

Attachment 4 consists of the following items:

- ✓ **Budget.** Attachment 4 provides a budget estimate for each budget category row of the proposed project.

### Introduction

This attachment presents detailed budget information and supporting documentation for the *Lower Mission Creek Flood Control and Restoration Project* Reach 1A Phase 2 and Reach 1B. Table 4-1 provides a summary table for the combined projects.

**Table 4-1: Project Budget – Summary Table**  
***Lower Mission Creek Flood Control and Restoration Project* Reach 1A Phase 2 and Reach 1B**

	(a)	(b)	(c)	(d)	(e)
<b>Budget Category</b>	<b>Grant Request</b>	<b>Non-State Share*</b>	<b>Other State Funds</b>	<b>Total</b>	<b>% Funding Match</b>
Direct Project Administration Costs	\$17,896	\$183,664	\$0	\$201,560	17%
Land Purchase/Easement	\$0	\$3,827,859	\$0	\$3,827,859	0%
Planning/Design/Engineering/Environmental Documentation	\$0	\$549,500	\$0	\$549,500	0%
Construction/Implementation	\$1,723,367	\$6,254,661	\$0	\$7,978,028	46%
Environmental Compliance/Mitigation/Enhancement	\$13,774	\$62,771	\$0	\$76,545	27%
Construction Administration	\$96,878	\$348,857	\$0	\$445,735	45%
Other Costs	\$0	\$0	\$0	\$0	0%
Construction/Implementation Contingency	\$170,975	\$626,827	\$0	\$797,802	45%
<b>Grand Total</b>	<b>\$2,022,890</b>	<b>\$11,854,139</b>	<b>\$0</b>	<b>\$13,877,029</b>	<b>83%</b>

## Reach 1A Phase 2

The Reach 1A Phase 2 project offers tremendous investment value to the State for a number of reasons including:

- 50% funding match from non-State sources, demonstrating there is a strong commitment from the SBCFCWCD and its partners to the implementation of this project.
- 84% percent of the grant funding request will be used directly for construction activities.

Table 4-2 provides a cost breakdown by Work Plan task and sub-task for Reach 1A Phase 2. The following pages provide detailed budget breakdowns for each of the budget categories. The cost breakdown for each budget is provided for each of the budget categories included in the sample budget provided in Exhibit B of the Proposition 1E IRWM Proposal Solicitation Package and are consistent with the categories included in the Work Plan (provided in Attachment 3) and Schedule (provided in Attachment 5).

**Table 4-2: Project Budget – Reach 1A Phase 2**

	(a)	(b)	(c)	(d)	(e)
Budget Category	Grant Request	Non-State Share	Other State Funds	Total	% Funding Match
Direct Project Administration Costs	\$4,796	\$72,920	\$0	\$77,716	6%
Land Purchase/Easement	\$0	\$1,089,793	\$0	\$1,089,793	0%
Planning/Design/Engineering/Environmental Documentation	\$0	\$209,500	\$0	\$209,500	0%
Construction/Implementation	\$768,366	\$2,093,808	\$0	\$2,862,174	27%
Environmental Compliance/Mitigation/Enhancement	\$13,774	\$36,771	\$0	\$50,545	27%
Construction Administration	\$47,639	\$127,181	\$0	\$174,820	27%
Other Costs	\$0	\$0	\$0	\$0	0%
Construction/Implementation Contingency	\$77,994	\$208,223	\$0	\$286,217	27%
<b>Grand Total</b>	<b>\$912,569</b>	<b>\$3,838,196</b>	<b>\$0</b>	<b>\$4,750,765</b>	<b>80%</b>

## Reach 1B

The Reach 1B project offers tremendous investment value to the State for a number of reasons including:

- 78% funding match from non-State sources, demonstrating there is a strong commitment from the SBCFCWCD and its partners to the implementation of this project.
- 90% percent of the grant funding request will be used directly for construction activities.

Table 4-3 provides a cost breakdown by Work Plan task and sub-task for each section. The following pages provide detailed budget breakdowns for each of the budget categories. The cost breakdown for each budget is provided for each of the budget categories included in the sample budget provided in Exhibit B of the Proposition 1E IRWM Proposal Solicitation Package and are consistent with the categories included in the Work Plan (provided in Attachment 3) and Schedule (provided in Attachment 5).

**Table 4-3: Project Budget – Reach 1B**

	(a)	(b)	(c)	(d)	(e)
Budget Category	Grant Request	Non-State Share*	Other State Funds	Total	% Funding Match
Direct Project Administration Costs	\$13,100	\$110,744	\$0	\$123,844	11%
Land Purchase/Easement	\$0	\$2,738,066	\$0	\$2,738,066	0%
Planning/Design/Engineering/Environmental Documentation	\$0	\$340,000	\$0	\$340,000	0%
Construction/Implementation	\$955,001	\$4,160,853	\$0	\$5,115,854	19%
Environmental Compliance/Mitigation/Enhancement	\$0	\$26,000	\$0	\$26,000	0%
Construction Administration	\$49,239	\$221,676	\$0	\$270,915	18%
Other Costs	\$0	\$0	\$0	\$0	0%
Construction/Implementation Contingency	\$92,981	\$418,604	\$0	\$511,585	18%
<b>Grand Total</b>	<b>\$1,110,321</b>	<b>\$8,015,943</b>	<b>\$0</b>	<b>\$9,126,264</b>	<b>87%</b>

## Detailed Project Budget

Table 4-4 provides a summary budget for the *Lower Mission Creek Flood Control and Restoration Project* Reach 1A Phase 2 and Reach 1B.

**Table 4-4: Cost Breakdown by Work Plan Task and Subtask**

<b>Row/ Task</b>	<b>Category</b>	<b>Reach 1A Phase 2</b>	<b>Reach 1B</b>	<b>Total</b>
Row (a)	Direct Project Administration Costs			
Task 1	<i>Project Administration</i>	\$ 52,977	\$ 90,105	\$ 143,082
Task 2	<i>Labor Compliance Program</i>	\$ 17,200	\$ 26,200	\$ 43,400
Task 3	<i>Reporting</i>	\$ 7,539	\$ 7,539	\$ 15,078
Row (b)	Land Purchase Easement	\$ 1,089,793	\$ 2,738,066	\$ 3,827,859
Row (c)	Planning/Design/Engineering/ Environmental Documentation			
Task 4	<i>Assessment and Evaluation</i>	\$ 16,000	\$ 26,000	\$ 42,000
Task 5	<i>Final Design</i>	\$ 177,500	\$ 288,000	\$ 465,500
Task 6	<i>Environmental Documentation</i>	\$ -	\$ -	\$ -
Task 7	<i>Permitting</i>	\$ 16,000	\$ 26,000	\$ 42,000
Row (d)	Construction/Implementation			
Task 8	<i>Construction Contracting</i>	\$ 16,000	\$ 26,000	\$ 42,000
Task 9	<i>Construction</i>	\$ 2,862,174	\$ 5,089,854	\$ 7,952,028
Row (e)	Environmental Compliance/Mitigation/Enhancement			
Task 10	<i>Environmental Compliance/Mitigation/Enhancement</i>	\$ 50,545	\$ 26,000	\$ 76,545
Row (f)	Construction Administration			
Task 11	<i>Construction Administration</i>	\$ 174,820	\$ 270,915	\$ 445,735
Row (g)	Other Costs	\$ -	\$ -	\$ -
Row (h)	Construction/Implementation Contingency	\$ 286,217	\$ 511,585	\$ 797,802
<b>Row (i)</b>	<b>Grand Total</b>	<b>\$4,750,765</b>	<b>\$9,126,264</b>	<b>\$ 13,877,029</b>

### Row (a) Direct Project Administration Costs

#### **Task 1 - Project Administration:**

The project administration cost estimate is taken from a Cost Engineering Report done in October 2011 for the U.S. Army Corps of Engineers and represents 2% of the construction costs.

**Task 2 – Labor Compliance Program:**

Labor Compliance Program (LCP) costs calculated based on an percent fee of the project construction costs (not including contingency costs).

**Task 3 – Reporting:**

The project manager will prepare and submit quarterly and final progress reports and invoices to DWR.

**Table 4-5: Row (a) Direct Project Administration Budget**

Discipline	Hourly Wage (\$/hr)	Reach 1A-2		Reach 1B		Grand Total
		Hours	Total	Hours	Total	
<b>Project Administration</b>						
Project Administration	\$150/hr	353	\$52,977	600	\$90,105	\$143,082
<b>Labor Compliance Program</b>						
Project Administration	\$150/hr	115	\$17,200	N/A	\$26,200	\$43,400
<b>Reporting</b>						
Project Manager	\$125.65	60	\$7,539	60	\$7,539	\$15,078
<b>Total</b>			<b>\$77,716</b>		<b>\$123,844</b>	<b>\$201,560</b>

**Row (b) Land Purchase/Easement**

All of the land purchases and easements that are required have already been negotiated or are well underway and almost complete. These costs are not part of the grant request. They are included in the funding match.

**Table 4-6: Row (b) Land Purchase Easements**

Land Purchase/Easements	Reach 1A -2	Reach 1B	Total Value (match)
Land Purchase Easement	\$1,089,793	\$2,738,066	\$3,827,859

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

**Task 4 – Assessment and Evaluation:**

Assessment and evaluation activities have already been completed.

**Task 5 – Final Design:**

Final design plans and specifications are 100% complete for Reach 1A Phase 2. Final design plans and specifications are at and 60% for Reach 1B. Final design for Phase 1B will be undertaken by the SBCFCWCD. The budget was based on the USACE Value Engineering document prepared for the project.

**Task 6 – Environmental Documentation:**

An EIR/EIS was completed from the project and all permits with the exception of the USACE 440 permit, which will be received in March 2013, have been secured. The grant request for this task is for environmental compliance and is derived from the USACE Value Engineering Study.

**Task 7 – Permitting:**

The majority of permitting has been completed for this project. However, a nominal permitting budget is being requested for permitting compliance items during construction.

**Table 4-7: Row (c) Planning/Design/Engineering/Environmental Documentation Budget**

Discipline	Hourly Wage (\$/hr)	Reach 1A-2		Reach 1B		Grand Total
		Hours	Total	Hours	Total	
<b>Assessment and Evaluation</b>						
Planning (match)	\$140/hr	114	\$16,000	186	\$26,000	\$42,000
<b>Final Design</b>						
Engineering and Technical Review (match)	\$180/hr	986	\$177,5000	1600	\$288,000	\$465,500
<b>Environmental Documentation</b>						
Environmental Documentation (complete)	Complete	--	--	--	--	--
<b>Permitting</b>						
Permits (complete) (match)	Complete	LS	\$16,000	LS	\$26,000	\$42,000
		Total	\$209,500		\$340,000	\$549,500

**Row (d) Construction**

**Task 8 – Construction Contracting:**

The construction contracting for the project will be handled by District staff. Costs to advertise and acquire the construction contractor are estimated to be \$16,000 for Reach 1A Phase 2 and \$26,000 for Reach 1B.

**Table 4-8: Row (d) Construction Contracting Costs**

Construction Contracting	Reach 1A -2	Reach 1B	Total Value
Construction Contracting	\$16,000	\$26,000	\$42,000

**Task 9 – Construction:**

Construction costs are estimated to be \$2,862,173.72 for Reach 1A Phase 2. Construction costs including mobilization and site preparation, project management and documentation, and geotechnical materials testing , as well as construction materials. As shown in Table 4-6, costs were broken down by common construction divisions. The project construction estimates were taken from USACE estimates and value engineering documents.

**Table 4-9: Row (d) Construction Costs for Reach 1A Phase 2**

Discipline	Unit Costs (\$)	Number of Units	Total (\$)
<b><i>Subtask 9.1 Mobilization and Site Preparation</i></b>			
Construction Survey	\$15,283	1	\$15,283
<b><i>Subtask 9.2 Construction</i></b>			
Mobilization	\$125,870	1	\$125,870
Site safety, noise & dust control	\$28,845	1	\$28,845
Traffic Control	\$16,390	1	\$16,390
Temporary security fencing	\$39.33	1000	\$39,330
Temporary security gate	\$2,360	2	\$4,720
Demo timber piles	\$52.45	660	\$34,617
Demo existing building	\$15.74	5328	\$83,862.72
Demo existing concrete patio	\$11.80	815	\$9,617
Remove and reinstall existing garden	\$525	2	\$1,050
Remove existing trees	\$1,050	1	\$1,050
Clear and grub	\$2,032	1	\$2,032
Cofferdam	\$300,220	1	\$300,220
Dewatering	\$726,897	1	\$726,897
Excavation, hauling and backfill	\$112,195	1	\$112,195
Concrete walls	\$960,914	1	\$960,914
42" hand railing	\$130,096	1	\$130,096
Riprap, boulder and stone	\$14,371	1	\$14,371
Stormwater Pollution Prevention Plan	\$2,000	1	\$2,000
Engineering and planning during construction, Project management	\$26,488	1	\$26,488
Construction management	\$158,929	1	\$158,929
Project photo and video documentation	\$4,196	1	\$4,196
<b><i>Subtask 9.3 Performance Testing and Demobilization</i></b>			
Geotechnical Material Testing	\$47,201	1	\$47,201
<b>Total</b>			<b>\$2,862,173.72</b>

Construction costs are estimated to be \$5,089,853.92 for Reach 1B. Construction costs including mobilization and site preparation, project management and documentation, and geotechnical materials testing, as well as construction materials. As shown in Table 4-6, costs were broken down by common construction divisions. The project construction estimates were taken from USACE estimates and DDR documents.

**Table 4-10: Row (d) Construction Costs for Reach 1B**

Discipline	Unit Costs (\$)	Number of Units	Total (\$)
<b><i>Subtask 9.2 Construction</i></b>			
Mobilization	\$71,384	1	\$71,384
Demobilization	\$34,197	1	\$34,197
Demolition	\$36,318	1	\$36,318
Remove/replace light pole	\$3,426	1	\$3,426
Clear and grub	\$14,896	1	\$14,896
Excavation	\$40.33	7457	\$300,740.81
Fill	\$32.27	62	\$2,000.74
Channel Wall	\$2,720,374	1	\$2,720,374
Fill Material - Riprap	\$76.21	818	\$62,339.78
Fill Material - Gravel	\$43.27	355	\$15,360.85
Filter Material	\$3.34	873	\$2,915.82
Construct 54" RCP	\$356.55	40	\$14,262
Dewatering	\$1,155,804	1	\$1,155,804
Landscaping	\$11,804	1	\$11,804
Boulder Cluster	\$3,580.50	2	\$7,161
Fencing	\$57.50	716	\$41,170
Fish Ledge	\$45.86	110	\$5,044.60
Reinforced gutter	\$20.17	796	\$16,055.32
Construction Survey	\$99,300	1	\$99,300
Engineering and planning during construction, Project management	\$53,000	1	\$53,000
Construction management	\$323,000	1	\$323,000
<b><i>Subtask 9.3 Performance Testing and Demobilization</i></b>			
Geotechnical Material Testing	\$99,300	1	\$99,300
<b>Total</b>			<b>\$5,089,853.92</b>

**Table 4-11: Row (d) Summary of Total Construction Costs**

Construction	Reach 1A -2	Reach 1B	Total Value
Construction	\$2,862,173.72	\$5,089,853.92	\$7,952,027.64

**Row (e) Environmental Compliance/Mitigation/Enhancement**

**Task 10- Environmental Compliance/Mitigation/Enhancement:**

Environmental compliance, mitigation and enhancement activities include biology and cultural compliance and assessment. Total costs for Reach 1A Phase 2 are \$50,545, of which \$13,744 are included as part of the grant request. Total costs for Reach 12B are \$26,000, which was derived from SBCFCWCD experience and estimates.

**Table 4-12: Row (e) Environmental Compliance Costs**

Environmental Compliance	Reach 1A -2	Reach 1B	Total Value
Environmental Compliance	\$50,545	\$26,000	\$76,545

**Row (f) Construction Administration**

**Task 11- Construction Administration:**

As described in the Work Plan (Attachment 3), a construction management (CM) consultant will be required to have staff onsite for the duration of the project. CM staff will be required to keep daily and weekly observation logs and turn them in with monthly reports on the project status and adherence to budget and schedule. The CM team will be responsible for the coordination of invoices from its sub-consultants and these will be submitted to County staff. County staff will be responsible for the review of invoices from all consultants and the compilation of invoices and reports to DWR for the project. The County will ensure the appropriate materials are invoiced for the project, the correct documentation is being prepared and the on-going requirements of the grant are being adhered to.

Total costs for Reach 1A Phase 2 are \$174,820, of which \$47,639 are included as part of the grant request. Total costs for Reach 1B are \$270,915, of which \$49,239 are included as part of the grant request.

**Table 4-13: Row (f) Construction Administration Costs**

Construction Administration	Reach 1A -2	Reach 1B	Total Value
Construction Project Management & Inspection	\$174,820	\$270,915	\$445,735

**Row (g) Other Costs**

There are no additional activities and costs.

**Row (h) Construction Contingency**

A 10% construction contingency is being allocated to the project based on a percentage of the raw (equipment and materials portion of) construction costs. The 10% contingency was selected because that is the standard rate used in all District projects.

The contingency cost covers any unforeseen circumstances out in the field that have not been encountered during the initial design and subsequent design phases. It includes all unforeseen underground utilities, concrete or other items that have to be removed or relocated in order to complete construction. Unforeseen, or changed conditions, are handled via extra work change orders which require approval by deputy public works manager. The amount of monies allocated to the construction contingency is typically 10% of all construction costs. The construction contingency allows change orders to be processed efficiently and quickly through Public Works accounting without having to approach the Board of Supervisors for additional monies.

**Row (i) Grand Total**

The grand total of rows (a) through (h) is as shown below in Table 4-8.

**Table 4-14: Row (i) Grand Total Costs**

<b>Row</b>	<b>Budget Category</b>	<b>Reach 1A-2</b>	<b>Reach B</b>	<b>Grand Total</b>
(a)	Direct Project Administration Costs	\$77,716	\$123,844	\$201,560
(b)	Land Purchase/Easement	\$1,089,793	\$2,738,066	\$3,827,859
(c)	Planning/Design/Engineering/ Environmental Documentation	\$209,500	\$340,000	\$549,500
(d)	Construction/Implementation	\$2,862,174	\$5,115,854	\$7,978,028
(e)	Environmental Compliance/ Mitigation/Enhancement	\$50,545	\$26,000	\$76,545
(f)	Construction Administration	\$174,820	\$270,915	\$445,735
(g)	Other Costs (Includes Permitting)	\$0	\$0	\$0
(h)	Construction/Implementation Contingency	\$286,217	\$511,585	\$797,802
<b>(i)</b>	<b>Grand Total</b>	<b>\$4,750,765</b>	<b>\$9,126,264</b>	<b>\$13,877,029</b>