

APPENDIX C
ATTACHMENT D

COST ENGINEERING

American River Watershed

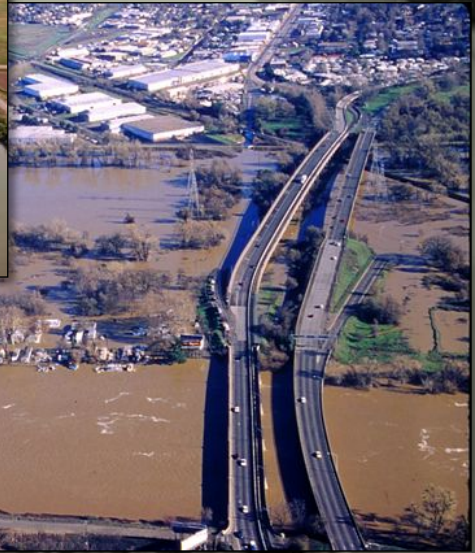
Common Features

General Reevaluation Report

Attachment D

Cost Engineering

February 2015



Sacramento
Area Flood
Control
Agency



US Army Corps
of Engineers®
Sacramento District

*Cover Photos courtesy of the Sacramento District:
Sacramento Weir during operation
Sacramento River facing south near the Pocket and Little Pocket neighborhoods
High flows on the American River at the Highway 160 overcrossing
Folsom Dam releasing high flows*

**AMERICAN RIVER, CALIFORNIA
COMMON FEATURES PROJECT
GENERAL REEVALUATION REPORT**

**Attachment D
Cost Engineering**

**U.S. Army Corps of Engineers
Sacramento District**

February 2015

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Abbreviated Risk Analysis

Project: **American River Common Features - GRR - Alt 1**

Project Development Stage: **Feasibility (Alternatives)**

Risk Category: **Moderate Risk: Typical Project or Possible Life Safety**

Total Construction Contract Cost = \$ 794,694,000

	<u>CWWBS</u>	<u>Feature of Work</u>	<u>Contract Cost</u>	<u>% Contingency</u>	<u>\$ Contingency</u>	<u>Total</u>
	01 LANDS AND DAMAGES	Real Estate	\$ 89,850,307	43.41%	\$ 39,007,943	\$ 128,858,250
1	02 RELOCATIONS	Rel - Penetr, Pos Closures, PP	\$ 37,689,392	39.46%	\$ 14,870,893	\$ 52,560,285
2	11 01 LEVEES	SWPP	\$ 32,698,642	14.59%	\$ 4,770,584	\$ 37,469,226
3	11 01 LEVEES	Earthwork (Degrade & Reused)	\$ 96,929,982	19.85%	\$ 19,237,364	\$ 116,167,346
4	11 01 LEVEES	Earthwork (Imported Borrow)	\$ 43,617,186	20.96%	\$ 9,143,859	\$ 52,761,045
5	11 01 LEVEES	Cutoff Walls	\$ 139,412,365	31.04%	\$ 43,273,487	\$ 182,685,852
6	11 01 LEVEES	Floodwalls	\$ 31,806,867	16.59%	\$ 5,277,254	\$ 37,084,121
7	11 01 LEVEES	Slope/Erosion Protection	\$ 252,737,933	17.42%	\$ 44,034,738	\$ 296,772,671
8	11 01 LEVEES	Planting	\$ 38,300,637	18.68%	\$ 7,155,218	\$ 45,455,855
9	11 01 LEVEES			0.00%	\$ -	\$ -
10	11 01 LEVEES			0.00%	\$ -	\$ -
11	11 01 LEVEES			0.00%	\$ -	\$ -
12		Remaining Construction Items	\$ 121,500,996	20.79%	\$ 25,262,601	\$ 146,763,597
13	30 PLANNING, ENGINEERING, AND DESIGN	Planning, Engineering, & Design	\$ 122,449,000	21.77%	\$ 26,660,401	\$ 149,109,401
14	31 CONSTRUCTION MANAGEMENT	Construction Management	\$ 67,819,000	21.77%	\$ 14,765,998	\$ 82,584,998

Totals								
	Real Estate	\$	89,850,307	43.41%	\$	39,007,943	\$	128,858,250
	Total Construction Estimate	\$	794,694,000	21.77%	\$	173,025,999	\$	967,719,999
	Total Planning, Engineering & Design	\$	122,449,000	21.77%	\$	26,660,401	\$	149,109,401
	Total Construction Management	\$	67,819,000	21.77%	\$	14,765,998	\$	82,584,998
	Sub-Total	\$	1,074,812,307		\$	253,460,342	\$	1,328,272,649

assumes contingency for 30 & 31 accounts same as that for construction estimate

Sunk Costs
Total Costs \$ 1,074,812,307

Abbreviated Risk Analysis

Project (less than \$40M): **American River Common Features - GRR - Alt 2**
 Project Development Stage: **Feasibility (Alternatives)**
 Risk Category: **Moderate Risk: Typical Project or Possible Life Safety**

Total Construction Contract Cost = \$ **914,119,000**

	<u>CWWBS</u>	<u>Feature of Work</u>	<u>Contract Cost</u>	<u>% Contingency</u>	<u>\$ Contingency</u>	<u>Total</u>
	01 LANDS AND DAMAGES	Real Estate	\$ 72,390,701	33.91%	\$ 24,547,424	\$ 96,938,125
1	02 RELOCATIONS	Rel - Penetr, Pos Closures, PP, Rds, RR	\$ 52,083,126	29.02%	\$ 15,116,663	\$ 67,199,789
2	11 01 LEVEES	SWPP	\$ 35,690,334	14.59%	\$ 5,207,059	\$ 40,897,393
3	11 01 LEVEES	Earthwork (Degrade & Reused)	\$ 109,182,547	19.85%	\$ 21,669,088	\$ 130,851,635
4	11 01 LEVEES	Earthwork (Imported Borrow)	\$ 76,854,734	20.96%	\$ 16,111,743	\$ 92,966,477
5	11 01 LEVEES	Cutoff Walls	\$ 140,727,551	31.04%	\$ 43,681,720	\$ 184,409,271
6	11 01 LEVEES	Floodwalls	\$ 28,868,492	12.82%	\$ 3,699,641	\$ 32,568,133
7	11 01 LEVEES	Slope/Erosion Protection	\$ 252,737,933	17.42%	\$ 44,034,738	\$ 296,772,671
8	11 01 LEVEES	Planting	\$ 38,300,637	18.68%	\$ 7,155,218	\$ 45,455,855
9	11 01 LEVEES			0.00%	\$ -	\$ -
10	11 01 LEVEES			0.00%	\$ -	\$ -
11	15 FLOODWAY CONTROL AND DIVERSION STRUCTURES	Widen Sac Bypass Structure	\$ 44,336,160	16.91%	\$ 7,495,995	\$ 51,832,155
12		Remaining Construction Items	\$ 135,337,486	20.79%	\$ 28,139,497	\$ 163,476,983
13	30 PLANNING, ENGINEERING, AND DESIGN	Planning, Engineering, & Design	\$ 141,737,000	21.04%	\$ 29,818,476	\$ 171,555,476
14	31 CONSTRUCTION MANAGEMENT	Construction Management	\$ 78,150,000	21.04%	\$ 16,441,112	\$ 94,591,112

Totals								
	Real Estate	\$	72,390,701	33.91%	\$	24,547,424	\$	96,938,125
	Total Construction Estimate	\$	914,119,000	21.04%	\$	192,311,362	\$	1,106,430,362
	Total Planning, Engineering & Design	\$	141,737,000	21.04%	\$	29,818,476	\$	171,555,476
	Total Construction Management	\$	78,150,000	21.04%	\$	16,441,112	\$	94,591,112
	Sub-Total	\$	1,206,396,701		\$	263,118,374	\$	1,469,515,075

assumes contingency for 30 & 31 accounts same as that for construction estimate

Sunk Costs
Total Costs \$ 1,206,396,701

**** TOTAL PROJECT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 PROJECT NO: P2 149827
 LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

This Estimate reflects the scope and schedule in report; Draft Feasibility Report

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)						TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
WBS NUMBER A	Civil Works Feature & Sub-Feature Description B	COST (\$K) C	CNTG (\$K) D	CNTG (%) E	TOTAL (\$K) F	ESC (%) G	COST (\$K) H	CNTG (\$K) I	TOTAL (\$K) J	Program Year (Budget EC): 2015 Effective Price Level Date: 1 OCT 14		TOTAL FIRST COST (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
										Spent Thru: 10/1/2014 (\$K)						
06	FISH & WILDLIFE FACILITIES	\$42,423	\$9,237	22%	\$51,659	0.0%	\$42,423	\$9,237	\$51,659	\$0	\$51,659					
11	LEVEES & FLOODWALLS	\$695,322	\$151,390	22%	\$846,713	0.0%	\$695,322	\$151,390	\$846,713	\$0	\$846,713					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0 -		\$0	-	\$0	\$0	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0 -		\$0	-	\$0	\$0	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$15,778	\$3,435	22%	\$19,213	0.0%	\$15,778	\$3,435	\$19,213	\$0	\$19,213					
CONSTRUCTION ESTIMATE TOTALS:		\$753,523	\$164,062		\$917,585	0.0%	\$753,523	\$164,062	\$917,585	\$0	\$917,585					
01	LANDS AND DAMAGES (FED)	\$8,598	\$452	5%	\$9,050	0.0%	\$8,598	\$452	\$9,050	\$0	\$9,050					
01	LANDS AND DAMAGES (NON-FED)	\$81,253	\$38,555	47%	\$119,808	0.0%	\$81,253	\$38,555	\$119,808	\$0	\$119,808					
02	RELOCATIONS	\$37,689	\$8,206	22%	\$45,895	0.0%	\$37,689	\$8,206	\$45,895	\$0	\$45,895					
30	RELOCATIONS - PED	\$9,422	\$2,051	22%	\$11,474	0.0%	\$9,422	\$2,051	\$11,474	\$0	\$11,474					
31	RELOCATIONS - CM	\$3,769	\$821	22%	\$4,590	0.0%	\$3,769	\$821	\$4,590	\$0	\$4,590					
18	CULTURAL RESOURCES-DATA RECOV.	\$3,482	\$758	22%	\$4,240	0.0%	\$3,482	\$758	\$4,240	\$0	\$4,240					
30	PLANNING, ENGINEERING & DESIGN	\$113,027	\$24,609	22%	\$137,636	0.0%	\$113,027	\$24,609	\$137,636	\$0	\$137,636					
31	CONSTRUCTION MANAGEMENT	\$64,050	\$13,945	22%	\$77,995	0.0%	\$64,050	\$13,945	\$77,995	\$0	\$77,995					
PROJECT COST TOTALS:		\$1,074,812	\$253,461	24%	\$1,328,273		\$1,074,812	\$253,461	\$1,328,273	\$0	\$1,328,273					

CHIEF, COST ENGINEERING, Jeremiah Frost

PROJECT MANAGER, Dan Tibbits

CHIEF, REAL ESTATE, Sharon Caine

CHIEF, ENGINEERING, Rick Poepelman

ESTIMATED TOTAL FIRST COST (in \$1000s):

\$1,328,273

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	RISK BASED				ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)									
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach A														
06	FISH & WILDLIFE FACILITIES	\$10,287	\$2,240	22%	\$12,526	0.0%	\$10,287	\$2,240	\$12,526					
11	LEVEES & FLOODWALLS	\$102,021	\$22,213	22%	\$124,234	0.0%	\$102,021	\$22,213	\$124,234					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$2,111	\$460	22%	\$2,570	0.0%	\$2,111	\$460	\$2,570					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$114,418	\$24,912	22%	\$139,330		\$114,418	\$24,912	\$139,330					
01	LANDS AND DAMAGES (FED)	\$95	\$5	5%	\$100	0.0%	\$95	\$5	\$100					
01	LANDS AND DAMAGES (NON-FED)	\$1,907	\$827	43%	\$2,734	0.0%	\$1,907	\$827	\$2,734					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$466	\$101	22%	\$567	0.0%	\$466	\$101	\$567					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$1,831	\$399	22%	\$2,230	0.0%	\$1,831	\$399	\$2,230					
1.3%	Planning & Environmental Compliance	\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
5.6%	Engineering & Design	\$6,407	\$1,395	22%	\$7,802	0.0%	\$6,407	\$1,395	\$7,802					
0.3%	Reviews, ATRs, IEPRs, VE	\$343	\$75	22%	\$418	0.0%	\$343	\$75	\$418					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$343	\$75	22%	\$418	0.0%	\$343	\$75	\$418					
1.3%	Contracting & Reprographics	\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
2.0%	Engineering During Construction	\$2,288	\$498	22%	\$2,786	0.0%	\$2,288	\$498	\$2,786					
1.3%	Planning During Construction	\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
1.3%	Project Operations	\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$6,751	\$1,470	22%	\$8,221	0.0%	\$6,751	\$1,470	\$8,221					
1.2%	Project Operation:	\$1,373	\$299	22%	\$1,672	0.0%	\$1,373	\$299	\$1,672					
1.4%	Project Management	\$1,602	\$349	22%	\$1,951	0.0%	\$1,602	\$349	\$1,951					
CONTRACT COST TOTALS:		\$143,772	\$31,699		\$175,471		\$143,772	\$31,699	\$175,471					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach B														
06	FISH & WILDLIFE FACILITIES	\$2,454	\$534	22%	\$2,988	0.0%	\$2,454	\$534	\$2,988					
11	LEVEES & FLOODWALLS	\$25,040	\$5,452	22%	\$30,492	0.0%	\$25,040	\$5,452	\$30,492					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$524	\$114	22%	\$639	0.0%	\$524	\$114	\$639					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$28,018	\$6,100	22%	\$34,119		\$28,018	\$6,100	\$34,119					
01	LANDS AND DAMAGES (FED)	\$166	\$9	5%	\$175	0.0%	\$166	\$9	\$175					
01	LANDS AND DAMAGES (NON-FED)	\$845	\$199	24%	\$1,044	0.0%	\$845	\$199	\$1,044					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$116	\$25	22%	\$141	0.0%	\$116	\$25	\$141					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$448	\$98	22%	\$546	0.0%	\$448	\$98	\$546					
1.3%	Planning & Environmental Compliance	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
5.6%	Engineering & Design	\$1,569	\$342	22%	\$1,911	0.0%	\$1,569	\$342	\$1,911					
0.3%	Reviews, ATRs, IEPRs, VE	\$84	\$18	22%	\$102	0.0%	\$84	\$18	\$102					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$84	\$18	22%	\$102	0.0%	\$84	\$18	\$102					
1.3%	Contracting & Reprographics	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
2.0%	Engineering During Construction	\$560	\$122	22%	\$682	0.0%	\$560	\$122	\$682					
1.3%	Planning During Construction	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
1.3%	Project Operations	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$1,653	\$360	22%	\$2,013	0.0%	\$1,653	\$360	\$2,013					
1.2%	Project Operation:	\$336	\$73	22%	\$409	0.0%	\$336	\$73	\$409					
1.4%	Project Management	\$392	\$85	22%	\$477	0.0%	\$392	\$85	\$477					
CONTRACT COST TOTALS:		\$35,727	\$7,767		\$43,494		\$35,727	\$7,767	\$43,494					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report: Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015						
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach C														
06	FISH & WILDLIFE FACILITIES	\$170	\$37	22%	\$207	0.0%	\$170	\$37	\$207					
11	LEVEES & FLOODWALLS	\$23,655	\$5,150	22%	\$28,805	0.0%	\$23,655	\$5,150	\$28,805					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$454	\$99	22%	\$553	0.0%	\$454	\$99	\$553					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$24,279	\$5,286	22%	\$29,566		\$24,279	\$5,286	\$29,566					
01	LANDS AND DAMAGES (FED)	\$143	\$7	5%	\$150	0.0%	\$143	\$7	\$150					
01	LANDS AND DAMAGES (NON-FED)	\$733	\$175	24%	\$908	0.0%	\$733	\$175	\$908					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$100	\$22	22%	\$122	0.0%	\$100	\$22	\$122					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$388	\$84	22%	\$472	0.0%	\$388	\$84	\$472					
1.3%	Planning & Environmental Compliance	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
5.6%	Engineering & Design	\$1,360	\$296	22%	\$1,656	0.0%	\$1,360	\$296	\$1,656					
0.3%	Reviews, ATRs, IEPRs, VE	\$73	\$16	22%	\$89	0.0%	\$73	\$16	\$89					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$73	\$16	22%	\$89	0.0%	\$73	\$16	\$89					
1.3%	Contracting & Reprographics	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
2.0%	Engineering During Construction	\$486	\$106	22%	\$592	0.0%	\$486	\$106	\$592					
1.3%	Planning During Construction	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
1.3%	Project Operations	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$1,432	\$312	22%	\$1,744	0.0%	\$1,432	\$312	\$1,744					
1.2%	Project Operation:	\$291	\$63	22%	\$354	0.0%	\$291	\$63	\$354					
1.4%	Project Management	\$340	\$74	22%	\$414	0.0%	\$340	\$74	\$414					
CONTRACT COST TOTALS:		\$30,962	\$6,733		\$37,695		\$30,962	\$6,733	\$37,695					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014				Program Year (Budget EC): 2015				FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level: 10/1/2014				Effective Price Level Date: 1 OCT 14								
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach D														
06	FISH & WILDLIFE FACILITIES	\$4,227	\$920	22%	\$5,147	0.0%	\$4,227	\$920	\$5,147					
11	LEVEES & FLOODWALLS	\$80,332	\$17,490	22%	\$97,822	0.0%	\$80,332	\$17,490	\$97,822					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,691	\$368	22%	\$2,059	0.0%	\$1,691	\$368	\$2,059					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$86,249	\$18,779	22%	\$105,028		\$86,249	\$18,779	\$105,028					
01	LANDS AND DAMAGES (FED)	\$214	\$11	5%	\$225	0.0%	\$214	\$11	\$225					
01	LANDS AND DAMAGES (NON-FED)	\$1,820	\$623	34%	\$2,443	0.0%	\$1,820	\$623	\$2,443					
02	RELOCATIONS	\$4,625	\$1,007	22%	\$5,632	0.0%	\$4,625	\$1,007	\$5,632					
30	RELOCATIONS - PED	\$1,156	\$252	22%	\$1,408	0.0%	\$1,156	\$252	\$1,408					
31	RELOCATIONS - CM	\$462	\$101	22%	\$563	0.0%	\$462	\$101	\$563					
18	CULTURAL RESOURCES - DATA RECOV.	\$373	\$81	22%	\$454	0.0%	\$373	\$81	\$454					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$1,380	\$300	22%	\$1,680	0.0%	\$1,380	\$300	\$1,680					
1.3%	Planning & Environmental Compliance	\$1,121	\$244	22%	\$1,365	0.0%	\$1,121	\$244	\$1,365					
5.6%	Engineering & Design	\$4,830	\$1,052	22%	\$5,882	0.0%	\$4,830	\$1,052	\$5,882					
0.3%	Reviews, ATRs, IEPs, VE	\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
1.3%	Contracting & Reprographics	\$1,121	\$244	22%	\$1,365	0.0%	\$1,121	\$244	\$1,365					
2.0%	Engineering During Construction	\$1,725	\$376	22%	\$2,101	0.0%	\$1,725	\$376	\$2,101					
1.3%	Planning During Construction	\$1,121	\$244	22%	\$1,365	0.0%	\$1,121	\$244	\$1,365					
1.3%	Project Operations	\$1,121	\$244	22%	\$1,365	0.0%	\$1,121	\$244	\$1,365					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$5,089	\$1,108	22%	\$6,197	0.0%	\$5,089	\$1,108	\$6,197					
1.2%	Project Operation:	\$1,035	\$225	22%	\$1,260	0.0%	\$1,035	\$225	\$1,260					
1.4%	Project Management	\$1,207	\$263	22%	\$1,470	0.0%	\$1,207	\$263	\$1,470					
CONTRACT COST TOTALS:		\$115,167	\$25,266		\$140,434		\$115,167	\$25,266	\$140,434					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015		FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach E														
06	FISH & WILDLIFE FACILITIES	\$2,895	\$630	22%	\$3,526	0.0%	\$2,895	\$630	\$3,526					
11	LEVEES & FLOODWALLS	\$67,662	\$14,732	22%	\$82,394	0.0%	\$67,662	\$14,732	\$82,394					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,421	\$309	22%	\$1,730	0.0%	\$1,421	\$309	\$1,730					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$71,978	\$15,672	22%	\$87,650		\$71,978	\$15,672	\$87,650					
01	LANDS AND DAMAGES (FED)	\$1,401	\$74	5%	\$1,475	0.0%	\$1,401	\$74	\$1,475					
01	LANDS AND DAMAGES (NON-FED)	\$5,137	\$678	13%	\$5,816	0.0%	\$5,137	\$678	\$5,816					
02	RELOCATIONS	\$774	\$169	22%	\$942	0.0%	\$774	\$169	\$942					
30	RELOCATIONS - PED	\$193	\$42	22%	\$236	0.0%	\$193	\$42	\$236					
31	RELOCATIONS - CM	\$77	\$17	22%	\$94	0.0%	\$77	\$17	\$94					
18	CULTURAL RESOURCES - DATA RECOV.	\$314	\$68	22%	\$382	0.0%	\$314	\$68	\$382					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$1,152	\$251	22%	\$1,403	0.0%	\$1,152	\$251	\$1,403					
1.3%	Planning & Environmental Compliance	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
5.6%	Engineering & Design	\$4,031	\$878	22%	\$4,909	0.0%	\$4,031	\$878	\$4,909					
0.3%	Reviews, ATRs, IEPs, VE	\$216	\$47	22%	\$263	0.0%	\$216	\$47	\$263					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$216	\$47	22%	\$263	0.0%	\$216	\$47	\$263					
1.3%	Contracting & Reprographics	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
2.0%	Engineering During Construction	\$1,440	\$314	22%	\$1,754	0.0%	\$1,440	\$314	\$1,754					
1.3%	Planning During Construction	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
1.3%	Project Operations	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$4,247	\$925	22%	\$5,172	0.0%	\$4,247	\$925	\$5,172					
1.2%	Project Operation:	\$864	\$188	22%	\$1,052	0.0%	\$864	\$188	\$1,052					
1.4%	Project Management	\$1,008	\$219	22%	\$1,227	0.0%	\$1,008	\$219	\$1,227					
CONTRACT COST TOTALS:		\$96,793	\$20,403		\$117,196		\$96,793	\$20,403	\$117,196					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report: Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 PREPARED: 12/19/2014
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)					
WBS NUMBER	Civil Works Feature & Sub-Feature Description	Estimate Prepared:		10/1/2014	Program Year (Budget EC):		2015	FULLY FUNDED PROJECT ESTIMATE			Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
		Effective Price Level:	10/1/2014	Effective Price Level Date:	1 OCT 14	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)						
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O	
ARS - Reach F															
06	FISH & WILDLIFE FACILITIES	\$11,167	\$2,431	22%	\$13,599	0.0%	\$11,167	\$2,431	\$13,599						
11	LEVEES & FLOODWALLS	\$180,793	\$39,364	22%	\$220,157	0.0%	\$180,793	\$39,364	\$220,157						
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0						
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0						
18	CULTURAL RESOURCE PRESERVATION	\$4,247	\$925	22%	\$5,171	0.0%	\$4,247	\$925	\$5,171						
							\$0								
	CONSTRUCTION ESTIMATE TOTALS:	\$196,207	\$42,720	22%	\$238,927		\$196,207	\$42,720	\$238,927						
01	LANDS AND DAMAGES (FED)	\$3,016	\$159	5%	\$3,175	0.0%	\$3,016	\$159	\$3,175						
01	LANDS AND DAMAGES (NON-FED)	\$37,420	\$21,023	56%	\$58,443	0.0%	\$37,420	\$21,023	\$58,443						
02	RELOCATIONS	\$4,155	\$905	22%	\$5,060	0.0%	\$4,155	\$905	\$5,060						
30	RELOCATIONS - PED	\$1,039	\$226	22%	\$1,265	0.0%	\$1,039	\$226	\$1,265						
31	RELOCATIONS - CM	\$416	\$90	22%	\$506	0.0%	\$416	\$90	\$506						
18	CULTURAL RESOURCES - DATA RECOV.	\$937	\$204	22%	\$1,141	0.0%	\$937	\$204	\$1,141						
30	PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$3,139	\$683	22%	\$3,822	0.0%	\$3,139	\$683	\$3,822						
1.3%	Planning & Environmental Compliance	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106						
5.6%	Engineering & Design	\$10,988	\$2,392	22%	\$13,380	0.0%	\$10,988	\$2,392	\$13,380						
0.3%	Reviews, ATRs, IEPs, VE	\$589	\$128	22%	\$717	0.0%	\$589	\$128	\$717						
0.3%	Life Cycle Updates (cost, schedule, risks)	\$589	\$128	22%	\$717	0.0%	\$589	\$128	\$717						
1.3%	Contracting & Reprographics	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106						
2.0%	Engineering During Construction	\$3,924	\$854	22%	\$4,778	0.0%	\$3,924	\$854	\$4,778						
1.3%	Planning During Construction	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106						
1.3%	Project Operations	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106						
31	CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$11,576	\$2,520	22%	\$14,096	0.0%	\$11,576	\$2,520	\$14,096						
1.2%	Project Operation:	\$2,354	\$513	22%	\$2,867	0.0%	\$2,354	\$513	\$2,867						
1.4%	Project Management	\$2,747	\$598	22%	\$3,345	0.0%	\$2,747	\$598	\$3,345						
	CONTRACT COST TOTALS:	\$289,300	\$75,366		\$364,667		\$289,300	\$75,366	\$364,667						

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	Estimate Prepared: Effective Price Level:		10/1/2014 10/1/2014	Program Year (Budget EC): Effective Price Level Date:				2015 1 OCT 14	FULLY FUNDED PROJECT ESTIMATE				
		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach G														
06	FISH & WILDLIFE FACILITIES	\$5,429	\$1,182	22%	\$6,610	0.0%	\$5,429	\$1,182	\$6,610					
11	LEVEES & FLOODWALLS	\$61,177	\$13,320	22%	\$74,497	0.0%	\$61,177	\$13,320	\$74,497					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,482	\$323	22%	\$1,805	0.0%	\$1,482	\$323	\$1,805					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$68,088	\$14,825	22%	\$82,912		\$68,088	\$14,825	\$82,912					
01	LANDS AND DAMAGES (FED)	\$570	\$30	5%	\$600	0.0%	\$570	\$30	\$600					
01	LANDS AND DAMAGES (NON-FED)	\$4,766	\$1,466	31%	\$6,232	0.0%	\$4,766	\$1,466	\$6,232					
02	RELOCATIONS	\$8,303	\$1,808	22%	\$10,111	0.0%	\$8,303	\$1,808	\$10,111					
30	RELOCATIONS - PED	\$2,076	\$452	22%	\$2,528	0.0%	\$2,076	\$452	\$2,528					
31	RELOCATIONS - CM	\$830	\$181	22%	\$1,011	0.0%	\$830	\$181	\$1,011					
18	CULTURAL RESOURCES - DATA RECOV.	\$327	\$71	22%	\$398	0.0%	\$327	\$71	\$398					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$1,089	\$237	22%	\$1,326	0.0%	\$1,089	\$237	\$1,326					
1.3%	Planning & Environmental Compliance	\$885	\$193	22%	\$1,078	0.0%	\$885	\$193	\$1,078					
5.6%	Engineering & Design	\$3,813	\$830	22%	\$4,643	0.0%	\$3,813	\$830	\$4,643					
0.3%	Reviews, ATRs, IEPRs, VE	\$204	\$44	22%	\$248	0.0%	\$204	\$44	\$248					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$204	\$44	22%	\$248	0.0%	\$204	\$44	\$248					
1.3%	Contracting & Reprographics	\$885	\$193	22%	\$1,078	0.0%	\$885	\$193	\$1,078					
2.0%	Engineering During Construction	\$1,362	\$297	22%	\$1,659	0.0%	\$1,362	\$297	\$1,659					
1.3%	Planning During Construction	\$885	\$193	22%	\$1,078	0.0%	\$885	\$193	\$1,078					
1.3%	Project Operations	\$885	\$193	22%	\$1,078	0.0%	\$885	\$193	\$1,078					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$4,017	\$875	22%	\$4,892	0.0%	\$4,017	\$875	\$4,892					
1.2%	Project Operation:	\$817	\$178	22%	\$995	0.0%	\$817	\$178	\$995					
1.4%	Project Management	\$953	\$207	22%	\$1,160	0.0%	\$953	\$207	\$1,160					
CONTRACT COST TOTALS:		\$100,959	\$22,316		\$123,275		\$100,959	\$22,316	\$123,275					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report: Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 PREPARED: 12/19/2014
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015		FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach A														
06	FISH & WILDLIFE FACILITIES	\$5,060	\$1,102	22%	\$ 6,161	0.0%	\$5,060	\$1,102	\$6,161					
11	LEVEES & FLOODWALLS	\$74,180	\$16,151	22%	\$ 90,331	0.0%	\$74,180	\$16,151	\$90,331					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$ -	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$ -	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,493	\$325	22%	\$ 1,818	0.0%	\$1,493	\$325	\$1,818					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$80,732	\$17,578	22%	\$98,309		\$80,732	\$17,578	\$98,309					
01	LANDS AND DAMAGES (FED)	\$190	\$10	5%	\$ 200	0.0%	\$190	\$10	\$200					
01	LANDS AND DAMAGES (NON-FED)	\$1,456	\$508	35%	\$ 1,964	0.0%	\$1,456	\$508	\$1,964					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$329	\$72	22%	\$401	0.0%	\$329	\$72	\$401					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$1,292	\$281	22%	1,573	0.0%	\$1,292	\$281	\$1,573					
1.3%	Planning & Environmental Compliance	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
5.6%	Engineering & Design	\$4,521	\$984	22%	5,505	0.0%	\$4,521	\$984	\$5,505					
0.3%	Reviews, ATRs, IEPRs, VE	\$242	\$53	22%	295	0.0%	\$242	\$53	\$295					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$242	\$53	22%	\$295	0.0%	\$242	\$53	\$295					
1.3%	Contracting & Reprographics	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
2.0%	Engineering During Construction	\$1,615	\$352	22%	1,967	0.0%	\$1,615	\$352	\$1,967					
1.3%	Planning During Construction	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
1.3%	Project Operations	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$4,763	\$1,037	22%	5,800	0.0%	\$4,763	\$1,037	\$5,800					
1.2%	Project Operation:	\$969	\$211	22%	1,180	0.0%	\$969	\$211	\$1,180					
1.4%	Project Management	\$1,130	\$246	22%	1,376	0.0%	\$1,130	\$246	\$1,376					
CONTRACT COST TOTALS:		\$101,682	\$22,298		123,980		\$101,682	\$22,298	\$123,980					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 PREPARED: 12/19/2014
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: Effective Price Level:		10/1/2014 10/1/2014	Program Year (Budget EC): Effective Price Level Date:				2015 1 OCT 14	FULLY FUNDED PROJECT ESTIMATE				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach B														
06	FISH & WILDLIFE FACILITIES	\$443	\$97	22%	\$540	0.0%	\$443	\$97	\$540					
11	LEVEES & FLOODWALLS	\$4,097	\$892	22%	\$4,989	0.0%	\$4,097	\$892	\$4,989					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$88	\$19	22%	\$107	0.0%	\$88	\$19	\$107					
							\$0		\$0					
CONSTRUCTION ESTIMATE TOTALS:		\$4,628	\$1,008	22%	\$5,635		\$4,628	\$1,008	\$5,635					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$187	\$39	21%	\$226	0.0%	\$187	\$39	\$226					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$19	\$4	22%	\$24	0.0%	\$19	\$4	\$24					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$74	\$16	22%	\$90	0.0%	\$74	\$16	\$90					
1.3%	Planning & Environmental Compliance	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
5.6%	Engineering & Design	\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
0.3%	Reviews, ATRs, IEPs, VE	\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
1.3%	Contracting & Reprographics	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
2.0%	Engineering During Construction	\$93	\$20	22%	\$113	0.0%	\$93	\$20	\$113					
1.3%	Planning During Construction	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
1.3%	Project Operations	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$273	\$59	22%	\$332	0.0%	\$273	\$59	\$332					
1.2%	Project Operation:	\$56	\$12	22%	\$68	0.0%	\$56	\$12	\$68					
1.4%	Project Management	\$65	\$14	22%	\$79	0.0%	\$65	\$14	\$79					
CONTRACT COST TOTALS:		\$5,970	\$1,290		\$7,260		\$5,970	\$1,290	\$7,260					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 PREPARED: 12/19/2014
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)					
WBS NUMBER	Civil Works Feature & Sub-Feature Description	Estimate Prepared:		10/1/2014	Program Year (Budget EC):		2015	FULLY FUNDED PROJECT ESTIMATE			Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
		Effective Price Level:	10/1/2014	Effective Price Level Date:	1 OCT 14	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)						
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O	
ARN - Reach C															
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42						
11	LEVEES & FLOODWALLS	\$7,285	\$1,586	22%	\$8,871	0.0%	\$7,285	\$1,586	\$8,871						
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0						
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0						
18	CULTURAL RESOURCE PRESERVATION	\$156	\$34	22%	\$190	0.0%	\$156	\$34	\$190						
							\$0								
	CONSTRUCTION ESTIMATE TOTALS:	\$7,476	\$1,628	22%	\$9,103		\$7,476	\$1,628	\$9,103						
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50						
01	LANDS AND DAMAGES (NON-FED)	\$341	\$115	34%	\$456	0.0%	\$341	\$115	\$456						
02	RELOCATIONS	\$725	\$158	22%	\$882	0.0%	\$725	\$158	\$882						
30	RELOCATIONS - PED	\$181	\$39	22%	\$221	0.0%	\$181	\$39	\$221						
31	RELOCATIONS - CM	\$72	\$16	22%	\$88	0.0%	\$72	\$16	\$88						
18	CULTURAL RESOURCES - DATA RECOV.	\$34	\$7	22%	\$42	0.0%	\$34	\$7	\$42						
30	PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$120	\$26	22%	\$146	0.0%	\$120	\$26	\$146						
1.3%	Planning & Environmental Compliance	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118						
5.6%	Engineering & Design	\$419	\$91	22%	\$510	0.0%	\$419	\$91	\$510						
0.3%	Reviews, ATRs, IEPs, VE	\$22	\$5	22%	\$27	0.0%	\$22	\$5	\$27						
0.3%	Life Cycle Updates (cost, schedule, risks)	\$22	\$5	22%	\$27	0.0%	\$22	\$5	\$27						
1.3%	Contracting & Reprographics	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118						
2.0%	Engineering During Construction	\$150	\$33	22%	\$183	0.0%	\$150	\$33	\$183						
1.3%	Planning During Construction	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118						
1.3%	Project Operations	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118						
31	CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$441	\$96	22%	\$537	0.0%	\$441	\$96	\$537						
1.2%	Project Operation:	\$90	\$20	22%	\$110	0.0%	\$90	\$20	\$110						
1.4%	Project Management	\$105	\$23	22%	\$128	0.0%	\$105	\$23	\$128						
	CONTRACT COST TOTALS:	\$10,633	\$2,349		\$12,982		\$10,633	\$2,349	\$12,982						

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach E														
06	FISH & WILDLIFE FACILITIES	\$119	\$26	22%	\$145	0.0%	\$119	\$26	\$145					
11	LEVEES & FLOODWALLS	\$18,497	\$4,027	22%	\$22,524	0.0%	\$18,497	\$4,027	\$22,524					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$540	\$118	22%	\$658	0.0%	\$540	\$118	\$658					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$19,157	\$4,171	22%	\$23,328		\$19,157	\$4,171	\$23,328					
01	LANDS AND DAMAGES (FED)	\$974	\$51	5%	\$1,025	0.0%	\$974	\$51	\$1,025					
01	LANDS AND DAMAGES (NON-FED)	\$3,351	\$543	16%	\$3,894	0.0%	\$3,351	\$543	\$3,894					
02	RELOCATIONS	\$6,453	\$1,405	22%	\$7,857	0.0%	\$6,453	\$1,405	\$7,857					
30	RELOCATIONS - PED	\$1,613	\$351	22%	\$1,964	0.0%	\$1,613	\$351	\$1,964					
31	RELOCATIONS - CM	\$645	\$140	22%	\$786	0.0%	\$645	\$140	\$786					
18	CULTURAL RESOURCES - DATA RECOV.	\$119	\$26	22%	\$145	0.0%	\$119	\$26	\$145					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$307	\$67	22%	\$374	0.0%	\$307	\$67	\$374					
1.3%	Planning & Environmental Compliance	\$249	\$54	22%	\$303	0.0%	\$249	\$54	\$303					
5.6%	Engineering & Design	\$1,073	\$234	22%	\$1,307	0.0%	\$1,073	\$234	\$1,307					
0.3%	Reviews, ATRs, IEPRs, VE	\$57	\$12	22%	\$69	0.0%	\$57	\$12	\$69					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$57	\$12	22%	\$69	0.0%	\$57	\$12	\$69					
1.3%	Contracting & Reprographics	\$249	\$54	22%	\$303	0.0%	\$249	\$54	\$303					
2.0%	Engineering During Construction	\$383	\$83	22%	\$466	0.0%	\$383	\$83	\$466					
1.3%	Planning During Construction	\$249	\$54	22%	\$303	0.0%	\$249	\$54	\$303					
1.3%	Project Operations	\$249	\$54	22%	\$303	0.0%	\$249	\$54	\$303					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$1,130	\$246	22%	\$1,376	0.0%	\$1,130	\$246	\$1,376					
1.2%	Project Operation:	\$230	\$50	22%	\$280	0.0%	\$230	\$50	\$280					
1.4%	Project Management	\$268	\$58	22%	\$326	0.0%	\$268	\$58	\$326					
CONTRACT COST TOTALS:		\$36,813	\$7,668		\$44,480		\$36,813	\$7,668	\$44,480					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report: Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015						
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach F														
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$20,946	\$4,561	22%	\$25,507	0.0%	\$20,946	\$4,561	\$25,507					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$505	\$110	22%	\$615	0.0%	\$505	\$110	\$615					
			\$0				\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$21,486	\$4,678	22%	\$26,164		\$21,486	\$4,678	\$26,164					
01	LANDS AND DAMAGES (FED)	\$71	\$4	5%	\$75	0.0%	\$71	\$4	\$75					
01	LANDS AND DAMAGES (NON-FED)	\$385	\$150	39%	\$535	0.0%	\$385	\$150	\$535					
02	RELOCATIONS	\$5,419	\$1,180	22%	\$6,598	0.0%	\$5,419	\$1,180	\$6,598					
30	RELOCATIONS - PED	\$1,355	\$295	22%	\$1,650	0.0%	\$1,355	\$295	\$1,650					
31	RELOCATIONS - CM	\$542	\$118	22%	\$660	0.0%	\$542	\$118	\$660					
18	CULTURAL RESOURCES - DATA RECOV.	\$111	\$24	22%	\$136	0.0%	\$111	\$24	\$136					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$344	\$75	22%	\$419	0.0%	\$344	\$75	\$419					
1.3%	Planning & Environmental Compliance	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
5.6%	Engineering & Design	\$1,203	\$262	22%	\$1,465	0.0%	\$1,203	\$262	\$1,465					
0.3%	Reviews, ATRs, IEPRs, VE	\$64	\$14	22%	\$78	0.0%	\$64	\$14	\$78					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$64	\$14	22%	\$78	0.0%	\$64	\$14	\$78					
1.3%	Contracting & Reprographics	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
2.0%	Engineering During Construction	\$430	\$94	22%	\$524	0.0%	\$430	\$94	\$524					
1.3%	Planning During Construction	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
1.3%	Project Operations	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$1,268	\$276	22%	\$1,544	0.0%	\$1,268	\$276	\$1,544					
1.2%	Project Operation:	\$258	\$56	22%	\$314	0.0%	\$258	\$56	\$314					
1.4%	Project Management	\$301	\$66	22%	\$367	0.0%	\$301	\$66	\$367					
CONTRACT COST TOTALS:		\$34,417	\$7,548		\$41,965		\$34,417	\$7,548	\$41,965					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report: Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014				Program Year (Budget EC): 2015				FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level: 10/1/2014				Effective Price Level Date: 1 OCT 14								
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach G														
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$7,394	\$1,610	22%	\$9,003	0.0%	\$7,394	\$1,610	\$9,003					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$218	\$47	22%	\$265	0.0%	\$218	\$47	\$265					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$7,646	\$1,665	22%	\$9,310		\$7,646	\$1,665	\$9,310					
01	LANDS AND DAMAGES (FED)	\$285	\$15	5%	\$300	0.0%	\$285	\$15	\$300					
01	LANDS AND DAMAGES (NON-FED)	\$840	\$89	11%	\$929	0.0%	\$840	\$89	\$929					
02	RELOCATIONS	\$3,116	\$678	22%	\$3,795	0.0%	\$3,116	\$678	\$3,795					
30	RELOCATIONS - PED	\$779	\$170	22%	\$949	0.0%	\$779	\$170	\$949					
31	RELOCATIONS - CM	\$312	\$68	22%	\$379	0.0%	\$312	\$68	\$379					
18	CULTURAL RESOURCES - DATA RECOV.	\$48	\$10	22%	\$58	0.0%	\$48	\$10	\$58					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$122	\$27	22%	\$149	0.0%	\$122	\$27	\$149					
1.3%	Planning & Environmental Compliance	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
5.6%	Engineering & Design	\$428	\$93	22%	\$521	0.0%	\$428	\$93	\$521					
0.3%	Reviews, ATRs, IEPRs, VE	\$23	\$5	22%	\$28	0.0%	\$23	\$5	\$28					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$23	\$5	22%	\$28	0.0%	\$23	\$5	\$28					
1.3%	Contracting & Reprographics	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
2.0%	Engineering During Construction	\$153	\$33	22%	\$186	0.0%	\$153	\$33	\$186					
1.3%	Planning During Construction	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
1.3%	Project Operations	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$451	\$98	22%	\$549	0.0%	\$451	\$98	\$549					
1.2%	Project Operation:	\$92	\$20	22%	\$112	0.0%	\$92	\$20	\$112					
1.4%	Project Management	\$107	\$23	22%	\$130	0.0%	\$107	\$23	\$130					
CONTRACT COST TOTALS:		\$14,821	\$3,086		\$17,907		\$14,821	\$3,086	\$17,907					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt1
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: Effective Price Level:		10/1/2014 10/1/2014	Program Year (Budget EC): Effective Price Level Date:				2015 1 OCT 14	FULLY FUNDED PROJECT ESTIMATE				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach H														
06	FISH & WILDLIFE FACILITIES	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
11	LEVEES & FLOODWALLS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
18	CULTURAL RESOURCE PRESERVATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$0	\$0	0%	\$0		\$0	\$0	\$0			\$0	\$0	\$0
01	LANDS AND DAMAGES (FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
01	LANDS AND DAMAGES (NON-FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
18	CULTURAL RESOURCES - DATA RECOV.	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Planning & Environmental Compliance	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
5.6%	Engineering & Design	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
0.3%	Reviews, ATRs, IEPRs, VE	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
0.3%	Life Cycle Updates (cost, schedule, risks)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Contracting & Reprographics	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
2.0%	Engineering During Construction	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Planning During Construction	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Project Operations	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.2%	Project Operation:	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.4%	Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
CONTRACT COST TOTALS:		\$0	\$0		\$0		\$0	\$0	\$0			\$0	\$0	\$0

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

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 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report: Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015		FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach I														
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$4,198	\$914	22%	\$5,112	0.0%	\$4,198	\$914	\$5,112					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$386	\$84	22%	\$470	0.0%	\$386	\$84	\$470					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$4,618	\$1,005	22%	\$5,623		\$4,618	\$1,005	\$5,623					
01	LANDS AND DAMAGES (FED)	\$713	\$38	5%	\$750	0.0%	\$713	\$38	\$750					
01	LANDS AND DAMAGES (NON-FED)	\$19,780	\$11,750	59%	\$31,530	0.0%	\$19,780	\$11,750	\$31,530					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$85	\$19	22%	\$104	0.0%	\$85	\$19	\$104					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$74	\$16	22%	\$90	0.0%	\$74	\$16	\$90					
1.3%	Planning & Environmental Compliance	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
5.6%	Engineering & Design	\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
0.3%	Reviews, ATRs, IEPs, VE	\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
1.3%	Contracting & Reprographics	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
2.0%	Engineering During Construction	\$92	\$20	22%	\$112	0.0%	\$92	\$20	\$112					
1.3%	Planning During Construction	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
1.3%	Project Operations	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$272	\$59	22%	\$331	0.0%	\$272	\$59	\$331					
1.2%	Project Operation:	\$55	\$12	22%	\$67	0.0%	\$55	\$12	\$67					
1.4%	Project Management	\$65	\$14	22%	\$79	0.0%	\$65	\$14	\$79					
CONTRACT COST TOTALS:		\$26,280	\$13,048		\$39,328		\$26,280	\$13,048	\$39,328					

**** TOTAL PROJECT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
PROJECT NO: P2 149827
LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District
PREPARED: 12/19/2014
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

This Estimate reflects the scope and schedule in report; Draft Feasibility Report

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)					TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)					
WBS NUMBER A	Civil Works Feature & Sub-Feature Description B	COST (\$K) C	CNTG (\$K) D	CNTG (%) E	TOTAL (\$K) F	ESC (%) G	COST (\$K) H	CNTG (\$K) I	TOTAL (\$K) J	Program Year (Budget EC): 2015 Effective Price Level Date: 1 OCT 14		TOTAL FIRST COST (\$K)	ESC (%)	COST (\$K) M	CNTG (\$K) N	FULL (\$K) O
										Spent Thru: 10/1/2014 (\$K)						
06	FISH & WILDLIFE FACILITIES	\$45,830	\$9,642	21%	\$55,472	0.0%	\$45,830	\$9,642	\$55,472	\$0		\$55,472				
11	LEVEES & FLOODWALLS	\$750,253	\$157,837	21%	\$908,090	0.0%	\$750,253	\$157,837	\$908,090	\$0		\$908,090				
15	FLOODWAY CONTROL & DIVERSION STRU	\$44,336	\$9,327	21%	\$53,664	0.0%	\$44,336	\$9,327	\$53,664	\$0		\$53,664				
16	BANK STABILIZATION	\$0	\$0		\$0		\$0	\$0	\$0	\$0		\$0				
18	CULTURAL RESOURCE PRESERVATION	\$17,709	\$3,726	21%	\$21,435	0.0%	\$17,709	\$3,726	\$21,435	\$0		\$21,435				
CONSTRUCTION ESTIMATE TOTALS:		\$858,128	\$180,532		\$1,038,660	0.0%	\$858,128	\$180,532	\$1,038,660	\$0		\$1,038,660				
01	LANDS AND DAMAGES (FED)	\$8,764	\$461	5%	\$9,225	0.0%	\$8,764	\$461	\$9,225	\$0		\$9,225				
01	LANDS AND DAMAGES (NON-FED)	\$63,627	\$24,086	38%	\$87,713	0.0%	\$63,627	\$24,086	\$87,713	\$0		\$87,713				
02	RELOCATIONS	\$52,083	\$10,957	21%	\$63,040	0.0%	\$52,083	\$10,957	\$63,040	\$0		\$63,040				
30	RELOCATIONS - PED	\$13,021	\$2,739	21%	\$15,760	0.0%	\$13,021	\$2,739	\$15,760	\$0		\$15,760				
31	RELOCATIONS - CM	\$5,208	\$1,096	21%	\$6,304	0.0%	\$5,208	\$1,096	\$6,304	\$0		\$6,304				
18	CULTURAL RESOURCES-DATA RECOV.	\$3,908	\$822	21%	\$4,730	0.0%	\$3,908	\$822	\$4,730	\$0		\$4,730				
30	PLANNING, ENGINEERING & DESIGN	\$128,716	\$27,079	21%	\$155,795	0.0%	\$128,716	\$27,079	\$155,795	\$0		\$155,795				
31	CONSTRUCTION MANAGEMENT	\$72,942	\$15,345	21%	\$88,287	0.0%	\$72,942	\$15,345	\$88,287	\$0		\$88,287				
PROJECT COST TOTALS:		\$1,206,397	\$263,119	22%	\$1,469,516		\$1,206,397	\$263,119	\$1,469,516	\$0		\$1,469,516				

CHIEF, COST ENGINEERING, Jeremiah Frost

PROJECT MANAGER, Dan Tibbits

CHIEF, REAL ESTATE, Sharon Caine

CHIEF, ENGINEERING, Rick Poepelman

ESTIMATED TOTAL FIRST COST (in \$1000s):

\$1,469,516

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost
PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	RISK BASED			TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
		COST (\$K)	CNTG (\$K)	CNTG (%)										
A	B	C	D	E	F	G	H	I	J					
ARS - Reach A														
06	FISH & WILDLIFE FACILITIES	\$10,287	\$2,164	21%	\$12,451	0.0%	\$10,287	\$2,164	\$12,451					
11	LEVEES & FLOODWALLS	\$102,021	\$21,463	21%	\$123,484	0.0%	\$102,021	\$21,463	\$123,484					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$2,111	\$444	21%	\$2,555	0.0%	\$2,111	\$444	\$2,555					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$114,418	\$24,071	21%	\$138,489		\$114,418	\$24,071	\$138,489					
01	LANDS AND DAMAGES (FED)	\$95	\$5	5%	\$100	0.0%	\$95	\$5	\$100					
01	LANDS AND DAMAGES (NON-FED)	\$1,907	\$827	43%	\$2,734	0.0%	\$1,907	\$827	\$2,734					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$466	\$98	21%	\$564	0.0%	\$466	\$98	\$564					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$1,831	\$385	21%	\$2,216	0.0%	\$1,831	\$385	\$2,216					
1.3%	Planning & Environmental Compliance	\$1,487	\$313	21%	\$1,800	0.0%	\$1,487	\$313	\$1,800					
5.6%	Engineering & Design	\$6,407	\$1,348	21%	\$7,755	0.0%	\$6,407	\$1,348	\$7,755					
0.3%	Reviews, ATRs, IEPRs, VE	\$343	\$72	21%	\$415	0.0%	\$343	\$72	\$415					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$343	\$72	21%	\$415	0.0%	\$343	\$72	\$415					
1.3%	Contracting & Reprographics	\$1,487	\$313	21%	\$1,800	0.0%	\$1,487	\$313	\$1,800					
2.0%	Engineering During Construction	\$2,288	\$481	21%	\$2,769	0.0%	\$2,288	\$481	\$2,769					
1.3%	Planning During Construction	\$1,487	\$313	21%	\$1,800	0.0%	\$1,487	\$313	\$1,800					
1.3%	Project Operations	\$1,487	\$313	21%	\$1,800	0.0%	\$1,487	\$313	\$1,800					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$6,751	\$1,420	21%	\$8,171	0.0%	\$6,751	\$1,420	\$8,171					
1.2%	Project Operation:	\$1,373	\$289	21%	\$1,662	0.0%	\$1,373	\$289	\$1,662					
1.4%	Project Management	\$1,602	\$337	21%	\$1,939	0.0%	\$1,602	\$337	\$1,939					
CONTRACT COST TOTALS:		\$143,772	\$30,657		\$174,429		\$143,772	\$30,657	\$174,429					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost
PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015						
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach B														
06	FISH & WILDLIFE FACILITIES	\$2,454	\$516	21%	\$2,970	0.0%	\$2,454	\$516	\$2,970					
11	LEVEES & FLOODWALLS	\$25,040	\$5,268	21%	\$30,308	0.0%	\$25,040	\$5,268	\$30,308					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$524	\$110	21%	\$635	0.0%	\$524	\$110	\$635					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$28,018	\$5,895	21%	\$33,913		\$28,018	\$5,895	\$33,913					
01	LANDS AND DAMAGES (FED)	\$166	\$9	5%	\$175	0.0%	\$166	\$9	\$175					
01	LANDS AND DAMAGES (NON-FED)	\$845	\$199	24%	\$1,044	0.0%	\$845	\$199	\$1,044					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$116	\$24	21%	\$140	0.0%	\$116	\$24	\$140					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$448	\$94	21%	\$542	0.0%	\$448	\$94	\$542					
1.3%	Planning & Environmental Compliance	\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
5.6%	Engineering & Design	\$1,569	\$330	21%	\$1,899	0.0%	\$1,569	\$330	\$1,899					
0.3%	Reviews, ATRs, IEPRs, VE	\$84	\$18	21%	\$102	0.0%	\$84	\$18	\$102					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$84	\$18	21%	\$102	0.0%	\$84	\$18	\$102					
1.3%	Contracting & Reprographics	\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
2.0%	Engineering During Construction	\$560	\$118	21%	\$678	0.0%	\$560	\$118	\$678					
1.3%	Planning During Construction	\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
1.3%	Project Operations	\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$1,653	\$348	21%	\$2,001	0.0%	\$1,653	\$348	\$2,001					
1.2%	Project Operation:	\$336	\$71	21%	\$407	0.0%	\$336	\$71	\$407					
1.4%	Project Management	\$392	\$82	21%	\$474	0.0%	\$392	\$82	\$474					
CONTRACT COST TOTALS:		\$35,727	\$7,512		\$43,239		\$35,727	\$7,512	\$43,239					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach C														
06	FISH & WILDLIFE FACILITIES	\$170	\$36	21%	\$206	0.0%	\$170	\$36	\$206					
11	LEVEES & FLOODWALLS	\$23,655	\$4,976	21%	\$28,631	0.0%	\$23,655	\$4,976	\$28,631					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$454	\$96	21%	\$550	0.0%	\$454	\$96	\$550					
		\$0	\$0		\$0		\$0	\$0	\$0					
CONSTRUCTION ESTIMATE TOTALS:		\$24,279	\$5,108	21%	\$29,387		\$24,279	\$5,108	\$29,387					
01	LANDS AND DAMAGES (FED)	\$143	\$7	5%	\$150	0.0%	\$143	\$7	\$150					
01	LANDS AND DAMAGES (NON-FED)	\$733	\$175	24%	\$908	0.0%	\$733	\$175	\$908					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$100	\$21	21%	\$121	0.0%	\$100	\$21	\$121					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$388	\$82	21%	\$470	0.0%	\$388	\$82	\$470					
1.3%	Planning & Environmental Compliance	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
5.6%	Engineering & Design	\$1,360	\$286	21%	\$1,646	0.0%	\$1,360	\$286	\$1,646					
0.3%	Reviews, ATRs, IEPRs, VE	\$73	\$15	21%	\$88	0.0%	\$73	\$15	\$88					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$73	\$15	21%	\$88	0.0%	\$73	\$15	\$88					
1.3%	Contracting & Reprographics	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
2.0%	Engineering During Construction	\$486	\$102	21%	\$588	0.0%	\$486	\$102	\$588					
1.3%	Planning During Construction	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
1.3%	Project Operations	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$1,432	\$301	21%	\$1,733	0.0%	\$1,432	\$301	\$1,733					
1.2%	Project Operation:	\$291	\$61	21%	\$352	0.0%	\$291	\$61	\$352					
1.4%	Project Management	\$340	\$72	21%	\$412	0.0%	\$340	\$72	\$412					
CONTRACT COST TOTALS:		\$30,962	\$6,512		\$37,474		\$30,962	\$6,512	\$37,474					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014				Program Year (Budget EC): 2015				FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level: 10/1/2014				Effective Price Level Date: 1 OCT 14								
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
	ARS - Reach D													
06	FISH & WILDLIFE FACILITIES	\$2,572	\$541	21%	\$3,113	0.0%	\$2,572	\$541	\$3,113					
11	LEVEES & FLOODWALLS	\$77,004	\$16,200	21%	\$93,204	0.0%	\$77,004	\$16,200	\$93,204					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,589	\$334	21%	\$1,923	0.0%	\$1,589	\$334	\$1,923					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$81,165	\$17,075	21%	\$98,241		\$81,165	\$17,075	\$98,241					
01	LANDS AND DAMAGES (FED)	\$214	\$11	5%	\$225	0.0%	\$214	\$11	\$225					
01	LANDS AND DAMAGES (NON-FED)	\$1,191	\$364	31%	\$1,555	0.0%	\$1,191	\$364	\$1,555					
02	RELOCATIONS	\$4,625	\$973	21%	\$5,598	0.0%	\$4,625	\$973	\$5,598					
30	RELOCATIONS - PED	\$1,156	\$243	21%	\$1,399	0.0%	\$1,156	\$243	\$1,399					
31	RELOCATIONS - CM	\$462	\$97	21%	\$560	0.0%	\$462	\$97	\$560					
18	CULTURAL RESOURCES - DATA RECOV.	\$351	\$74	21%	\$424	0.0%	\$351	\$74	\$424					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$1,299	\$273	21%	\$1,572	0.0%	\$1,299	\$273	\$1,572					
1.3%	Planning & Environmental Compliance	\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
5.6%	Engineering & Design	\$4,545	\$956	21%	\$5,501	0.0%	\$4,545	\$956	\$5,501					
0.3%	Reviews, ATRs, IEPRs, VE	\$243	\$51	21%	\$294	0.0%	\$243	\$51	\$294					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$243	\$51	21%	\$294	0.0%	\$243	\$51	\$294					
1.3%	Contracting & Reprographics	\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
2.0%	Engineering During Construction	\$1,623	\$341	21%	\$1,964	0.0%	\$1,623	\$341	\$1,964					
1.3%	Planning During Construction	\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
1.3%	Project Operations	\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$4,789	\$1,008	21%	\$5,797	0.0%	\$4,789	\$1,008	\$5,797					
1.2%	Project Operation:	\$974	\$205	21%	\$1,179	0.0%	\$974	\$205	\$1,179					
1.4%	Project Management	\$1,136	\$239	21%	\$1,375	0.0%	\$1,136	\$239	\$1,375					
	CONTRACT COST TOTALS:	\$108,236	\$22,850		\$131,086		\$108,236	\$22,850	\$131,086					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015		FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach F														
06	FISH & WILDLIFE FACILITIES	\$8,624	\$1,814	21%	\$10,438	0.0%	\$8,624	\$1,814	\$10,438					
11	LEVEES & FLOODWALLS	\$175,784	\$36,981	21%	\$212,765	0.0%	\$175,784	\$36,981	\$212,765					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$3,821	\$804	21%	\$4,625	0.0%	\$3,821	\$804	\$4,625					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$188,228	\$39,599	21%	\$227,828		\$188,228	\$39,599	\$227,828					
01	LANDS AND DAMAGES (FED)	\$3,040	\$160	5%	\$3,200	0.0%	\$3,040	\$160	\$3,200					
01	LANDS AND DAMAGES (NON-FED)	\$18,356	\$5,939	32%	\$24,295	0.0%	\$18,356	\$5,939	\$24,295					
02	RELOCATIONS	\$4,155	\$874	21%	\$5,030	0.0%	\$4,155	\$874	\$5,030					
30	RELOCATIONS - PED	\$1,039	\$219	21%	\$1,257	0.0%	\$1,039	\$219	\$1,257					
31	RELOCATIONS - CM	\$416	\$87	21%	\$503	0.0%	\$416	\$87	\$503					
18	CULTURAL RESOURCES - DATA RECOV.	\$843	\$177	21%	\$1,021	0.0%	\$843	\$177	\$1,021					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$3,012	\$634	21%	\$3,646	0.0%	\$3,012	\$634	\$3,646					
1.3%	Planning & Environmental Compliance	\$2,447	\$515	21%	\$2,962	0.0%	\$2,447	\$515	\$2,962					
5.6%	Engineering & Design	\$10,541	\$2,218	21%	\$12,759	0.0%	\$10,541	\$2,218	\$12,759					
0.3%	Reviews, ATRs, IEPRs, VE	\$565	\$119	21%	\$684	0.0%	\$565	\$119	\$684					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$565	\$119	21%	\$684	0.0%	\$565	\$119	\$684					
1.3%	Contracting & Reprographics	\$2,447	\$515	21%	\$2,962	0.0%	\$2,447	\$515	\$2,962					
2.0%	Engineering During Construction	\$3,765	\$792	21%	\$4,557	0.0%	\$3,765	\$792	\$4,557					
1.3%	Planning During Construction	\$2,447	\$515	21%	\$2,962	0.0%	\$2,447	\$515	\$2,962					
1.3%	Project Operations	\$2,447	\$515	21%	\$2,962	0.0%	\$2,447	\$515	\$2,962					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$11,105	\$2,336	21%	\$13,441	0.0%	\$11,105	\$2,336	\$13,441					
1.2%	Project Operation:	\$2,259	\$475	21%	\$2,734	0.0%	\$2,259	\$475	\$2,734					
1.4%	Project Management	\$2,635	\$554	21%	\$3,189	0.0%	\$2,635	\$554	\$3,189					
CONTRACT COST TOTALS:		\$260,312	\$56,362		\$316,675		\$260,312	\$56,362	\$316,675					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14		FULLY FUNDED PROJECT ESTIMATE				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARS - Reach G														
06	FISH & WILDLIFE FACILITIES	\$2,688	\$566	21%	\$3,254	0.0%	\$2,688	\$566	\$3,254					
11	LEVEES & FLOODWALLS	\$58,626	\$12,334	21%	\$70,959	0.0%	\$58,626	\$12,334	\$70,959					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,365	\$287	21%	\$1,652	0.0%	\$1,365	\$287	\$1,652					
			\$0				\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$62,679	\$13,186	21%	\$75,865		\$62,679	\$13,186	\$75,865					
01	LANDS AND DAMAGES (FED)	\$475	\$25	5%	\$500	0.0%	\$475	\$25	\$500					
01	LANDS AND DAMAGES (NON-FED)	\$3,562	\$1,021	29%	\$4,583	0.0%	\$3,562	\$1,021	\$4,583					
02	RELOCATIONS	\$8,303	\$1,747	21%	\$10,050	0.0%	\$8,303	\$1,747	\$10,050					
30	RELOCATIONS - PED	\$2,076	\$437	21%	\$2,513	0.0%	\$2,076	\$437	\$2,513					
31	RELOCATIONS - CM	\$830	\$175	21%	\$1,005	0.0%	\$830	\$175	\$1,005					
18	CULTURAL RESOURCES - DATA RECOV.	\$301	\$63	21%	\$364	0.0%	\$301	\$63	\$364					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$1,003	\$211	21%	\$1,214	0.0%	\$1,003	\$211	\$1,214					
1.3%	Planning & Environmental Compliance	\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
5.6%	Engineering & Design	\$3,510	\$738	21%	\$4,248	0.0%	\$3,510	\$738	\$4,248					
0.3%	Reviews, ATRs, IEPRs, VE	\$188	\$40	21%	\$228	0.0%	\$188	\$40	\$228					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$188	\$40	21%	\$228	0.0%	\$188	\$40	\$228					
1.3%	Contracting & Reprographics	\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
2.0%	Engineering During Construction	\$1,254	\$264	21%	\$1,518	0.0%	\$1,254	\$264	\$1,518					
1.3%	Planning During Construction	\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
1.3%	Project Operations	\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$3,698	\$778	21%	\$4,476	0.0%	\$3,698	\$778	\$4,476					
1.2%	Project Operation:	\$752	\$158	21%	\$910	0.0%	\$752	\$158	\$910					
1.4%	Project Management	\$878	\$185	21%	\$1,063	0.0%	\$878	\$185	\$1,063					
CONTRACT COST TOTALS:		\$92,957	\$19,753		\$112,710		\$92,957	\$19,753	\$112,710					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14		FULLY FUNDED PROJECT ESTIMATE				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach A														
06	FISH & WILDLIFE FACILITIES	\$5,060	\$1,064	21%	\$ 6,124	0.0%	\$5,060	\$1,064	\$6,124					
11	LEVEES & FLOODWALLS	\$74,180	\$15,606	21%	\$ 89,786	0.0%	\$74,180	\$15,606	\$89,786					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$ -	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$ -	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,493	\$314	21%	\$ 1,807	0.0%	\$1,493	\$314	\$1,807					
			\$0				\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$80,732	\$16,984	21%	97,716		\$80,732	\$16,984	\$97,716					
01	LANDS AND DAMAGES (FED)	\$190	\$10	5%	\$ 200	0.0%	\$190	\$10	\$200					
01	LANDS AND DAMAGES (NON-FED)	\$1,456	\$508	35%	\$ 1,964	0.0%	\$1,456	\$508	\$1,964					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$329	\$69	21%	\$399	0.0%	\$329	\$69	\$399					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$1,292	\$272	21%	1,564	0.0%	\$1,292	\$272	\$1,564					
1.3%	Planning & Environmental Compliance	\$1,050	\$221	21%	1,271	0.0%	\$1,050	\$221	\$1,271					
5.6%	Engineering & Design	\$4,521	\$951	21%	5,472	0.0%	\$4,521	\$951	\$5,472					
0.3%	Reviews, ATRs, IEPRs, VE	\$242	\$51	21%	293	0.0%	\$242	\$51	\$293					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$242	\$51	21%	\$293	0.0%	\$242	\$51	\$293					
1.3%	Contracting & Reprographics	\$1,050	\$221	21%	1,271	0.0%	\$1,050	\$221	\$1,271					
2.0%	Engineering During Construction	\$1,615	\$340	21%	1,955	0.0%	\$1,615	\$340	\$1,955					
1.3%	Planning During Construction	\$1,050	\$221	21%	1,271	0.0%	\$1,050	\$221	\$1,271					
1.3%	Project Operations	\$1,050	\$221	21%	1,271	0.0%	\$1,050	\$221	\$1,271					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$4,763	\$1,002	21%	5,765	0.0%	\$4,763	\$1,002	\$5,765					
1.2%	Project Operation:	\$969	\$204	21%	1,173	0.0%	\$969	\$204	\$1,173					
1.4%	Project Management	\$1,130	\$238	21%	1,368	0.0%	\$1,130	\$238	\$1,368					
CONTRACT COST TOTALS:		\$101,682	\$21,563		123,245		\$101,682	\$21,563	\$123,245					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014				Program Year (Budget EC): 2015				FULLY FUNDED PROJECT ESTIMATE				
Effective Price Level: 10/1/2014						Effective Price Level Date: 1 OCT 14								
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach B														
06	FISH & WILDLIFE FACILITIES	\$443	\$93	21%	\$537	0.0%	\$443	\$93	\$537					
11	LEVEES & FLOODWALLS	\$4,097	\$862	21%	\$4,958	0.0%	\$4,097	\$862	\$4,958					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$88	\$18	21%	\$106	0.0%	\$88	\$18	\$106					
			\$0				\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$4,628	\$974	21%	\$5,601		\$4,628	\$974	\$5,601					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$187	\$39	21%	\$226	0.0%	\$187	\$39	\$226					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$19	\$4	21%	\$23	0.0%	\$19	\$4	\$23					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$74	\$16	21%	\$90	0.0%	\$74	\$16	\$90					
1.3%	Planning & Environmental Compliance	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
5.6%	Engineering & Design	\$259	\$54	21%	\$313	0.0%	\$259	\$54	\$313					
0.3%	Reviews, ATRs, IEPRs, VE	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
1.3%	Contracting & Reprographics	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
2.0%	Engineering During Construction	\$93	\$20	21%	\$113	0.0%	\$93	\$20	\$113					
1.3%	Planning During Construction	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
1.3%	Project Operations	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$273	\$57	21%	\$330	0.0%	\$273	\$57	\$330					
1.2%	Project Operation:	\$56	\$12	21%	\$68	0.0%	\$56	\$12	\$68					
1.4%	Project Management	\$65	\$14	21%	\$79	0.0%	\$65	\$14	\$79					
CONTRACT COST TOTALS:		\$5,970	\$1,248		\$7,218		\$5,970	\$1,248	\$7,218					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015		FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach C														
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$7,285	\$1,533	21%	\$8,818	0.0%	\$7,285	\$1,533	\$8,818					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$156	\$33	21%	\$189	0.0%	\$156	\$33	\$189					
			\$0				\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$7,476	\$1,573	21%	\$9,048		\$7,476	\$1,573	\$9,048					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$341	\$115	34%	\$456	0.0%	\$341	\$115	\$456					
02	RELOCATIONS	\$725	\$152	21%	\$877	0.0%	\$725	\$152	\$877					
30	RELOCATIONS - PED	\$181	\$38	21%	\$219	0.0%	\$181	\$38	\$219					
31	RELOCATIONS - CM	\$72	\$15	21%	\$88	0.0%	\$72	\$15	\$88					
18	CULTURAL RESOURCES - DATA RECOV.	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$120	\$25	21%	\$145	0.0%	\$120	\$25	\$145					
1.3%	Planning & Environmental Compliance	\$97	\$20	21%	\$117	0.0%	\$97	\$20	\$117					
5.6%	Engineering & Design	\$419	\$88	21%	\$507	0.0%	\$419	\$88	\$507					
0.3%	Reviews, ATRs, IEPRs, VE	\$22	\$5	21%	\$27	0.0%	\$22	\$5	\$27					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$22	\$5	21%	\$27	0.0%	\$22	\$5	\$27					
1.3%	Contracting & Reprographics	\$97	\$20	21%	\$117	0.0%	\$97	\$20	\$117					
2.0%	Engineering During Construction	\$150	\$32	21%	\$182	0.0%	\$150	\$32	\$182					
1.3%	Planning During Construction	\$97	\$20	21%	\$117	0.0%	\$97	\$20	\$117					
1.3%	Project Operations	\$97	\$20	21%	\$117	0.0%	\$97	\$20	\$117					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$441	\$93	21%	\$534	0.0%	\$441	\$93	\$534					
1.2%	Project Operation:	\$90	\$19	21%	\$109	0.0%	\$90	\$19	\$109					
1.4%	Project Management	\$105	\$22	21%	\$127	0.0%	\$105	\$22	\$127					
CONTRACT COST TOTALS:		\$10,633	\$2,273		\$12,907		\$10,633	\$2,273	\$12,907					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

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LOCATION: Sacramento, CA
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DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost
PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	RISK BASED			TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
		COST (\$K)	CNTG (\$K)	CNTG (%)										
A	B	C	D	E	F	G	H	I	J					
	ARN - Reach D													
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$18,045	\$3,796	21%	\$21,841	0.0%	\$18,045	\$3,796	\$21,841					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$463	\$97	21%	\$560	0.0%	\$463	\$97	\$560					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$18,542	\$3,901	21%	\$22,443		\$18,542	\$3,901	\$22,443					
01	LANDS AND DAMAGES (FED)	\$665	\$35	5%	\$700	0.0%	\$665	\$35	\$700					
01	LANDS AND DAMAGES (NON-FED)	\$2,285	\$370	16%	\$2,655	0.0%	\$2,285	\$370	\$2,655					
02	RELOCATIONS	\$4,120	\$867	21%	\$4,987	0.0%	\$4,120	\$867	\$4,987					
30	RELOCATIONS - PED	\$1,030	\$217	21%	\$1,247	0.0%	\$1,030	\$217	\$1,247					
31	RELOCATIONS - CM	\$412	\$87	21%	\$499	0.0%	\$412	\$87	\$499					
18	CULTURAL RESOURCES - DATA RECOV.	\$102	\$21	21%	\$124	0.0%	\$102	\$21	\$124					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$297	\$62	21%	\$359	0.0%	\$297	\$62	\$359					
1.3%	Planning & Environmental Compliance	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
5.6%	Engineering & Design	\$1,038	\$218	21%	\$1,256	0.0%	\$1,038	\$218	\$1,256					
0.3%	Reviews, ATRs, IEPRs, VE	\$56	\$12	21%	\$68	0.0%	\$56	\$12	\$68					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$56	\$12	21%	\$68	0.0%	\$56	\$12	\$68					
1.3%	Contracting & Reprographics	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
2.0%	Engineering During Construction	\$371	\$78	21%	\$449	0.0%	\$371	\$78	\$449					
1.3%	Planning During Construction	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
1.3%	Project Operations	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$1,094	\$230	21%	\$1,324	0.0%	\$1,094	\$230	\$1,324					
1.2%	Project Operation:	\$223	\$47	21%	\$270	0.0%	\$223	\$47	\$270					
1.4%	Project Management	\$260	\$55	21%	\$315	0.0%	\$260	\$55	\$315					
	CONTRACT COST TOTALS:	\$31,515	\$6,414		\$37,929		\$31,515	\$6,414	\$37,929					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
 LOCATION: Sacramento, CA
 This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
 POC: CHIEF, COST ENGINEERING, Jeremiah Frost
 PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014	Program Year (Budget EC):		2015							
		Effective Price Level:		10/1/2014	Effective Price Level Date:		1 OCT 14							
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach E														
06	FISH & WILDLIFE FACILITIES	\$119	\$25	21%	\$145	0.0%	\$119	\$25	\$145					
10	BREAKWATER & SEAWALLS	\$18,497	\$3,891	21%	\$22,389	0.0%	\$18,497	\$3,891	\$22,389					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$540	\$114	21%	\$654	0.0%	\$540	\$114	\$654					
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$19,157	\$4,030	21%	\$23,187		\$19,157	\$4,030	\$23,187					
01	LANDS AND DAMAGES (FED)	\$974	\$51	5%	\$1,025	0.0%	\$974	\$51	\$1,025					
01	LANDS AND DAMAGES (NON-FED)	\$3,351	\$543	16%	\$3,894	0.0%	\$3,351	\$543	\$3,894					
02	RELOCATIONS	\$6,453	\$1,357	21%	\$7,810	0.0%	\$6,453	\$1,357	\$7,810					
30	RELOCATIONS - PED	\$1,613	\$339	21%	\$1,953	0.0%	\$1,613	\$339	\$1,953					
31	RELOCATIONS - CM	\$645	\$136	21%	\$781	0.0%	\$645	\$136	\$781					
18	CULTURAL RESOURCES - DATA RECOV.	\$119	\$25	21%	\$144	0.0%	\$119	\$25	\$144					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$307	\$65	21%	\$372	0.0%	\$307	\$65	\$372					
1.3%	Planning & Environmental Compliance	\$249	\$52	21%	\$301	0.0%	\$249	\$52	\$301					
5.6%	Engineering & Design	\$1,073	\$226	21%	\$1,299	0.0%	\$1,073	\$226	\$1,299					
0.3%	Reviews, ATRs, IEPRs, VE	\$57	\$12	21%	\$69	0.0%	\$57	\$12	\$69					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$57	\$12	21%	\$69	0.0%	\$57	\$12	\$69					
1.3%	Contracting & Reprographics	\$249	\$52	21%	\$301	0.0%	\$249	\$52	\$301					
2.0%	Engineering During Construction	\$383	\$81	21%	\$464	0.0%	\$383	\$81	\$464					
1.3%	Planning During Construction	\$249	\$52	21%	\$301	0.0%	\$249	\$52	\$301					
1.3%	Project Operations	\$249	\$52	21%	\$301	0.0%	\$249	\$52	\$301					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$1,130	\$238	21%	\$1,368	0.0%	\$1,130	\$238	\$1,368					
1.2%	Project Operation:	\$230	\$48	21%	\$278	0.0%	\$230	\$48	\$278					
1.4%	Project Management	\$268	\$56	21%	\$324	0.0%	\$268	\$56	\$324					
CONTRACT COST TOTALS:		\$36,813	\$7,429		\$44,242		\$36,813	\$7,429	\$44,242					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report; Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost
PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach F														
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$20,946	\$4,407	21%	\$25,353	0.0%	\$20,946	\$4,407	\$25,353					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$505	\$106	21%	\$612	0.0%	\$505	\$106	\$612					
		\$0	\$0		\$0		\$0	\$0	\$0					
CONSTRUCTION ESTIMATE TOTALS:		\$21,486	\$4,520	21%	\$26,006		\$21,486	\$4,520	\$26,006					
01	LANDS AND DAMAGES (FED)	\$71	\$4	5%	\$75	0.0%	\$71	\$4	\$75					
01	LANDS AND DAMAGES (NON-FED)	\$385	\$150	39%	\$535	0.0%	\$385	\$150	\$535					
02	RELOCATIONS	\$5,419	\$1,140	21%	\$6,559	0.0%	\$5,419	\$1,140	\$6,559					
30	RELOCATIONS - PED	\$1,355	\$285	21%	\$1,640	0.0%	\$1,355	\$285	\$1,640					
31	RELOCATIONS - CM	\$542	\$114	21%	\$656	0.0%	\$542	\$114	\$656					
18	CULTURAL RESOURCES - DATA RECOV.	\$111	\$23	21%	\$135	0.0%	\$111	\$23	\$135					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$344	\$72	21%	\$416	0.0%	\$344	\$72	\$416					
1.3%	Planning & Environmental Compliance	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338					
5.6%	Engineering & Design	\$1,203	\$253	21%	\$1,456	0.0%	\$1,203	\$253	\$1,456					
0.3%	Reviews, ATRs, IEPRs, VE	\$64	\$13	21%	\$77	0.0%	\$64	\$13	\$77					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$64	\$13	21%	\$77	0.0%	\$64	\$13	\$77					
1.3%	Contracting & Reprographics	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338					
2.0%	Engineering During Construction	\$430	\$90	21%	\$520	0.0%	\$430	\$90	\$520					
1.3%	Planning During Construction	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338					
1.3%	Project Operations	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$1,268	\$267	21%	\$1,535	0.0%	\$1,268	\$267	\$1,535					
1.2%	Project Operation:	\$258	\$54	21%	\$312	0.0%	\$258	\$54	\$312					
1.4%	Project Management	\$301	\$63	21%	\$364	0.0%	\$301	\$63	\$364					
CONTRACT COST TOTALS:		\$34,417	\$7,298		\$41,715		\$34,417	\$7,298	\$41,715					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared:		10/1/2014		Program Year (Budget EC):		2015		FULLY FUNDED PROJECT ESTIMATE				
		Effective Price Level:		10/1/2014		Effective Price Level Date:		1 OCT 14						
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach G														
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$7,394	\$1,555	21%	\$8,949	0.0%	\$7,394	\$1,555	\$8,949					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$218	\$46	21%	\$263	0.0%	\$218	\$46	\$263					
			\$0				\$0		\$0					
CONSTRUCTION ESTIMATE TOTALS:		\$7,646	\$1,609	21%	\$9,254		\$7,646	\$1,609	\$9,254					
01	LANDS AND DAMAGES (FED)	\$285	\$15	5%	\$300	0.0%	\$285	\$15	\$300					
01	LANDS AND DAMAGES (NON-FED)	\$840	\$89	11%	\$929	0.0%	\$840	\$89	\$929					
02	RELOCATIONS	\$3,116	\$656	21%	\$3,772	0.0%	\$3,116	\$656	\$3,772					
30	RELOCATIONS - PED	\$779	\$164	21%	\$943	0.0%	\$779	\$164	\$943					
31	RELOCATIONS - CM	\$312	\$66	21%	\$377	0.0%	\$312	\$66	\$377					
18	CULTURAL RESOURCES - DATA RECOV.	\$48	\$10	21%	\$58	0.0%	\$48	\$10	\$58					
PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$122	\$26	21%	\$148	0.0%	\$122	\$26	\$148					
1.3%	Planning & Environmental Compliance	\$99	\$21	21%	\$120	0.0%	\$99	\$21	\$120					
5.6%	Engineering & Design	\$428	\$90	21%	\$518	0.0%	\$428	\$90	\$518					
0.3%	Reviews, ATRs, IEPRs, VE	\$23	\$5	21%	\$28	0.0%	\$23	\$5	\$28					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$23	\$5	21%	\$28	0.0%	\$23	\$5	\$28					
1.3%	Contracting & Reprographics	\$99	\$21	21%	\$120	0.0%	\$99	\$21	\$120					
2.0%	Engineering During Construction	\$153	\$32	21%	\$185	0.0%	\$153	\$32	\$185					
1.3%	Planning During Construction	\$99	\$21	21%	\$120	0.0%	\$99	\$21	\$120					
1.3%	Project Operations	\$99	\$21	21%	\$120	0.0%	\$99	\$21	\$120					
CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$451	\$95	21%	\$546	0.0%	\$451	\$95	\$546					
1.2%	Project Operation:	\$92	\$19	21%	\$111	0.0%	\$92	\$19	\$111					
1.4%	Project Management	\$107	\$23	21%	\$130	0.0%	\$107	\$23	\$130					
CONTRACT COST TOTALS:		\$14,821	\$2,985		\$17,806		\$14,821	\$2,985	\$17,806					

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014		Effective Price Level: 10/1/2014		Program Year (Budget EC): 2015		Effective Price Level Date: 1 OCT 14		FULLY FUNDED PROJECT ESTIMATE				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach H														
06	FISH & WILDLIFE FACILITIES	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
11	LEVEES & FLOODWALLS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
18	CULTURAL RESOURCE PRESERVATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
							\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$0	\$0	0%	\$0		\$0	\$0	\$0			\$0	\$0	\$0
01	LANDS AND DAMAGES (FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
01	LANDS AND DAMAGES (NON-FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
18	CULTURAL RESOURCES - DATA RECOV.	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Planning & Environmental Compliance	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
5.6%	Engineering & Design	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
0.3%	Reviews, ATRs, IEPRs, VE	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
0.3%	Life Cycle Updates (cost, schedule, risks)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Contracting & Reprographics	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
2.0%	Engineering During Construction	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Planning During Construction	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Project Operations	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.2%	Project Operation:	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.4%	Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
CONTRACT COST TOTALS:		\$0	\$0		\$0		\$0	\$0	\$0			\$0	\$0	\$0

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: American River Common Features GRR - Alt2
LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District
POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civil Works Work Breakdown Structure		ESTIMATED COST (in \$1000s)				PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)				TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)				
		Estimate Prepared: 10/1/2014				Program Year (Budget EC): 2015				FULLY FUNDED PROJECT ESTIMATE				
Effective Price Level: 10/1/2014						Effective Price Level Date: 1 OCT 14								
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
ARN - Reach I														
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$4,198	\$883	21%	\$5,081	0.0%	\$4,198	\$883	\$5,081					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$386	\$81	21%	\$467	0.0%	\$386	\$81	\$467					
			\$0				\$0							
CONSTRUCTION ESTIMATE TOTALS:		\$4,618	\$972	21%	\$5,590		\$4,618	\$972	\$5,590					
01	LANDS AND DAMAGES (FED)	\$713	\$38	5%	\$750	0.0%	\$713	\$38	\$750					
01	LANDS AND DAMAGES (NON-FED)	\$19,780	\$11,750	59%	\$31,530	0.0%	\$19,780	\$11,750	\$31,530					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$85	\$18	21%	\$103	0.0%	\$85	\$18	\$103					
30 PLANNING, ENGINEERING & DESIGN														
1.6%	Project Management	\$74	\$16	21%	\$90	0.0%	\$74	\$16	\$90					
1.3%	Planning & Environmental Compliance	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
5.6%	Engineering & Design	\$259	\$54	21%	\$313	0.0%	\$259	\$54	\$313					
0.3%	Reviews, ATRs, IEPs, VE	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
1.3%	Contracting & Reprographics	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
2.0%	Engineering During Construction	\$92	\$19	21%	\$111	0.0%	\$92	\$19	\$111					
1.3%	Planning During Construction	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
1.3%	Project Operations	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
31 CONSTRUCTION MANAGEMENT														
5.9%	Construction Management	\$272	\$57	21%	\$329	0.0%	\$272	\$57	\$329					
1.2%	Project Operation:	\$55	\$12	21%	\$67	0.0%	\$55	\$12	\$67					
1.4%	Project Management	\$65	\$14	21%	\$79	0.0%	\$65	\$14	\$79					
CONTRACT COST TOTALS:		\$26,280	\$13,006		\$39,286		\$26,280	\$13,006	\$39,286					

