineering/ Environmental Documentation	$53,500			$53,500	100%
(d)	Construction/Implementation	$338,000	$3,000,000		$3,338,000	10%
(e)	Environmental Compliance/ Mitigation/Enhancement				$0	0%
(f)	Construction Administration	$288,000			$288,000	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)				$0	0%
(h)	Construction/Implementation Contingency	$267,000			$267,000	100%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$1,000,000**	**$3,000,000**	**$0**	**$4,000,000**	**25%**

Sources of Funding:
CCWD General Fund

Row (a) Costs: Task 5A – Project Administration

Administration costs will cover general project administration including coordination with project partners and preparation of project invoices. In addition, this budget covers development of the quarterly, annual and final reports required by the Grant Agreement and development of the Labor Compliance Program. Project administration costs have been included in the Construction Administration budget.

Row (b) Costs: Task 5B –Land Purchase/Easement

A temporary construction easement will be required to be obtained from the Department of Water Resources to allow construction contractor access, staging, and dewatering disposal through irrigation of existing farmlands. Costs for securing this easement are estimated at $53,500 based on past experience with similar projects.

Row (c) Costs: Task 5C – Planning/Design/Environmental Documentation

Project planning is complete, and environmental documentation has been filed. Design is nearing completion, and will be complete prior to June 1, 2011. As a result, no planning or environmental compliance funding will be requested for this project. Budget requested in this task includes the final stages of design. The budget was developed as shown in the table below.

Task #	Descr.	Labor Costs				Expense Costs		Contingency		Total Cost
		Discipline	Hourly Rate	Hrs.	Total Labor	Expense Item	Cost	%	Amt.	
5.C.2	Final Design	senior engineer	$150 /hr	111	$16,650	Sub-consultant	$5,000		$0	$21,650
		project coordinator	$100 /hr	227	$22,700				$0	$22,700
		accountant	$75 /hr	80	$6,000				$0	$6,000
	TOTAL				*$45,350*		*$5,000*		*$0*	*$50,350*

Row (d) Costs: Task 5D – Construction/Implementation

Construction costs will include mobilization, site clearing, procurement and fabrication of pipe, dewatering setup, canal isolation, bypass pumping and power, earthwork, marsh creek crossing, pipeline installation, transition structures, importing fill material, final grading, and WAPA relocation. Cost detail is provided in the following table. Construction contracting costs have been included in the line item budget for Construction Administration.

Task	Unit	Quantity	Unit Cost	Total
5.D.1 Construction Contracting	*Budget included in Construction Contracting line item.*			
5.D.2 Construction				
5.D.2.1 Mobilization & Closeout	LS	1	$120,000	$120,000
5.D.2.2 Site Clearing	LS	1	$90,000	$90,000

Task	Unit	Quantity	Unit Cost	Total
5.D.2.3 Dewatering	LS	1	$150,000	$150,000
5.D.2.4 Bypass Pumping	LS	1	$750,000	$750,000
5.D.2.5 Procure and Fabricate Pipe	LF	600	$1,500	$900,000
5.D.2.6 Pipeline Installation	LF	600	$950	$570,000
5.D.2.7 Import Fill Material and Grading	CY	7000	$12	$84,000
5.D.2.8 WAPA Relocation	LS	1	$50,000	$50,000

Row (e) Costs: Task 5E – Environmental Compliance/Mitigation/Enhancement

Environmental mitigation for this project has been completed, and no budget has been allocated to this task.

Row (f) Costs: Task 5F – Construction Administration

This task includes all construction administration activities, including advertisement for bids, bidding, contract award, insurance confirmation and tracking, submittal review and tracking, invoice review and payment, schedule maintenance, and contract closeout. In addition, this line item includes costs for Project Administration (refer to Task 5.A). Construction administration costs have been estimated at 8 percent of the construction budget, or $288,000.

Row (g) Costs: Task 5G – Other Costs

No other costs are expected for this project.

Row (h) Costs: Construction/Implementation Contingency

An eight percent construction contingency has been added for this project, for a total of $267,000. Eight percent was identified as a reasonable contingency based on experience with similar projects.

Row (i) Costs: Grand Totals

The total estimated cost of this project is $4.0 M. The project will be funded through the following mechanisms:

- $1,000,000 in non-State funding (funding match) from CCWD
- $3,000,000 in requested grant funding
- $0 in other State funding

Task 6 – Drainage Area 55 - West Antioch Creek Channel Improvements

The table below presents the budget for the Drainage Area 55 – West Antioch Creek Channel Improvements Project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: Drainage Area 55 - West Antioch Creek Chanel Improvement Project

Budget Category		(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$285,500	$0	$0	$285,500	100%
(b)	Land Purchase/Easement	$400,000	$0	$0	$400,000	100%
(c)	Planning/Design/Engineering/ Environmental Documentation	$530,000	$0	$0	$530,000	100%
(d)	Construction/Implementation	$743,300	$3,000,000	$0	$3,743,300	20%
(e)	Environmental Compliance/ Mitigation/Enhancement	$100,000	$0	$0	$100,000	100%
(f)	Construction Administration	$187,100	$0	$0	$187,100	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	$0	$0	$0	$0	0%
(h)	Construction/Implementation Contingency	$748,700	$0	$0	$748,700	100%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$2,994,600**	**$3,000,000**	**$0**	**$5,994,600**	**50%**

Sources of Funding:
Drainage Area 55 Impact Fees, Local Assessment Districts 27 and 31

Row (a) Costs: Task 6A – Project Administration

The project administration budget will fund overall project administration and management, development of a Labor Compliance Program, and project reporting (including reporting on project monitoring and assessment). Project administration has been estimated as 5 percent of total project costs, for a total of $285,500, based on experience completing similar projects.

Row (b) Costs: Task 6B –Land Purchase/Easement

Budget for land purchase / easements will cover purchase of a new permanent easement for the box culvert system, as well as temporary easements required during construction. Easement costs have been estimated as follows:

- Cost associated with purchase of land: $100,000
- Cost associated with securing easements: $300,000
- Total land purchase/easement cost : $400,000

Row (c) Costs: Task 6C – Planning/Design/Environmental Documentation

Planning / design / environmental documentation funds will be used to complete the following tasks:

- 6.C.1. Planning: Preparation of a Water Pollution Control Program
- 6.C.2. Design: Preparation of plans and specifications for project implementation
- 6.C.3. Environmental Documentation: Completion of the Habitat Conservation Plan process and completion and filing of CEQA documentation
- 6.C.4. Permitting: Securing the following required permits: ACOE 404, DFG 1602, and SWRCB 401

Costs have been estimated as shown in the following table.

Task #	Descr.	Labor Costs				Expense Costs		Contingency		Total Cost
		Discipline	Rate	Hrs.	Total Labor	Expense Item	Cost	%	Amt.	
6.C.1 .	Planning					Water Pollution Control Plan	$5,000			$5,000
6.C.2.	Design					Design Consultant	$525,000			$525,000
6.C.3.	Env. Doc.	*Budget included in design line item (Task 6.C.2).*								
6.C.4.	Permitting									
	TOTAL									

Row (d) Costs: Task 6D – Construction/Implementation

The construction budget will cover contracting, mobilization and sitework, and construction-related costs. Estimated costs are provided in the table below. Construction contracting costs have been included in the line item budget for Construction Administration.

Task	Item	Description	Unit	Unit Cost	Quantity	Total
6.D.1 Construction Contracting	*Budget included in Construction Administration line item.*					
6.D.2. Mobilization and Site Preparation	1	Water Pollution Control Program	1	$10,000	1	$10,000
	2	Water Control	1	$50,000	1	$50,000
	3	Temporary Fence	LF	$16	1400	$22,400
	4	Clearing and Grubbing	1	$50,000	1	$50,000
	5	Traffic Control	1	$8,000	1	$8,000
	6	Mobilization	1	$25,000	1	$25,000
	7	Construction Area Signs	1	$3,000	1	$3,000
subtotal						*$82,400*
6.D.3. Construction	1	Wing Walls	EA	$20,000	2	$40,000
	2	Rip Rap Protection (1/4 ton rock)	TONS	$130	394	$51,220
	3	Fine Grading at Transition	EA	$5,000	2	$10,000
	4	Utility Relocation	1	$50,000	1	$50,000
	5	Remove and Reconstruct Car Port	1	$25,000	1	$25,000
	6	Channel Excavation	CY	$60	9185	$551,100
	7	Culvert Concrete	CY	$400	4947	$1,978,800
	8	Culvert Steel	LBS	$0.72	1,231,320	$886,550
	9	Minor Concrete (Sidewalk)	SF	$10	580	$5,800
	10	Minor Concrete (S1-6 Curb)	LF	$35	232	$8,120
	11	Minor Concrete (Median)	SF	$10	116	$1,160
	12	Asphalt Concrete (Str 6" sec 16" AB	TONS	$170	147	$24,990
	13	Asphalt Concrete (Parking Lot, 4" sec 6"AB)	TONS	$140	201	$28,140
subtotal						*$3,660,880*
TOTAL						**$3,743,280**

Row (e) Costs: Task 6E – Environmental Compliance/Mitigation/Enhancement

Budget included in this task covers completion of the Habitat Conservation Process, which provides for project mitigation as outlined in the East County Habitat Conservation Plan. In addition, the task includes implementing project mitigation measures required by regulatory agencies. Costs are estimated to be approximately $100,000 based on experience completing similar projects.

Row (f) Costs: Task 6F – Construction Administration

Construction administration budget will cover the following tasks:

- Construction Contracting: bid advertisement, contract award, etc
- Construction Inspection: construction management and project oversight
- Material Testing: Testing and approval of construction materials (i.e., concrete testing, reinforcing steel approval, compaction testing, base material approvals, etc.)
- Contract Administration: Approval of billing submittals, certified payrolls, processing of change orders and contract payments
- Project Acceptance: Prepare final report and obtain Council Approval
- Surveying: Survey site to obtain design and construction information

Construction administration costs were assumed to be approximately 5 percent of construction costs, based on experience completing similar projects. Construction administration costs are estimated to be $187,100.

Row (g) Costs: Task 6G – Other Costs

No other costs are expected for this project.

Row (h) Costs: Construction/Implementation Contingency

A twenty percent construction contingency has been added for this project, for a total of $748,700. Twenty percent was identified as a reasonable contingency based on the expected accuracy of the cost estimate and experience with similar projects.

Row (i) Costs: Grand Totals

The total estimated cost of this project is $5,994,600. The project will be funded through the following mechanisms:

- $2,994,600 in non-State funding (funding match) from Drainage Area 55 Impact Fees and Local Assessment Districts 27 and 31
- $3,000,000 in requested grant funding
- $0 in other State funding

Task 7 – Upper Sand Creek Basin

The table below presents the budget for the Upper Sand Creek Basin Project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: Upper Sand Creek Basin

	Budget Category	(a) Non-State Share* (Funding Match)	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$73,000			$73,000	100%
(b)	Land Purchase/Easement	$215,000			$215,000	100%
(c)	Planning/Design/Engineering/ Environmental Documentation	$459,000			$459,000	100%
(d)	Construction/Implementation	$8,400,000	$2,000,000		$10,400,000	81%
(e)	Environmental Compliance/ Mitigation/Enhancement	$851,000			$851,000	100%
(f)	Construction Administration	$1,020,000			$1,020,000	100%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	$21,000			$21,000	100%
(h)	Construction/Implementation Contingency	$1,040,000			$1,040,000	100%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$12,079,000**	**$2,000,000**	**$0**	**$14,079,000**	**86%**

Sources of Funding:
Drainage Area Fees

Row (a) Costs: Task 7A – Project Administration

Project administration tasks will include overall project administration and management, development of a Labor Compliance Program, and project reporting (including reporting on project monitoring and assessment). Project administration costs are estimated to be approximately $73,000, as shown in the following table.

Task #	Descr.	Labor Costs			
		Discipline	Hourly Rate	Hrs.	Total Labor
7.A.1	Project Admin.	Senior Engineer	$210 /hr	83	$17,430
		Associate Engineer	$185 /hr	300	$55,500
	TOTAL			*383*	*$72,930*

Row (b) Costs: Task 7B –Land Purchase/Easement

Land purchase costs for this project will cover costs associated with securing a new permanent easement required for utility (PG&E line) relocation. Costs include the following:

Cost associated with purchase of land: $80,000

Item	Description of Land/Parcel	# acres	$/acre	Total cost
1	APN 057-050-014	1.21	$9,700	**$11,737**
2	APN 057-050-005	6.94	$9,700	**$67,318**
	TOTAL	**8.15**		**$79,055**

Cost associated with securing easements : $42,000

- Easement costs are estimated as 50% of fee title costs. District acquired 8.81 acres at 50% x $9700/acre =$42,730 (approximate cost)

Labor costs: $93,000

Task	Discipline	Hourly Wage	Total Hours	Total Cost
1	Senior Engineer	$210 /hr	20	**$4,200**
	Associate Engineer	$185 /hr	40	**$7,400**
	Senior Real Property Agent	$170 /hr	480	**$81,600**
Subtotal			*540*	***$93,200***
Total Labor			**540**	**$93,200**

Row (c) Costs: Task 7C – Planning/Design/Environmental Documentation

Budget for this task is estimated to be $405,000, and includes completing planning and design work, and securing all necessary approvals. Task-level budgets are summarized in further detail below.

- Task 7.C.1. – Planning: $53,500

Task	Discipline	Hourly Wage	Total Hours	Total Cost
1	Senior Engineer	$210 /hr	40	**$8,400**
	Associate Engineer	$185 /hr	60	**$11,100**
	Project Engineer	$170 /hr	200	**$34,000**
subtotal			*300*	***$53,500***
Total Labor				***$53,500***

- Task 7.C.2. – Design: $305,350

Task #	Description	Labor Costs			
		Discipline	**Hourly Rate**	**Hours**	**Total Labor**
1	10% Design	Senior Engineer	$210 /hr	40	$8,400
		Associate Engineer	$185 /hr	80	$14,800
		Project Engineer	$170 /hr	120	$20,400
subtotal					*$43,600*
2	30% Design	Senior Engineer	$210 /hr	40	$8,400
		Associate Engineer	$185 /hr	130	$24,050
		Project Engineer	$170 /hr	200	$34,000
subtotal					*$66,450*
3	60% Design	Senior Engineer	$210 /hr	60	$12,600
		Associate Engineer	$185 /hr	130	$24,050
		Project Engineer	$170 /hr	200	$34,000
subtotal					*$70,650*
4	90% Design	Senior Engineer	$210 /hr	60	$12,600
		Associate Engineer	$185 /hr	100	$18,500
		Project Engineer	$170 /hr	200	$34,000
subtotal					*$65,100*
3	Final Design	Senior Engineer	$210 /hr	20	$4,200
		Associate Engineer	$185 /hr	120	$22,200
		Project Engineer	$170 /hr	195	$33,150
subtotal					*$59,550*
Total Design Costs					***$305,350***

- Task 7.C.3. – Environmental Documentation: $49,750

Task #	Description	Labor Costs			
		Discipline	Hourly Rate	Hours	Total Labor
1	CEQA	Senior Env. Specialist	$190 /hr	100	**$19,000**
		Env. Specialist	$150 /hr	205	**$30,750**
TOTAL					***$49,750***

- Task 7.C.4. – Permitting: $49,750

Task #	Description	Labor Costs			
		Discipline	Hourly Rate	Hours	Total Labor
1	Permitting	Senior Env. Specialist	$190 /hr	100	**$19,000**
		Env. Specialist	$150 /hr	206	**$30,900**
TOTAL					***$49,900***

Row (d) Costs: Task 7D – Construction/Implementation

The construction budget will cover contracting, mobilization and sitework, and construction-related costs. Estimated costs are provided in the table below. Construction contracting costs have been included in the line item budget for Construction Administration.

Task	Item	Description	Unit	Unit Cost	Quantity	Total
7.D.1 Construction Contracting	*Budget included in Construction Administration line item.*					
7.D.2. Mobilization and Site Preparation	1	Traffic Control	LS	$15,000	1	$15,000
	2	Mobilization	LS	$200,000	1	$200,000
	3	Clear and Grub	LS	$20,000	1	$20,000
	4	Excavation Safety Plan	LS	$5,000	1	$5,000
	5	Construction Area Signs	LS	$3,000	1	$3,000
	6	Storm Water Pollution Prevention Plan	LS	$30,000	1	$30,000
	7	Control of Water	LS	$20,000	1	$20,000
subtotal						*$293,000*
7.D.3. Construction	1	Erosion Control	AC	$5,324	61	$324,764
	2	Basin Excavation (Build Dam)	CY	$2	105,000	$210,000
	3	Basin Excavation (placed on adjacent properties)	CY	$2	40,000	$80,000
	4	Basin Excavation (Offsite Disposal)	CY	$10	610,000	$6,100,000
	5	Dam Embankment Overexcavation	CY	$3.50	1,100	$3,850
	6	Dam Embankment	SY	$1.16	24,380	$28,281

Task	Item	Description	Unit	Unit Cost	Quantity	Total
		Foundation Preparation				
	7	Dam Embankment	CY	$7	105,000	$735,000
	8	Channel Excavation (low flow channel)	CY	$8	6,400	$51,200
	9	Channel Fill (low flow channel)	CY	$10	6,400	$64,000
	10	Basin Inlet Structure (energy dissipater and stilling basin)	LS	$600,000	1	$600,000
	11	Basin Inlet Structure (twin 84")	LS	$75,000	1	$75,000
	12	Primary Spillway Trash Rack, Headwall and Sluice Gate	LS	$83,400	1	$83,400
	13	Primary Spillway (60" RCP-Class V, Including Concrete)	LF	$1,300	400	$520,000
	14	Primary Spillway Discharge Structure and Energy Dissipater	LS	$440	1	$440
	15	Primary Spillway RSP	TON	$130	100	$13,000
	16	County Standard CD50i outfalls/downdrains	EA	$5,000	6	$30,000
	17	Emergency Spillway Concrete	LS	$795,000	1	$795,000
	18	Perimeter Road (20' wide, 1' aggregate base)	CY	$44	5,533	$243,452
	19	Perimeter fence	LF	$20	5,800	$116,000
subtotal						*$10,073,387*
TOTAL						**$10,366,387**

Row (e) Costs: Task 7E – Environmental Compliance/Mitigation/Enhancement

This budget, estimated at $851,000, covers all environmental mitigation needed to offset potential impacts of project implementation. Additional detail follows.

- *Restoration Design Plan Cost Estimate: $54,000*

Task	Item	Description	Unit	Unit Cost	Quantity	Total
Restoration Design Plan	1	Principal Environmental Scientist	Hours	$200	56	$11,200
	2	Associate Project Biologist	Hours	$160	110	$17,600

Task	Item	Description	Unit	Unit Cost	Quantity	Total
	3	Project Biologist	Hours	$140	180	$25,200
subtotal						*$54,000*
Site Preparation	1	Fine Grading	LS	$23,000	1	$23,000
	2	Mulching	LS	$17,000	1	$17,000
subtotal						*$40,000*
Planting	1	Plant -- Plug	EA	$2	7500	$15,000
	2	Plant -- 1 gallon pot	EA	$10	500	$5,000
	3	Plant -- Boxed Tree	EA	$500	30	$15,000
subtotal						*$35,000*
Long-term Maintenance	1	Maintenance Worker II	Hour	$100	650	$65,000
	2	Associate Project Biologist	Hours	$160	40	$6,400
	3	Principal Environmental Scientist	Hours	$200	18	$3,600
subtotal						*$75,000*
HCP Fees	1	Fees	LS	$647,000	1	$647,000
subtotal						*$647,000*
TOTAL						**$851,000**

Row (f) Costs: Task 7F – Construction Administration

Construction administration will includes all construction administration activities, including advertisement for bids, bidding, contract award, insurance confirmation and tracking, submittal review and tracking, invoice review and payment, schedule maintenance, and contract closeout.

Construction administration costs were assumed to be approximately 9.8 percent of construction costs, based on experience completing similar projects. Construction administration costs are estimated to be $1,020,240.

Row (g) Costs: Task 7G – Other Costs

Other costs include fees charged by the Division of Safety of Dams for review performed in Task 7.C.2. These fees are expected to total $21,000.

Row (h) Costs: Construction/Implementation Contingency

A ten percent construction contingency has been added for this project, for a total of $1,040,000. Ten percent was identified as a reasonable contingency based on the expected accuracy of the cost estimate and experience with similar projects.

Row (i) Costs: Grand Totals

The total estimated cost of this project is $14,079,000. The project will be funded through the following mechanisms:

- $12,079,000 in non-State funding (funding match) from drainage area fees
- $2,000,000 in requested grant funding
- $0 in other State funding

Task 8 – Watershed Protection and Restoration

The table below presents the budget for the Watershed Protection and Restoration project. The following pages document the basis for this cost estimate.

Table 7 - Project Budget

Proposal Title: East Contra Costa County Proposition 84 Round 1 Implementation Grant
Project Title: Watershed Protection and Restoration

Budget Category		(a) Non-State Share* (Funding Match)[1]	(b) Requested Grant Funding	(c) Other State Funds Being Used	(d) Total	(e) % Funding Match
(a)	Direct Project Administration Costs	$10,000			$10,000	100%
(b)	Land Purchase/Easement	$825,000	$375,000		$1,200,000	69%
(c)	Planning/Design/Engineering/ Environmental Documentation	$175,000		$25,000	$200,000	88%
(d)	Construction/Implementation	$0	$250,000		$250,000	0%
(e)	Environmental Compliance/ Mitigation/Enhancement	$0	$0		$0	0%
(f)	Construction Administration	$0	$25,000		$25,000	0%
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	$40,000	$0		$40,000	100%
(h)	Construction/Implementation Contingency	$25,000	$0		$25,000	100%
(i)	**Grand Total (Sum rows (a) through (h) for each column)**	**$1,075,000**	**$650,000**	**$25,000**	**$1,750,000**	**61%**

Sources of Funding:

Federal Match - USFWS Section Grant (already awarded), East Bay Regional Park District Measure Wastewater Funds (funds are secure).
Other State Funds - anticipated Local Assistance Grant (LAG) from CA Dept of Fish and Game (not yet awarded)
NOTE 1: Match will be achieved with $650,000 of the $825,000 listed for Land Purchase / Easement. Other local funding line items shown for illustration purposes, but are not intended to be used toward grant funding match.

Row (a) Costs: Task 8A – Project Administration

The project administration budget will fund overall project administration and management, development of a Labor Compliance Program, and project reporting (including reporting on project monitoring and assessment). Project administration has been estimated as $10,000, based on experience completing similar projects.

Row (b) Costs: Task 8B –Land Purchase/Easement

Land purchase costs will be used to fund acquisition of a high priority parcel in Eastern Contra Costa County. Costs are estimated as $1,200,000, based on averages for appraisals of similar-sized parcels in the area. The following table presents the assumptions used to arrive at this estimate.

Item	Description of Land/Parcel	# acres	$/acre	Total cost
1	High Priority HCP Target in eastern IRWMP area	200	$6,000	**$1,200,000**

Row (c) Costs: Task 8C – Planning/Design/Environmental Documentation

Funding for this task, estimated at $200,000, will cover the following activities:

- 8.C.1. Planning: Completing a pre-acquisition survey and preparing an assessment of restoration opportunities
- 8.C.2. Design: Completion of conceptual, 30%, 60%, 90% and final design
- 8.C.3. Environmental Documentation: Preparation and filing of a Negative Declaration
- 8.C.4. Permitting: Securing all required local, State and Federal permits

The specific planning and design activities depend on the on-site resource inventory of the properties. After assessment biologists and planners will work within the framework of the HCP/NCCP to design enhancement activities and identify management strategies appropriate for the parcels. $200,000 is an estimate for the studies, designs and planning that will be needed.

Row (d) Costs: Task 8D – Construction/Implementation

The construction budget will cover contracting, mobilization and sitework, and construction-related costs. Estimated costs are provided in the table below. Construction contracting costs have been included in the line item budget for Construction Administration.

Task	Item	Description	Unit	Unit Cost	Quantity	Total
8.D.1. Construction Contracting	*Budget included in Construction Administration line item.*					
8.D.2. Mobilization and Site Preparation	1	Mobilize equipment	LS	$15,000	1	$5,000
	2	Survey/lineout project site	LS	$5,000	1	$5,000
	3	Install BMPs	LS	$15,000	1	$5,000
subtotal						*$15,000*

Task	Item	Description	Unit	Unit Cost	Quantity	Total
8.D.3. Construction	1	Clear and grub site	LS	$15,000	1	$5,000
	2	Earth movement	LS	$85,000	1	$85,000
	3	Materials for Berm liner, spillway mat	LS	$30,000	1	$20,000
	4	Seed / hydroseed	LS	$35,000	1	$25,000
	5	Plant material	LS	$35,000	1	$50,000
	6	Plant installation	LS	$25,000	1	$25,000
	7	6 month weeding and maintenance	LS	$25,000	1	$25,000
Subtotal						*$235,000*
TOTAL						**$250,000**

Row (e) Costs: Task 8E – Environmental Compliance/Mitigation/Enhancement

Because the project involves acquisition and restoration, no mitigation / enhancement activities will be required as part of this project.

Row (f) Costs: Task 8F – Construction Administration

Construction administration will includes all construction administration activities, including advertisement for bids, bidding, contract award, insurance confirmation and tracking, submittal review and tracking, invoice review and payment, schedule maintenance, and contract closeout.

Construction administration costs were estimated to be ten percent of construction costs, or $25,000, based on experience completing similar projects.

Row (g) Costs: Task 8G – Other Costs

Other costs for this project are estimated as $40,000 in permit fees. This estimate is based on experience completing similar projects.

Row (h) Costs: Construction/Implementation Contingency

A ten percent construction contingency has been added for this project, for a total of $25,000. Ten percent was identified as a reasonable contingency based on experience with similar projects.

Row (i) Costs: Grand Totals

The total estimated cost of this project is $1,750,000. The project will be funded through the following mechanisms:

- $1,075,000 in non-State funding from USFWS Section Grant (already awarded), East Bay Regional Park District Measure WW Funds (funds are secure). Of this, $650,000 of the land acquisition funds will be used to comprise the 50% funding match.

- $650,000 in requested grant funding
- $25,000 in other State funding from an anticipated Local Assistance Grant (LAG) from CA Dept of Fish and Game (not yet awarded)