

American River Watershed Project

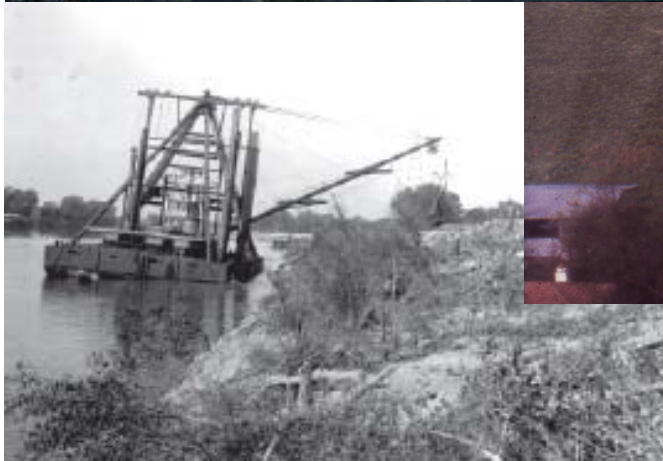
Post-Authorization Change Report And Interim General Reevaluation Report

American River Watershed

Common Features Project

Natomas Basin

Sacramento and Sutter Counties, California



**US Army Corps
of Engineers**®

Sacramento District

Appendix G – Cost

October 2010

(B L A N K)

APPENDIX G COST ENGINEERING

1. BASIS OF DESIGN

This estimate is based on the draft report:
American River Common Features Project,
Natomas Post Authorization Change Report and Interim General Reevaluation
Report

The type of solicitation is expected to be unrestricted IFB.

Civil Design quantities are per three AE's (HDR, Wood Rodgers and Mead & Hunt) with spot checking by SPK. HDR also provided "bare cost" estimates for Pumping Plant modifications, Riverside Canal and well relocations.

2. PROJECT SCOPE/DESCRIPTION

The project area is comprised of nine reaches, designated A through I for economic evaluation and construction sequencing purposes. Costs for both the NED and locally preferred plan (LPP) have been developed. The Sacramento Area Flood Control Agency (SAFCA) has completed construction, or is in the process of doing so, much of the work in Reaches B, C & D (sans Pumping Station Modifications). These costs are shown as either sunk (omitted) for contracted work expected to be completed before 10/2010 or as Section 104 work for ongoing projects SAFCA is providing for.

The description of each reach, and typical work involved, is as follows:

Reach A: SREL from Interstate Highway 5 north to San Juan Road. (Adjacent levee, cutoff wall, Irrigation Canal, Pumping Plant Relocations (3) and Private Irrigation Facilities (1))

Reach B: SREL from San Juan Road north to Elverta Road. (Adjacent levee, cutoff wall, seepage berm, Irrigation/Drainage Canals (2), Pumping Plant Relocations (4))

Reach C: SREL from Elverta Road north to Sankey Road at the west end of the south levee of the NCC. (Adjacent levee, cutoff wall, seepage berm, Irrigation/Drainage Canals (2), Pumping Plant Relocations (2), Private Irrigation Facility)

Reach D: NCC south levee from Sankey Road north to Howsley Road. (Cutoff wall, Pumping Plant Relocations (3))

Reach E: PGCC west levee from Howsley Road north to Sankey Road. (Cutoff wall, Vinyl Sheet Pile, Private Irrigation Facilities (4))

Reach F: NEMDC west levee from Sankey Road south to Elverta Road. (Cutoff wall, Drained stability berm, flattened landside levee slope, Private Irrigation Facilities (5))

- . Reach G: NEMDC west levee from Elverta Road south to the pumping station just upstream of Dry Creek. (Cutoff wall, Pumping Plant Relocations, Private Irrigation Facilities (4))
- . Reach H: NEMDC west levee from the pumping station just upstream of Dry Creek south to Northgate Boulevard. (Cutoff wall, Jet Grouting, Pumping Plant Relocations (2))
- . Reach I: ARNL from Northgate Boulevard south to Interstate Highway 5. (Cutoff wall, Pumping Plant Relocations)

3. TOTAL PROJECT COSTS (SEE ATTACHED)

The costs shown in the attached Total Project Cost (TPC) summary sheets are developed from two sources (1) bid data from various projects put forth by SAFCA for the Natomas Levee Improvement Project (Reaches B, C and D) and (2) feasibility level plans and associated quantities developed by three AE firms, HDR, Wood Rodgers, and Mead & Hunt (Reaches A, E, F, G, H and I plus work remaining in Reaches B, C and D). Costs were developed primarily through the use of MII and the local 'database' of construction methods (labor, equipment, and materials cost data, construction crews and anticipated production rate, anticipated borrow and disposal sites, etc). These are relatively up-to-date (June 2010 Davis-Bacon rates, recent quotes for bulk materials, but only 2007 MII equipment rates). First Costs are based on 1 Oct 2010 price levels escalated to the anticipated construction schedules.

4. MII COST ESTIMATE (SEE ATTACHED) - NOTES & ASSUMPTIONS

OVERTIME

Overtime is included in this estimate. Assumption is 10 hr days, 6 days/week.

ACQUISITION PLAN

Construction Contracts are assumed to be design-bid-build, lowest competitive price.

CONTRACTING PLAN

The prime contractor is expected to be an earthwork contractor responsible for the general site work, borrow site excavation, levee degrading and rebuilding to the restored or new levee height.

Subcontractors are provided for two categories, miscellaneous/general and trucking:

Miscellaneous/General Subcontractors are expected to be utilized for cutoff wall placement, pumping plant relocations, bridge relocations, jet grouting, sheet pile work, paving and hydroseeding.

PROJECT CONSTRUCTION

The project consists of 9 reaches (A-I) with multiple utility relocations for penetrations through the levees (primarily pumping plants and private irrigation

facilities). Should the LPP ultimately be constructed, several bridges will also be raised.

SITE ACCESS

The project sites encompass the perimeter of the Natomas Basin in the Sacramento, CA area and are accessible by paved local roads. Certain reaches (B, C, D & E) are of close enough proximity to borrow areas that scrapers are a viable option for degrading of levees and levee restoration.

BORROW \ DISPOSAL AREAS

Many potential borrow areas have been identified in or very near to (such as the "Triangle") the Natomas basin and these are expected to provide the borrow required. Disposal of Debris is normal.

CONSTRUCTION METHODOLOGY

The construction methodologies are considered standard, except for deep (greater than 85 ft) cutoff wall excavation & placement. Below this depth a conventional long reach hydraulic excavator cannot be used. The method provided in the cost estimate opts for the contractor to utilize a hydraulic clamshell in excavating to the lower depths of the wall (the lower 18.5 ft for the extreme depth walls, 103.5 ft deep). The estimator realizes that production by the clamshell is much slower than that of the excavator but the extra depth is approximately 20% of that for the excavator and it is believed the 18.5 ft done by the clamshell will allow it to roughly keep up with the 85 ft done by the excavator. Other methods such as deep-soil-mixing are expected to be a contractor option. Deep soil mixing was examined but is expected to be slightly less cost effective than excavator/clamshell at this depth.

UNUSUAL CONDITIONS

No unusual conditions.

UNIQUE TECHNIQUES OF CONSTRUCTION

Proximity of existing bridge abutments or retaining walls require that jet grouting be performed in lieu of placing slurry cutoff walls in two short lengths of Reach H.

EQUIPMENT AND LABOR AVAILABILITY & DISTANCE TRAVELED

In an urban area such as Sacramento, equipment and labor is readily available within a 100 mile radius of the site.

ENVIRONMENTAL CONCERNS

Environmental protection requires consideration of air, water, and land, and involves noise, solid-waste management and management of other pollutants. In order to prevent or provide for abatement and control of any environmental pollution arising from the work activities, the Contractor and his subcontractors in the performance of this contract, shall comply with all applicable Federal, State, and local laws, and regulations concerning environmental pollution control and

abatement. The Contractor shall use best management practices at all times to minimize the potential for environmental impacts. A running 2% markup on construction equipment is provided to account for air quality considerations.

LABOR RATES, EQUIPMENT RATES, MATERIAL COSTS & SALES TAX

This estimate meets Davis Bacon wage rates for Davis Bacon wage determinations for the state of California, General Decision Numbers: CA 20100003 03/12/2010, CA 20100006 03/12/2010, CA 20100009 03/12/2010 and CA 20100026 03/12/2010.

Equipment unit costs were obtained from Quotes or verbal/telephone conversations with Contractors performing like or similar work and the MCACES Equipment Library.

Material prices were obtained from Quotes, supply catalogs, previous similar estimates, and the MCACES Cost Book.

Sales tax is applied at 8.75%.

PRODUCTION RATES

Productivity/Task Durations are based on production for 50 minutes/hr for meetings/breaks, accessing the working area/office trailer to get supplies.

BRIDGE RAISING COSTS

These were provided by Wood Rodgers an AE firm who provided the civil design for Reaches D-H. The costs are within reason when compared to "Comparative Bridge Costs" (January 2010) as set forth by Caltrans.

Note: Gasoline and diesel fuel costs used in the estimate are the average costs in the Sacramento area as of July 2010. Off-road diesel costs are assumed at 90% of on-road.

5. CONTRACTOR MARKUPS

Profit is included for the prime contractor (8.48% based on PWG). Home Office Overhead is considered to be 7% for these relatively large projects. Job/Field Office Overhead (JOOH) is set at 10% for all reaches except Reach I, where it is set at 23%. Small Tool Markup is set at a running 2% of Labor costs. Bond is set at 0.7%.

Initially, JOOH was calculated independently for each reach (based on the developed construction schedule) with Small Tools set at 2% of Prime Contractor Labor. It is considered very likely however, that the contractors will be given the full construction season to complete the work (2 seasons in the case of Reach A). Reaches A-H typically showed a JOOH in the 8-11% range, with an average of about 9.5%. 10% was therefore chosen to be used uniformly in those reaches.

Reach I has a somewhat higher JOOH due to a shorter calculated construction duration extended to allow the full construction season.

Likewise, bond was initially calculated based on Bond Class B. A weighted average was used for conformity of costs between like work in the NED vs the LPP.

Miscellaneous/General Subcontractors have profit set at of 10% , Home Office Overhead at 12% and Job Office Overhead at 15% (performs the majority of the cutoff wall/jet grouting/sheet pile/pumping plant/bridge work). Bond is set at 0.8%.

The Trucking/Hauling Subcontractors have profit set at of 10%, Home Office Overhead at 10% and Job Office Overhead at 5%. Bond again is set at 1.0%.

6. CONSTRUCTION SCHEDULE (SEE ATTACHED)

Total Project Schedules including design, pre-construction, construction and post construction were developed using MS Project with construction durations based on those developed in MII. These were used to insure the project reaches could be completed within the construction windows and with the anticipated crews. It was determined that Reaches A, B, E, F, G & H will require two crews for slurry wall construction, excavation at the borrow areas and levee restoration. It was determined that Reach A would also require two construction seasons due to the long construction period for the deep slurry walls.

CONSTRUCTION WINDOWS

The estimate considers the construction work window for major construction activities to be May-Oct, April and November are available for mobilization and demobilization of equipment and non-flood protection items such as hydroseeding that do not change the effectiveness of flood control and drainage system.

7. COST RISK ANALYSIS (SEE ATTACHED)

The scope of the risk analysis was to calculate and present the cost and schedule contingencies at the 80 percent confidence level using the risk analysis processes, as mandated by U.S. Army Corps of Engineers (USACE) Engineer Regulation (ER) 1110-2-1150, Engineering and Design for Civil Works, ER 1110-2-1302, Civil Works Cost Engineering, and Engineer Technical Letter 1110-2-573, Construction Cost Estimating Guide for Civil Works. The study does not include consideration for operation and maintenance or life cycle costs.

NOTE: Also attached are summary sheets of Annual Costs and a Summary Project Costs.

****CONTRACT COST SUMMARY(CONT'D)****

Current MCACES Estimate Prepared: 16-Aug-2010

Effective Price Level (EPL): 1-Oct-2010

ACCOUNT

AUTHORIZE/BUDGET PRICE LEVEL: 1-Oct-2010

.....FULLY FUNDED ESTIMATE... (3.....)

SUNK COST OMB COST CNTG TOTAL FULLY FUNDED

NO. FEATURE DESCRIPTION COST (\$K) CNTG (\$K) CNTG (%) TOTAL (\$K) OMB (%) COST (\$K) CNTG (\$K) TOTAL (\$K) (\$K) MIDPT(%) (\$K) CNTG (\$K) (\$K)

Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.

Table with columns for Account, Cost, Contingency, Total, OMB, and Sunk Cost. Rows include categories like 'TOTAL NON-FEDERAL COSTS', 'TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach A', 'Reach B', 'Reach C', and 'TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach B'. Subtotal rows are also present for federal and non-federal construction costs.

****CONTRACT COST SUMMARY(CONT'D)****

Current MCACES Estimate Prepared: 16-Aug-2010 Effective Price Level (EPL): 1-Oct-2010					AUTHORIZE/BUDGET PRICE LEVEL: 1-Oct-2010			FULLY FUNDED ESTIMATE... (3.....)					
ACCOUNT NO.	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	SUNK COST (\$K)	OMB MIDPT(%)	COST (\$K)	CNTG (%)	FULLY FUNDED (\$K)
Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.														
31	CONSTRUCTION MANAGE'MT	Contingency Applied To Remaining Cost Only 624 252 40 876				0.00	624	252	876	Sunk Cost Price Level (EPL): 1-Oct-2010 0 7.6 672 271 943				
TOTAL NON-FEDERAL COSTS		\$38,121	\$12,050		\$50,171		\$38,121	\$12,050	\$50,171	\$3,828		\$40,496	\$12,888	\$53,384
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach E		\$82,360	\$27,827		\$110,187		\$82,360	\$27,827	\$110,187	\$4,360		\$88,828	\$30,084	\$118,912
Reach F														
FEDERAL COSTS														
11	LEVEES & FLOODWALLS	35,245	11,261	32	46,506	0.00	35,245	11,261	46,506	0	5.8	37,296	11,916	49,212
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS		35,245	11,261		46,506		35,245	11,261	46,506	0		37,296	11,916	49,212
1	LANDS & DAMAGES, Admin. (1)	279	42	15	321	0.00	279	42	321	0	12	314	47	361
30	PLAN/ENGINEERING/DESIGN FEDERAL	6,969	577		7,546	0.00	6,969	577	7,546	2,740		7,440	642	8,082
	NON-FEDERAL - Section 104	2,740	0		2,740	0.00	4,229	577	4,806	0	11	4,700	642	5,342
						0.00	2,740	0	2,740	2,740	0	2,740	0	2,740
31	CONSTRUCTION MANAGE'MT	2,820	901	32	3,721	0.00	2,820	901	3,721	0	15	3,238	1,034	4,272
TOTAL FEDERAL COSTS		\$45,313	\$12,781		\$58,094		\$45,313	\$12,781	\$58,094	\$2,740		\$48,288	\$13,639	\$61,927
NON-FEDERAL COSTS														
1	LANDS AND DAMAGES	9,220	4,547	50	13,767	0.00	9,220	4,547	13,767	99	4.9	9,667	4,771	14,438
2	RELOCATIONS	9,006	2,939	33	11,945	0.00	9,006	2,939	11,945	0	5.8	9,530	3,110	12,640
	SECTION 104	2,740	0		2,740		2,740	0	2,740	2,740		2,740	0	2,740
	30 PED	2,740	0		2,740		2,740	0	2,740	2,740	0	2,740	0	2,740
30	PLAN/ENGINEERING/DESIGN	1,081	352	33	1,433	0.00	1,081	352	1,433	0	4.5	1,129	368	1,497
31	CONSTRUCTION MANAGE'MT	721	235	33	956	0.00	721	235	956	0	5.9	764	248	1,012
TOTAL NON-FEDERAL COSTS		\$22,768	\$8,073		\$30,841		\$22,768	\$8,073	\$30,841	\$2,839		\$23,830	\$8,497	\$32,327
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach F		\$65,341	\$20,854		\$86,195		\$65,341	\$20,854	\$86,195	\$2,839		\$69,378	\$22,136	\$91,514
Reach G														
FEDERAL COSTS														
11	LEVEES & FLOODWALLS	25,543	9,472	37	35,015	0.00	25,543	9,472	35,015	0	7.6	27,485	10,191	37,676
13	PUMPING PLANT	2,078	745	36	2,823	0.00	2,078	745	2,823	0	7.6	2,236	802	3,038
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS		27,621	10,217		37,838		27,621	10,217	37,838	0		29,721	10,993	40,714
1	LANDS & DAMAGES, Admin. (1)	210	31	15	241	0.00	210	31	241	0	17	246	37	283
30	PLAN/ENGINEERING/DESIGN	3,065	428	14	3,493	0.00	3,065	428	3,493	0	16	3,555	496	4,051
31	CONSTRUCTION MANAGE'MT	2,043	756	37	2,799	0.00	2,043	756	2,799	0	20	2,448	906	3,354
TOTAL FEDERAL COSTS		\$32,939	\$11,432		\$44,371		\$32,939	\$11,432	\$44,371	\$0		\$35,970	\$12,432	\$48,402
NON-FEDERAL COSTS														
1	LANDS AND DAMAGES	13,118	5,222	40	18,340	0.00	13,118	5,222	18,340	0	6.7	13,996	5,572	19,568
2	RELOCATIONS	7,795	2,881	37	10,676	0.00	7,795	2,881	10,676	0	7.6	8,387	3,100	11,487
30	PLAN/ENGINEERING/DESIGN	1,177	432	37	1,609	0.00	1,177	432	1,609	8	6.2	1,250	459	1,709
31	CONSTRUCTION MANAGE'MT	779	289	37	1,068	0.00	779	289	1,068	0	7.6	838	311	1,149
TOTAL NON-FEDERAL COSTS		\$22,869	\$8,824		\$31,693		\$22,869	\$8,824	\$31,693	\$8		\$24,471	\$9,442	\$33,913
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach G		\$55,808	\$20,256		\$76,064		\$55,808	\$20,256	\$76,064	\$8		\$60,441	\$21,874	\$82,315
Reach H														
FEDERAL COSTS														
6	FISH & WILDLIFE FACILITIES	6,480	1,869	29	8,349	0.00	6,480	1,869	8,349	0	5.9	6,865	1,980	8,845
11	LEVEES & FLOODWALLS	30,435	9,966	33	40,401	0.00	30,435	9,966	40,401	0	5.9	32,242	10,558	42,800
13	PUMPING PLANT	2,227	654	29	2,881	0.00	2,227	654	2,881	0	5.9	2,359	693	3,052
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS		39,142	12,489		51,631		39,142	12,489	51,631	0		41,466	13,231	54,697
1	LANDS & DAMAGES, Admin. (1)	785	117	15	902	0.00	785	117	902	0	12	882	131	1,013
1	LANDS & DAMAGES, Real Estate	1,283	309	24	1,592	0.00	1,283	309	1,592	0	4.9	1,346	324	1,670

******CONTRACT COST SUMMARY(CONT'D)******


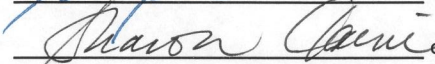
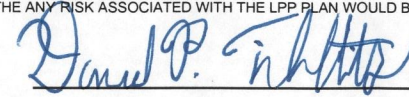
Current MCACES Estimate Prepared: 16-Aug-2010
 Effective Price Level (EPL): 1-Oct-2010

Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.

ACCOUNT NO.	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	AUTHORIZE/BUDGET PRICE LEVEL: 1-Oct-2010			FULLY FUNDED ESTIMATE.....(3.....)					
						OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	SUNK COST (\$K)	OMB MIDPT (%)	COST (\$K)	CNTG (%)	FULLY FUNDED (\$K)
Contingency Applied To Remaining Cost Only						Sunk Cost Price Level (EPL): 1-Oct-2010								
30	PLAN/ENGINEERING/DESIGN FEDERAL	8,845	637		9,482	0.00	8,845	637	9,482	4,148		9,384	710	10,094
	NON-FEDERAL - Section 104	5,422	637	14	6,059		5,422	637	6,059	725	10	5,961	710	6,671
		3,423	0		3,423	0.00	3,423	0	3,423	3,423	0	3,423	0	3,423
31	CONSTRUCTION MANAG'NT	3,131	1,000	32	4,131	0.00	3,131	1,000	4,131	0	15	3,604	1,152	4,756
TOTAL FEDERAL COSTS		\$53,186	\$14,552		\$67,738		\$53,186	\$14,552	\$67,738	\$4,148		\$56,682	\$15,548	\$72,230
NON-FEDERAL COSTS														
1	LANDS AND DAMAGES	26,642	5,363	20	32,005	0.00	26,642	5,363	32,005	215	4.9	27,940	5,626	33,566
2	RELOCATIONS	9,537	3,459	36	12,996	0.00	9,537	3,459	12,996	0	5.9	10,103	3,665	13,768
	SECTION 104	3,423	0		3,423		3,423	0	3,423	3,423		3,423	0	3,423
	30 PED	3,423	0		3,423		3,423	0	3,423	3,423	0	3,423	0	3,423
30	PLAN/ENGINEERING/DESIGN	1,149	415	36	1,564	0.00	1,149	415	1,564	5	4.6	1,202	434	1,636
31	CONSTRUCTION MANAG'NT	763	277	36	1,040	0.00	763	277	1,040	0	6	809	293	1,102
TOTAL NON-FEDERAL COSTS		\$41,514	\$9,514		\$51,028		\$41,514	\$9,514	\$51,028	\$3,643		\$43,477	\$10,018	\$53,495
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach H		\$91,277	\$24,066		\$115,343		\$91,277	\$24,066	\$115,343	\$4,368		\$96,736	\$25,566	\$122,302
Reach I														
FEDERAL COSTS														
11	LEVEES & FLOODWALLS	13,859	3,668	26	17,527	0.00	13,859	3,668	17,527	0	4	14,417	3,816	18,233
13	PUMPING PLANT	1,195	315	26	1,510	0.00	1,195	315	1,510	0	4	1,243	328	1,571
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS		15,054	3,983		19,037		15,054	3,983	19,037	0		15,660	4,144	19,804
1	LANDS & DAMAGES, Admin. (1	142	21	15	163	0.00	142	21	163	0	7.4	152	23	175
30	PLAN/ENGINEERING/DESIGN FEDERAL	3,910	238		4,148		3,910	238	4,148	2,104		4,026	253	4,279
	NON-FEDERAL - Section 104	1,806	238	13	2,044	0.00	1,806	238	2,044	0	6.4	1,922	253	2,175
		2,104	0		2,104	0.00	2,104	0	2,104	2,104	0	2,104	0	2,104
31	CONSTRUCTION MANAG'NT	1,204	319	26	1,523	0.00	1,204	319	1,523	0	9.9	1,323	351	1,674
TOTAL FEDERAL COSTS		\$20,310	\$4,561		\$24,871		\$20,310	\$4,561	\$24,871	\$2,104		\$21,161	\$4,771	\$25,932
NON-FEDERAL COSTS														
1	LANDS AND DAMAGES	2,257	1,336	63	3,593	0.00	2,257	1,336	3,593	141	3	2,324	1,378	3,702
2	RELOCATIONS	2,501	667	27	3,168	0.00	2,501	667	3,168	0	4	2,602	694	3,296
	SECTION 104	2,104	0		2,104		2,104	0	2,104	2,104		2,104	0	2,104
	30 PED	2,104	0		2,104		2,104	0	2,104	2,104	0	2,104	0	2,104
30	PLAN/ENGINEERING/DESIGN	306	80	27	386	0.00	306	80	386	6	2.6	314	82	396
31	CONSTRUCTION MANAG'NT	200	53	27	253	0.00	200	53	253	0	4	207	56	263
TOTAL NON-FEDERAL COSTS		\$7,368	\$2,136		\$9,504		\$7,368	\$2,136	\$9,504	\$2,251		\$7,551	\$2,210	\$9,761
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach I		\$25,574	\$6,697		\$32,271		\$25,574	\$6,697	\$32,271	\$2,251		\$26,608	\$6,981	\$33,589

- GENERAL NOTES**
- Cultural Resources Preservation costs associated with mitigation and/or data recovery up to one percent of the total Federal cost are not subject to cost sharing.
 - Federal administrative costs for non-Federal land acquisition.
 - The Fully Funded cost estimate was prepared in compliance with OMB INDEXES EC-11-2-199, published on MAR. 31, 2010.
 - 01 Account for Land and Damages cost are from Real Estates.
 - Fully Funded Estimate was supported using Project Cost Estimate (PCE) spreadsheet.
 - 30 Account Planning, Engineering and Design and 31 Account Construction Management cost was provided by its respective organizations.
 - Federal 30 Account Planning, Engineering sunk cost to date is \$5,090,000.
 - Section 104 Sunk cost to date is \$307,343,000.
 - Total Sunk Cost to date is \$312,433,000

CONTINGENCY RATIONALE
 (A) CONTINGENCIES USED WAS DERIVED BY THE COST RISK ANALYSIS PROCESS AND IS BASED ON A 80% CONFIDENCE LEVEL. NED RISK DATA WAS ABSTRACTED FROM THE LPP RISK MODEL. IT WAS ASSUMED THAT THE ANY RISK ASSOCIATED WITH THE LPP PLAN WOULD BE SIMILAIR TO THE NED PLAN.

 CHIEF, COST ENGINEERING
 CHIEF, REAL ESTATE
 PROJECT MANAGER

The estimate was prepared in accordance with current guidance. The estimate has undergone an independent technical review, and that all issues that may have been identified in the independent technical review have been resolved.

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

8/26/2010

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE POST AUTHORIZATION CHANGE REPORT, LPP PLAN
PROJECT: NATOMAS PACR
LOCATION: CALIFORNIA
U. S. ARMY CORPS OF ENGINEER, SACRAMENTO DISTRICT
P.O.C.: JOE W. YEE, CHIEF, COST ENGINEERING SECTION

Current MCACES Estimate Prepared: 16-Aug-2010
Effective Price Level (EPL): 1-Oct-2010

ACCOUNT NO. FEATURE DESCRIPTION COST (\$K) CNTG (\$K) CNTG (%) TOTAL (\$K) OMB COST (%) PRICE LEVEL: 1-Oct-2010 SUNK COST (\$K) OMB MIDPT(%) COST (\$K) CNTG (%) FULLY FUNDED (\$K) FULLY FUNDED (\$K)

Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.

Main data table with columns for account numbers, feature descriptions, and various cost metrics (Cost, CNTG, Total, OMB, Sunk Cost, etc.) across different project categories like FISH & WILDLIFE FACILITIES, VEEVES & FLOODWALLS, etc.

******CONTRACT COST SUMMARY(CONT'D)******

Current MCACES Estimate Prepared: 16-Aug-2010

Effective Price Level (EPL): 1-Oct-2010

ACCOUNT NO. FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	AUTHORIZE/BUDGET PRICE LEVEL: 1-Oct-2010			FULLY FUNDED ESTIMATE... (3.....)				
					OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	SUNK COST (\$K)	OMB MIDPT(%)	COST (\$K)	CNTG (\$K)	FULLY FUNDED (\$K)

Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.

NON-FEDERAL COSTS					Contingency Applied To Remaining Cost Only				Sunk Cost Price Level (EPL): 1-Oct-2010				
1 LANDS AND DAMAGES	11,207	3,974	43	15,181	0.00	11,207	3,974	15,181	1,998	7.4	11,991	4,312	16,303
2 RELOCATIONS	10,585	2,566	47	13,151	0.00	10,585	2,566	13,151	5,092	5.8	11,105	2,809	13,914
SECTION 104 - NED	82,460	0		82,460		82,460	0	82,460	82,460		82,460	0	82,460
30 PLAN/ENGINEERING/DESIGN	4,555	308	47	4,863	0.00	4,555	308	4,863	3,896	1.6	4,608	333	4,941
31 CONSTRUCTION MANAGE'MT	470	205	47	675	0.00	470	205	675	30	9	511	225	736
SUBTOTAL NON-FEDERAL (INCLUDES FED IRRIGATION SHARE)	109,277	7,053		116,330		109,277	7,053	116,330	93,476		110,675	7,679	118,354
NON-FEDERAL CONTRIBUTION (+) Additional Cost Above NED	3,971 3,971	0 0		3,971 3,971		3,971 3,971	0 0	3,971 3,971	3,971 3,971		3,971 3,971	0 0	3,971 3,971
TOTAL NON-FEDERAL COSTS	\$113,248	\$7,053		\$120,301		\$113,248	\$7,053	\$120,301	\$97,447		\$114,646	\$7,679	\$122,325
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach C	\$134,575	\$14,959		\$149,534		\$134,575	\$14,959	\$149,534	\$98,252		\$138,397	\$16,457	\$154,854
Reach D													
FEDERAL COSTS													
11 LEVEES & FLOODWALLS FEDERAL	41,814	1,080		42,894	0.00	41,814	1,080	42,894	39,341		42,050	1,184	43,234
NON FEDERAL - Section 104	2,473	1,080	44	3,553	0.00	2,473	1,080	3,553	0	9.6	2,709	1,184	3,893
	39,341	0		39,341	0.00	39,341	0	39,341	39,341	0	39,341	0	39,341
13 PUMPING PLANT	2,820	1,387	49	4,207	0.00	2,820	1,387	4,207	0	9.6	3,089	1,520	4,609
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS	44,634	2,467		47,101		44,634	2,467	47,101	39,341		45,139	2,704	47,843
1 LANDS & DAMAGES, Admin. (1)	85	13	15	98	0.00	85	13	98	0	22	104	16	120
1 LANDS & DAMAGES, Real Estate	1,580	932	59	2,512	0.00	1,580	932	2,512	0	8.5	1,714	1,012	2,726
30 PLAN/ENGINEERING/DESIGN FEDERAL	10,746	148		10,894		10,746	148	10,894	9,688		10,973	180	11,153
NON FEDERAL - Section 104	1,944	148	14	2,092	0.00	1,944	148	2,092	886	12	2,171	180	2,351
	8,802	0		8,802	0.00	8,802	0	8,802	8,802	0	8,802	0	8,802
31 CONSTRUCTION MANAGE'MT FEDERAL	47,940	198		48,138	0.00	47,940	198	48,138	47,517		48,047	249	48,296
NON FEDERAL - Section 104	423	198	47	621	0.00	423	198	621	0	25	530	249	779
	47,517	0		47,517	0.00	47,517	0	47,517	47,517	0	47,517	0	47,517
SUBTOTAL FEDERAL & NON-FEDERAL CONTRIBUTION	104,985	3,758		108,743		104,985	3,758	108,743	96,546		105,977	4,161	110,138
NON-FEDERAL CONTRIBUTION(-)	4,639	106		4,745		4,639	106	4,745	4,374		4,670	120	4,790
TOTAL FEDERAL NED COSTS	\$100,346	\$3,652		\$103,998		\$100,346	\$3,652	\$103,998	\$92,172		\$101,307	\$4,041	\$105,348
NON-FEDERAL COSTS													
1 LANDS AND DAMAGES	3,633	1,532	59	5,165	0.00	3,633	1,532	5,165	1,021	6.8	3,856	1,662	5,518
2 RELOCATIONS	10,369	3,531	47	13,900	0.00	10,369	3,531	13,900	2,823	7.6	11,091	3,869	14,960
SECTION 104 - NED	91,286	0		91,286		91,286	0	91,286	91,286		91,286	0	91,286
30 PLAN/ENGINEERING/DESIGN	1,080	377	47	1,457	0.00	1,080	377	1,457	272	5.1	1,130	401	1,531
31 CONSTRUCTION MANAGE'MT	538	252	47	790	0.00	538	252	790	0	9.6	590	276	866
SUBTOTAL NON-FEDERAL (INCLUDES FED IRRIGATION SHARE)	106,906	5,692		112,598		106,906	5,692	112,598	95,402		107,953	6,208	114,161
NON-FEDERAL CONTRIBUTION (+) Additional Cost Above NED	4,639 4,639	106 106		4,745 4,745		4,639 4,639	106 106	4,745 4,745	4,374 4,374		4,670 4,670	120 120	4,790 4,790
TOTAL NON-FEDERAL COSTS	\$111,545	\$5,798		\$117,343		\$111,545	\$5,798	\$117,343	\$99,776		\$112,623	\$6,328	\$118,951
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach D	\$120,605	\$9,450		\$130,055		\$120,605	\$9,450	\$130,055	\$100,662		\$122,644	\$10,369	\$133,013
Reach E													
FEDERAL COSTS													
6 FISH & WILDLIFE FACILITIES	4,907	1,810	37	6,717	0.00	4,907	1,810	6,717	0	7.7	5283	1950	7233
11 LEVEES & FLOODWALLS	33,402	12,879	39	46,281	0.00	33,402	12,879	46,281	0	7.7	35967	13868	49835
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS	38,309	14,689		52,998		38,309	14,689	52,998	0		41250	15818	57068
1 LANDS & DAMAGES, Admin. (1)	346	51	15	397	0.00	346	51	397	0	17	405	60	465
1 LANDS & DAMAGES, Real Estate	790	284	36	1,074	0.00	790	284	1,074	0	6.7	843	303	1,146
30 PLAN/ENGINEERING/DESIGN FEDERAL	8,579	874		9,453	0.00	8,579	874	9,453	3,982		9325	1015	10340
NON FEDERAL - Section 104	5,129	874	19	6,003	0.00	5,129	874	6,003	532	15	5875	1015	6890
	3,450	0		3,450	0.00	3,450	0	3,450	3,450	0	3,450	0	3,450

******CONTRACT COST SUMMARY(CONT'D)******

Current MCACES Estimate Prepared: 16-Aug-2010				AUTHORIZE/BUDGET			FULLY FUNDED ESTIMATE.... (3.....)						
Effective Price Level (EPL): 1-Oct-2010				PRICE LEVEL: 1-Oct-2010										
ACCOUNT	COST	CNTG	CNTG	TOTAL	OMB	COST	CNTG	TOTAL	SUNK	OMB	COST	CNTG	FULLY	
NO. FEATURE DESCRIPTION	(\$K)	(\$K)	(%)	(\$K)	(%)	(\$K)	(\$K)	(\$K)	(\$K)	MIDPT(%)	(\$K)	(\$K)	(\$K)	
Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.														
	Contingency Applied To Remaining Cost Only					Sunk Cost Price Level (EPL): 1-Oct-2010								
31 CONSTRUCTION MANAGE'MT	3,065	1,175	38	4,240	0.00	3,065	1,175	4,240	0	20	3680	1410	5090	
SUBTOTAL FEDERAL & NON-FEDERAL CONTRIBUTION	51,089	17,073		68,162		51,089	17,073	68,162	3,982		55503	18606	74109	
NON-FEDERAL CONTRIBUTION(-)	3,400	1,296		4,696		3,400	1,296	4,696	0		3721	1410	5131	
TOTAL FEDERAL NED COSTS	\$47,689	\$15,777		\$63,466		\$47,689	\$15,777	\$63,466	\$3,982		\$51,782	\$17,196	\$68,978	
NON-FEDERAL COSTS														
1 LANDS AND DAMAGES	25,076	8,175	33	33,251	0.00	25,076	8,175	33,251	378	6.6	26,730	8,722	35,452	
2 RELOCATIONS	11,433	4,617	40	16,050	0.00	11,433	4,617	16,050	0	7.7	12,312	4,971	17,283	
SECTION 104 - NED	3,450	0		3,450		3,450	0	3,450	3,450		3,450	0	3,450	
30 PLAN/ENGINEERING/DESIGN	1,715	693	40	2,408	0.00	1,715	693	2,408	0	6.3	1,824	736	2,560	
31 CONSTRUCTION MANAGE'MT	915	369	40	1,284	0.00	915	369	1,284	0	7.7	986	397	1,383	
SUBTOTAL NON-FEDERAL (INCLUDES FED IRRIGATION SHARE)	42,589	13,854		56,443		42,589	13,854	56,443	3,828		45,302	14,826	60,128	
NON-FEDERAL CONTRIBUTION (+)	3,400	1,296		4,696		3,400	1,296	4,696	0		3,721	1,410	5,131	
Additional Cost Above NED	3,400	1,296		4,696		3,400	1,296	4,696	0		3,721	1,410	5,131	
TOTAL NON-FEDERAL COSTS	\$45,989	\$15,150		\$61,139		\$45,989	\$15,150	\$61,139	\$3,828		\$49,023	\$16,236	\$65,259	
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach E	\$90,228	\$30,927		\$121,155		\$90,228	\$30,927	\$121,155	\$4,360		\$97,355	\$33,432	\$130,787	
Reach F														
FEDERAL COSTS														
11 LEVEES & FLOODWALLS	36,823	11,766	32	48,589	0.00	36,823	11,766	48,589	0	5.8	38,966	12,450	51,416	
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS	36,823	11,766		48,589		36,823	11,766	48,589	0		38,966	12,450	51,416	
1 LANDS & DAMAGES, Admin. (1)	279	42	15	321	0.00	279	42	321	0	12	314	47	361	
30 PLAN/ENGINEERING/DESIGN FEDERAL	7,159	602		7,761	0.00	7,159	602	7,761	2,740		7,652	669	8,321	
NON FEDERAL - Section 104	4,419	602	14	5,021	0.00	4,419	602	5,021	0	11	4,912	669	5,581	
	2,740	0		2,740	0.00	2,740	0	2,740	2,740	0	2,740	0	2,740	
31 CONSTRUCTION MANAGE'MT	2,946	941	32	3,887	0.00	2,946	941	3,887	0	15	3,382	1,081	4,463	
SUBTOTAL FEDERAL & NON-FEDERAL CONTRIBUTION	47,207	13,351		60,558		47,207	13,351	60,558	2,740		50,314	14,247	64,561	
NON-FEDERAL CONTRIBUTION(-)	1,894	570		2,464		1,894	570	2,464	0		2,026	608	2,634	
TOTAL FEDERAL NED COSTS	\$45,313	\$12,781		\$58,094		\$45,313	\$12,781	\$58,094	\$2,740		\$48,288	\$13,639	\$61,927	
NON-FEDERAL COSTS														
1 LANDS AND DAMAGES	9,220	4,547	50	13,767	0.00	9,220	4,547	13,767	99	4.9	9,667	4,771	14,438	
2 RELOCATIONS	11,584	3,835	33	15,419	0.00	11,584	3,835	15,419	0	5.8	12,258	4,058	16,316	
SECTION 104 - NED	2,740	0		2,740		2,740	0	2,740	2,740		2,740	0	2,740	
30 PLAN/ENGINEERING/DESIGN	1,390	460	33	1,850	0.00	1,390	460	1,850	0	4.5	1,452	481	1,933	
31 CONSTRUCTION MANAGE'MT	927	307	33	1,234	0.00	927	307	1,234	0	5.8	981	325	1,306	
SUBTOTAL NON-FEDERAL (INCLUDES FED IRRIGATION SHARE)	25,861	9,149		35,010		25,861	9,149	35,010	2,839		27,098	9,635	36,733	
NON-FEDERAL CONTRIBUTION (+)	1,894	570		2,464		1,894	570	2,464	0		2,026	608	2,634	
Additional Cost Above NED	1,894	570		2,464		1,894	570	2,464	0		2,026	608	2,634	
TOTAL NON-FEDERAL COSTS	\$27,755	\$9,719		\$37,474		\$27,755	\$9,719	\$37,474	\$2,839		\$29,124	\$10,243	\$39,367	
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach F	\$70,328	\$22,500		\$92,828		\$70,328	\$22,500	\$92,828	\$2,839		\$74,672	\$23,882	\$98,554	
Reach G														
FEDERAL COSTS														
11 LEVEES & FLOODWALLS	26,789	9,974	37	36,763	0.00	26,789	9,974	36,763	0	7.6	28,825	10,732	39,557	
13 PUMPING PLANT	2,078	745	36	2,823	0.00	2,078	745	2,823	0	7.6	2,236	802	3,038	
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS	28,867	10,719		39,586		28,867	10,719	39,586	0		31,061	11,534	42,595	
1 LANDS & DAMAGES, Admin. (1)	210	31	15	241	0.00	210	31	241	0	17	246	37	283	
30 PLAN/ENGINEERING/DESIGN	3,215	449	14	3,664	0.00	3,215	449	3,664	0	16	3,730	520	4,250	

******CONTRACT COST SUMMARY(CONT'D)******

Current MCACES Estimate Prepared: 16-Aug-2010

Effective Price Level (EPL): 1-Oct-2010

ACCOUNT NO. FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	AUTHORIZE/BUDGET PRICE LEVEL: 1-Oct-2010			FULLY FUNDED ESTIMATE.... (3.....)				
					OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	SUNK COST (\$K)	OMB MIDPT(%)	COST (\$K)	CNTG (\$K)	FULLY FUNDED (\$K)
Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.													
31 CONSTRUCTION MANAGE'MT	Contingency Applied To Remaining Cost Only				0.00	2,143	796	2,939	Sunk Cost Price Level (EPL): 1-Oct-2010				
	2,143	796	37	2,939					0	20	2,567	954	3,521
SUBTOTAL FEDERAL & NON-FEDERAL CONTRIBUTION	34,435	11,995		46,430		34,435	11,995	46,430	0		37,604	13,045	50,649
NON-FEDERAL CONTRIBUTION(-)	1,496	563		2,059		1,496	563	2,059	0		1,634	613	2,247
TOTAL FEDERAL NED COSTS	\$32,939	\$11,432		\$44,371		\$32,939	\$11,432	\$44,371	\$0		\$35,970	\$12,432	\$48,402
NON-FEDERAL COSTS													
1 LANDS AND DAMAGES	13,118	5,222	40	18,340	0.00	13,118	5,222	18,340	0	6.7	13,996	5,572	19,568
2 RELOCATIONS	9,659	3,631	38	13,290	0.00	9,659	3,631	13,290	0	7.6	10,393	3,907	14,300
30 PLAN/ENGINEERING/DESIGN	1,457	544	38	2,001	0.00	1,457	544	2,001	8	6.2	1,548	578	2,126
31 CONSTRUCTION MANAGE'MT	966	363	38	1,329	0.00	966	363	1,329	0	7.6	1,039	391	1,430
SUBTOTAL NON-FEDERAL (INCLUDES FED IRRIGATION SHARE)	25,200	9,760		34,960		25,200	9,760	34,960	8		26,976	10,448	37,424
NON-FEDERAL CONTRIBUTION (+) Additional Cost Above NED	1,496	563		2,059		1,496	563	2,059	0		1,634	613	2,247
	1,496	563		2,059		1,496	563	2,059	0		1,634	613	2,247
TOTAL NON-FEDERAL COSTS	\$26,696	\$10,323		\$37,019		\$26,696	\$10,323	\$37,019	\$8		\$28,610	\$11,061	\$39,671
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach G	\$59,635	\$21,755		\$81,390		\$59,635	\$21,755	\$81,390	\$8		\$64,580	\$23,493	\$88,073
Reach H													
FEDERAL COSTS													
6 FISH & WILDLIFE FACILITIES	6,480	1,869	29	8,349	0.00	6,480	1,869	8,349	0	5.9	6,865	1,980	8,845
11 LEVEES & FLOODWALLS	30,435	9,966	33	40,401	0.00	30,435	9,966	40,401	0	5.9	32,242	10,558	42,800
13 PUMPING PLANT	2,227	654	29	2,881	0.00	2,227	654	2,881	0	5.9	2,359	693	3,052
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS	39,142	12,489		51,631		39,142	12,489	51,631	0		41,466	13,231	54,697
1 LANDS & DAMAGES, Admin. (1)	785	117	15	902	0.00	785	117	902	0	12	882	131	1,013
1 LANDS & DAMAGES, Real Estate	1,283	309	24	1,592	0.00	1,283	309	1,592	0	4.9	1,346	324	1,670
30 PLAN/ENGINEERING/DESIGN FEDERAL	8,845	637		9,482		8,845	637	9,482	4,148		9,384	710	10,094
FEDERAL	5,422	637	14	6,059	0.00	5,422	637	6,059	725	10	5,961	710	6,671
NON FEDERAL - Section 104	3,423	0		3,423	0.00	3,423	0	3,423	3,423	0	3,423	0	3,423
31 CONSTRUCTION MANAGE'MT	3,131	1,000	32	4,131	0.00	3,131	1,000	4,131	0	15	3,604	1,152	4,756
TOTAL FEDERAL NED COSTS	\$53,186	\$14,552		\$67,738		\$53,186	\$14,552	\$67,738	\$4,148		\$56,682	\$15,548	\$72,230
NON-FEDERAL COSTS													
1 LANDS AND DAMAGES	26,642	5,363	20	32,005	0.00	26,642	5,363	32,005	215	4.9	27,940	5,626	33,566
2 RELOCATIONS	9,537	3,459	36	12,996	0.00	9,537	3,459	12,996	0	5.9	10,103	3,665	13,768
SECTION 104 - NED	3,423	0		3,423		3,423	0	3,423	3,423		3,423	0	3,423
30 PLAN/ENGINEERING/DESIGN	1,149	415	36	1,564	0.00	1,149	415	1,564	5	4.6	1,202	434	1,636
31 CONSTRUCTION MANAGE'MT	763	277	36	1,040	0.00	763	277	1,040	0	6	809	293	1,102
TOTAL NON-FEDERAL COSTS	\$41,514	\$9,514		\$51,028		\$41,514	\$9,514	\$51,028	\$3,643		\$43,477	\$10,018	\$53,495
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach H	\$91,277	\$24,066		\$115,343		\$91,277	\$24,066	\$115,343	\$4,368		\$96,736	\$25,566	\$122,302
Reach I													
FEDERAL COSTS													
11 LEVEES & FLOODWALLS	13,859	3,668	26	17,527	0.00	13,859	3,668	17,527	0	4	14,417	3,816	18,233
13 PUMPING PLANT	1,195	315	26	1,510	0.00	1,195	315	1,510	0	4	1,243	328	1,571
SUBTOTAL FEDERAL & NON-FEDERAL CONSTRUCTION COSTS	15,054	3,983		19,037		15,054	3,983	19,037	0		15,660	4,144	19,804
1 LANDS & DAMAGES, Admin. (1)	142	21	15	163	0.00	142	21	163	0	7.4	152	23	175
30 PLAN/ENGINEERING/DESIGN FEDERAL	3,910	238		4,148		3,910	238	4,148	2,104		4,026	253	4,279
FEDERAL	1,806	238	13	2,044	0.00	1,806	238	2,044	0	6.4	1,922	253	2,175
NON FEDERAL - Section 104	2,104	0		2,104	0.00	2,104	0	2,104	2,104	0	2,104	0	2,104
31 CONSTRUCTION MANAGE'MT	1,204	319	26	1,523	0.00	1,204	319	1,523	0	9.9	1,323	351	1,674
TOTAL FEDERAL NED COSTS	\$20,310	\$4,561		\$24,871		\$20,310	\$4,561	\$24,871	\$2,104		\$21,161	\$4,771	\$25,932
NON-FEDERAL COSTS													

******CONTRACT COST SUMMARY(CONT'D)******

Current MCACES Estimate Prepared: 16-Aug-2010
 Effective Price Level (EPL): 1-Oct-2010

AUTHORIZE/BUDGET
 PRICE LEVEL: 1-Oct-2010

.....FULLY FUNDED ESTIMATE... (3.....)

ACCOUNT NO. FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	AUTHORIZE/BUDGET PRICE LEVEL: 1-Oct-2010		FULLY FUNDED ESTIMATE... (3.....)				
						COST (\$K)	CNTG (\$K)	TOTAL (\$K)	SUNK COST (\$K)	OMB MIDPT(%)	COST (\$K)	CNTG (\$K)	FULLY FUNDED (\$K)
Index Codes: 0 - no esc. applied; A - Administration; C - Combined indexes; All other codes used coincides with the Code of Accounts.													
	Contingency Applied To Remaining Cost Only								Sunk Cost Price Level (EPL): 1-Oct-2010				
1 LANDS AND DAMAGES	2,257	1,336	63	3,593	0.00	2,257	1,336	3,593	141	3	2,324	1,378	3,702
2 RELOCATIONS	2,501	667	27	3,168	0.00	2,501	667	3,168	0	4	2,602	694	3,296
SECTION 104 - NED	2,104	0		2,104		2,104	0	2,104	2,104		2,104	0	2,104
30 PLAN/ENGINEERING/DESIGN	306	80	27	386	0.00	306	80	386	6	2.6	314	82	396
31 CONSTRUCTION MANAGE'MT	200	53	27	253	0.00	200	53	253	0	4	207	56	263
TOTAL NON-FEDERAL COSTS	\$7,368	\$2,136		\$9,504		\$7,368	\$2,136	\$9,504	\$2,251		\$7,551	\$2,210	\$9,761
TOTAL FEDERAL AND NON-FEDERAL COSTS, Reach I	\$25,574	\$6,697		\$32,271		\$25,574	\$6,697	\$32,271	\$2,251		\$26,608	\$6,981	\$33,589

CWE

The project area is comprised of nine reaches, designated A through I for economic evaluation and construction sequencing purposes. Costs for both the NED and locally preferred plan (LPP) have been developed. The Sacramento Area Flood Control Agency (SAFCA) has completed construction, or is in the process of doing so, much of the levee work in Reaches B, C & D (sans Pumping Station Modifications). These costs are shown as Section 104 work and include sunk costs for contracted work expected to be completed before 10/2010 and remaining work for ongoing projects SAFCA is providing for.

For the Locally Preferred Plan (LPP) or Early Implementation Plan (EIP), levees are raised to the 200 year water surface plus 3 ft (as determined by SAFCA) in areas where they are not already of sufficient height.

The National Economic Plan (NED), or Reduced Early Implementation Plan (REIP), does not involve raising the levees but does fix them in place and provide seepage control.

Work primarily involves increasing levee stability by increasing levee width and controlling seepage thru use of soil-bentonite slurry walls and in some cases, a seepage berm. A great deal of work is also required for many Pumping Stations/Plants and Private Irrigation Facilities where piping previously penetrated through the levee will now be relocated to pass above the nominal levee crown or 200 year water surface. Where this occurs, new pumps & motors must be provided. Where possible, a positive closure structures is placed in the levee instead of raising the pipes. In this case, the pumps do not need to be replaced. Many additional utility crossings (water, gas, electrical) of the levee also require relocating pipes/conduits.

Estimated by CESP-K-ED-SC

Designed by HDR & USACE (Sacramento District)

Prepared by Robert Vrchticky

Preparation Date 8/16/2010

Effective Date of Pricing 8/16/2010

Estimated Construction Time Days

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Project Notes..... vii

NED 1

R-A-NED Reach A - NED 1

11 Levees and Floodwalls..... 1

13 Pumping Plants..... 1

02 Relocations 1

R-B-NED Reach B - NED 1

06 Fish & Wildlife Facilities 1

06-104 Fish & Wildlife Facilities - Section 104..... 1

11 Levees & Floodwalls..... 1

11-104 Levees & Floodwalls - Section 104 1

13 Pumping Plants..... 1

02 Relocations 1

R-C-NED Reach C - NED..... 1

06 Fish & Wildlife Facilities 1

06-104 Fish & Wildlife Facilities - Section 104..... 1

11 Levees & Floodwalls..... 1

11-104 Levees & Floodwalls - Section 104 1

13 Pumping Plants	1
02 Relocations	1
R-D-NED Reach D - NED	2
11 Levees & Floodwalls	2
11-104 Levees & Floodwalls - Section 104	2
13 Pumping Plants	2
02 Relocations	2
R-E-NED Reach E - NED	2
06 Fish & Wildlife	2
11 Levees & Floodwalls	2
02 Relocations	2
R-F-NED Reach F - NED	2
11 Levees and Floodwalls	2
02 Relocations	2
R-G-NED Reach G - NED	2
11 Levees and Floodwalls	2
13 Pumping Plants	2
02 Relocations	2

R-H-NED Reach H - NED	2
06 Fish and Wildlife Facilities	2
11 Levees and Floodwalls	2
13 Pumping Plants	2
02 Relocations	2
R-I-NED Reach I - NED	3
11 Levees and Floodwalls	3
13 Pumping Plants	3
02 Relocations	3
LPP	4
R-A-LPP Reach A - LPP	4
11 Levees and Floodwalls	4
13 Pumping Plants	4
02 Relocations	4
R-B-LPP Reach B - LPP	4
06 Fish & Wildlife Facilities	4
06-104 Fish & Wildlife Facilities - Section 104	4
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11-104 Levees & Floodwalls - Section 104	4
13 Pumping Plants	4
02 Relocations	4
R-C-LPP Reach C - LPP	4
06 Fish & Wildlife Facilities	4
06-104 Fish & Wildlife Facilities - Section 104	4
11 Levees & Floodwalls	4
11-104 Levees & Floodwalls - Section 104	4
13 Pumping Plants	4
02 Relocations	4
R-D-LPP Reach D - LPP	5
11 Levees & Floodwalls	5
11-104 Levees & Floodwalls - Section 104	5
13 Pumping Plants	5
02 Relocations	5
R-E-LPP Reach E - LPP	5
06 Fish & Wildlife	5
11 Levees & Floodwalls	5

02 Relocations	5
R-F-LPP Reach F - LPP.....	5
11 Levees and Floodwalls.....	5
02 Relocations	5
R-G-LPP Reach G - LPP.....	5
11 Levees and Floodwalls.....	5
13 Pumping Plants.....	5
02 Relocations	5
R-H-LPP Reach H - LPP	5
06 Fish and Wildlife Facilities	5
11 Levees and Floodwalls.....	5
13 Pumping Plants.....	5
02 Relocations	5
R-I-LPP Reach I - LPP.....	6
11 Levees and Floodwalls.....	6
13 Pumping Plants.....	6
02 Relocations	6

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8/3/2010 Vrchticky File Location: CostEng on "Dolomite/Engineering/EDPublic"
F:\CivWorks\Projects\AmRiver - CommFeat\CWE&IGE-NatomasPACR
File Name: CWE-Natomas (6x10wk) "date of latest revision".mlp

BASIS OF DESIGN

This estimate is based on the draft report:
American River Common Features Project,
Natomas Post Authorization Change Report and Interim General Reevaluation Report
The type of solicitation is expected to be unrestricted IFB.

Note: Civil Design quantities are per three AE's (HDR, Wood Rodgers and Mead & Hunt) with spot checking by SPK. HDR also provided "bare cost" estimates for Pumping Plant modifications, Riverside Canal and well relocations.

PROJECT SCOPE/DESCRIPTION

The project area is comprised of nine reaches, designated A through I for economic evaluation and construction sequencing purposes. Costs for both the NED and locally preferred plan (LPP) have been developed. The Sacramento Area Flood Control Agency (SAFCA) has completed construction, or is in the process of doing so, much of the work in Reaches B, C & D (sans Pumping Station Modifications). These costs are shown as either sunk (omitted) for contracted work expected to be completed before 10/2010 or as Section 104 work for ongoing projects SAFCA is providing for.

The description of each reach, and typical work involved for each, is as follows:

Reach A: SREL from Interstate Highway 5 north to San Juan Road. (Adjacent levee, cutoff wall, Irrigation Canal, Pumping Plant Relocations (3) and Private Irrigation Facilities (1))

Reach B: SREL from San Juan Road north to Elverta Road. (Adjacent levee, cutoff wall, seepage berm, Irrigation/Drainage Canals (2), Pumping Plant Relocations (4))

Reach C: SREL from Elverta Road north to Sankey Road at the west end of the south levee of the NCC. (Adjacent levee, cutoff wall, seepage berm, Irrigation/Drainage Canals (2), Pumping Plant Relocations (2), Private Irrigation Facility)

Reach D: NCC south levee from Sankey Road north to Howsley Road. (Cutoff wall, Pumping Plant Relocations (3))

Reach E: PGCC west levee from Howsley Road north to Sankey Road. (Cutoff wall, Vinyl Sheet Pile, Private Irrigation Facilities (4))

Reach F: NEMDC west levee from Sankey Road south to Elverta Road. (Cutoff wall, Drained stability berm, flattened

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landside levee slope, Private Irrigation Facilities (5))

Reach G: NEMDC west levee from Elverta Road south to the pumping station just upstream of Dry Creek. (Cutoff wall, Pumping Plant Relocations, Private Irrigation Facilities (4))

Reach H: NEMDC west levee from the pumping station just upstream of Dry Creek south to Northgate Boulevard. (Cutoff wall, Jet Grouting, Pumping Plant Relocations (2))

Reach I: ARNL from Northgate Boulevard south to Interstate Highway 5. (Cutoff wall, Pumping Plant Relocations)

In addition, bridge work (removal & raise/replacement) is required for bridges in Reaches E-H

CONSTRUCTION SCHEDULE

Total Project Schedules including design, pre-construction, construction and post construction were developed using MS Project with construction durations based on those developed in MII. These were used to insure the project reaches could be completed within the construction windows and with the anticipated crews. It was determined that Reaches A, B, E, F, G & H will require two crews for slurry wall construction, excavation at the borrow areas and levee restoration. It was determined that Reach A would also require two construction seasons due to the long construction period for the deep slurry walls.

CONSTRUCTION WINDOWS

This estimate considers the construction work window for major construction activities to be May-Oct, April and November are available for mobilization and demobilization of equipment and non-flood protection items such as hydroseeding that do not change the effectiveness of flood control and drainage system.

OVERTIME

Overtime is included in this estimate. Assumption is 10 hr days, 6 days/week.

ACQUISITION PLAN

Construction Contracts are assumed to be design-bid-build, lowest competitive price.

CONTRACTING PLAN

The prime contractor is expected to be an earthwork contractor responsible for the general site work, borrow site excavation, levee degrading and rebuilding to the restored or new levee height.

Subcontractors are provided for two categories, miscellaneous/general and trucking:

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Miscellaneous/General Subcontractors are expected to be utilized for cutoff wall placement, pumping plant relocations, bridge relocations, jet grouting, sheet pile work, paving and hydroseeding.

PROJECT CONSTRUCTION

The project consists of 9 reaches (A-I) with multiple utility relocations for penetrations through the levees (primarily pumping plants and private irrigation facilities). Should the LPP ultimately be constructed, several bridges will also be raised.

SITE ACCESS

The project sites encompass the perimeter of the Natomas Basin in the Sacramento, CA area and are accessible by paved local roads. Certain reaches (B, C, D & E) are of close enough proximity to borrow areas that scrapers are a viable option for degrading of levees and levee restoration.

BORROW \ DISPOSAL AREAS

Many potential borrow areas have been identified in or very near to (such as the "Triangle") the Natomas basin and these are expected to provide the borrow required. Disposal of Debris is normal.

CONSTRUCTION METHODOLOGY

The construction methodologies are considered standard, except for deep (greater than 85 ft) cutoff wall excavation & placement. Below this depth a conventional long reach hydraulic excavator cannot be used. The method provided in the cost estimate opts for the contractor to utilize a hydraulic clamshell in excavating to the lower depths of the wall (the lower 18.5 ft for the extreme depth walls, 103.5 ft deep). The estimator realizes that production by the clamshell is much slower than that of the excavator but the extra depth is approximately 20% of that for the excavator and it is believed the 18.5 ft done by the clamshell will allow it to roughly keep up with the 85 ft done by the excavator. Other methods such as deep-soil-mixing are expected to be a contractor option. Deep soil mixing was examined but is expected to be slightly less cost effective than excavator/clamshell at this depth.

UNUSUAL CONDITIONS

No unusual conditions.

UNIQUE TECHNIQUES OF CONSTRUCTION

Proximity of existing bridge abutments or retaining walls require that jet grouting be performed in lieu of placing slurry

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cutoff walls in two short lengths of Reach H.

EQUIPMENT AND LABOR AVAILABILITY & DISTANCE TRAVELED

In an urban area such as Sacramento, equipment and labor is readily available within a 100 mile radius of the site.

ENVIRONMENTAL CONCERNS

Environment protection requires consideration of air, water, and land, and involves noise, solid-waste management and management of other pollutants. In order to prevent or provide for abatement and control of any environmental pollution arising from the work activities, the Contractor and his subcontractors in the performance of this contract, shall comply with all applicable Federal, State, and local laws, and regulations concerning environmental pollution control and abatement. The Contractor shall use best management practices at all times to minimize the potential for environmental impacts. A running 2% markup on construction equipment is provided to account for air quality considerations.

LABOR RATES, EQUIPMENT RATES, MATERIAL COSTS & SALES TAX

This estimate meets Davis Bacon wage rates for Davis Bacon wage determinations for the state of California, General Decision Numbers: CA 20100003 03/12/2010, CA 20100006 03/12/2010, CA 20100009 03/12/2010 and CA 20100026 03/12/2010.

Equipment unit costs were obtained from Quotes or verbal/telephone conversations with Contractors performing like or similar work and the MCACES Equipment Library.

Material prices were obtained from Quotes, supply catalogs, previous similar estimates, and the MCACES Cost Book.

Sales tax is applied at 8.75%.

CONTRACTOR MARKUPS

Profit is included for the prime contractor (8.48% based on PWG). Home Office Overhead is considered to be 7% for these relatively large projects. Job/Field Office Overhead (JOOH) is set at 10% for all reaches except Reach I, where it is set at 23%. Small Tool Markup is set at a running 2% of Labor costs. Bond is set at 0.7%.

Initially, JOOH was calculated independently for each reach (based on the developed construction schedule) with Small Tools set at 2% of Prime Contractor Labor. It is considered very likely however, that the contractors will be given the full

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construction season to complete the work (2 seasons in the case of Reach A). Reaches A-H typically showed a JOOH in the 8-11% range, with an average of about 9.5%. 10% was therefore chosen to be used uniformly in those reaches. Reach I has a somewhat higher JOOH due to a shorter calculated construction duration extended to allow the full construction season.

Likewise, bond was initially calculated based on Bond Class B. A weighted average was used for conformity of costs between like work in the NED vs the LPP.

Miscellaneous/General Subcontractors have profit set at of 10% , Home Office Overhead at 12% and Job Office Overhead at 15% (performs the majority of the cutoff wall/jet grouting/sheet pile/pumping plant/bridge work). Bond is set at 0.8%.

The Trucking/Hauling Subcontractors have profit set at of 10%, Home Office Overhead at 10% and Job Office Overhead at 5%. Bond again is set at 1.0%.

Productivity/Task Durations are based on production for 50 minutes/hr for meetings/breaks, accessing the working area/office trailer to get supplies.

Note: Gasoline and diesel fuel costs used in the estimate are the average costs in the Sacramento area as of July 2010. Off-road diesel costs are assumed at 90% of on-road.

BRIDGE RAISING COSTS

These were provided by Wood Rodgers an AE firm who provided the civil design for Reaches D-H. The costs are within reason when compared to "Comparative Bridge Costs" (January 2010) as set forth by Caltrans.

CWE

Prime Contractor Cost or Bid Cost w/o Esc Page 1

Description	Quantity	UOM	CostToPrime	JOOH_PRM	HOOH_PRM	Profit_PRM	Bond_PRM	ContractCost
NED	1.00	EA	363,735,688	26,413,228	19,227,092	24,922,705	2,231,758	455,633,744
R-A-NED Reach A - NED	1.00	EA	54,782,444	5,378,244	4,141,248	5,368,004	480,690	70,745,360
11 Levees and Floodwalls	1.00	EA	42,836,965	4,283,697	3,298,446	4,275,540	382,863	55,077,511
13 Pumping Plants	1.00	EA	3,747,294	374,729	288,542	374,016	33,492	4,818,074
02 Relocations	1.00	EA	8,198,184	719,818	554,260	718,448	64,335	10,849,776
R-B-NED Reach B - NED	1.00	EA	79,114,346	3,519,066	2,709,681	3,512,366	314,522	98,144,479
06 Fish & Wildlife Facilities	1.00	EA	0	0	0	0	0	1,635,000
06-104 Fish & Wildlife Facilities - Section 104	1.00	EA	57,771	0	0	0	0	227,262
11 Levees & Floodwalls	1.00	EA	15,746,711	1,574,671	1,212,497	1,571,673	140,739	20,246,290
11-104 Levees & Floodwalls - Section 104	1.00	EA	36,951,576	0	0	0	0	43,030,812
13 Pumping Plants	1.00	EA	10,764,869	1,076,487	828,895	1,074,437	96,213	13,840,901
02 Relocations	1.00	EA	15,593,420	867,908	668,289	866,256	77,571	19,164,215
R-C-NED Reach C - NED	1.00	EA	39,719,073	1,557,551	1,199,314	1,554,585	139,209	48,587,363
06 Fish & Wildlife Facilities	1.00	EA	0	0	0	0	0	225,000
06-104 Fish & Wildlife Facilities - Section 104	1.00	EA	58,620	0	0	0	0	1,700,802
11 Levees & Floodwalls	1.00	EA	505,949	50,595	38,958	50,499	4,522	650,522
11-104 Levees & Floodwalls - Section 104	1.00	EA	19,382,393	0	0	0	0	21,320,632
13 Pumping Plants	1.00	EA	11,717,469	1,171,747	902,245	1,169,516	104,727	15,065,703
02 Relocations	1.00	EA	8,054,643	335,209	258,111	334,571	29,960	9,624,704

CWE

Prime Contractor Cost or Bid Cost w/o Esc Page 2

Description	Quantity	UOM	CostToPrime	JOOH_PRM	HOOH_PRM	Profit_PRM	Bond_PRM	ContractCost
R-D-NED Reach D - NED	1.00	EA	42,845,481	982,419	756,462	980,548	87,805	48,954,845
11 Levees & Floodwalls	1.00	EA	1,761,281	176,128	135,619	175,793	15,742	2,264,562
11-104 Levees & Floodwalls - Section 104	1.00	EA	31,787,966	0	0	0	0	34,966,763
13 Pumping Plants	1.00	EA	2,193,513	219,351	168,901	218,934	19,605	2,820,304
02 Relocations	1.00	EA	7,102,721	586,939	451,943	585,822	52,459	8,903,217
R-E-NED Reach E - NED	1.00	EA	33,788,351	3,158,425	2,431,987	3,152,412	282,290	43,276,990
06 Fish & Wildlife	1.00	LS	3,867,988	201,389	155,069	201,005	17,999	4,906,977
11 Levees & Floodwalls	1.00	LS	23,774,870	2,377,487	1,830,665	2,372,960	212,492	30,568,474
02 Relocations	1.00	LS	6,145,493	579,549	446,253	578,446	51,798	7,801,539
R-F-NED Reach F - NED	1.00	EA	34,567,721	3,388,772	2,609,355	3,382,320	302,877	44,251,045
11 Levees and Floodwalls	1.00	EA	27,411,734	2,741,173	2,110,704	2,735,954	244,997	35,244,562
02 Relocations	1.00	LS	7,155,987	647,599	498,651	646,366	57,880	9,006,483
R-G-NED Reach G - NED	1.00	EA	27,661,797	2,715,180	2,090,688	2,710,010	242,674	35,420,349
11 Levees and Floodwalls	1.00	EA	19,870,168	1,987,017	1,530,003	1,983,233	177,593	25,548,014
13 Pumping Plants	1.00	EA	1,616,350	161,635	124,459	161,327	14,446	2,078,217
02 Relocations	1.00	LS	6,175,280	566,528	436,227	565,449	50,634	7,794,118
R-H-NED Reach H - NED	1.00	EA	39,046,654	2,905,311	2,237,090	2,899,780	259,667	48,699,264
06 Fish and Wildlife Facilities	1.00	LS	6,465,180	0	0	0	0	6,480,180
11 Levees and Floodwalls	1.00	EA	23,687,698	2,368,770	1,823,953	2,364,260	211,713	30,456,393
13 Pumping Plants	1.00	EA	1,732,066	173,207	133,369	172,877	15,481	2,227,000
02 Relocations	1.00	LS	7,161,710	363,335	279,768	362,643	32,474	9,535,692

CWE

Prime Contractor Cost or Bid Cost w/o Esc Page 3

Description	Quantity	UOM	CostToPrime	JOOH_PRM	HOOH_PRM	Profit_PRM	Bond_PRM	ContractCost
R-I-NED Reach I - NED	1.00	EA	12,209,820	2,808,259	1,051,266	1,362,680	122,024	17,554,049
11 Levees and Floodwalls	1.00	EA	9,639,973	2,217,194	830,002	1,075,872	96,341	13,859,381
13 Pumping Plants	1.00	EA	831,248	191,187	71,570	92,772	8,307	1,195,085
02 Relocations	1.00	LS	1,738,599	399,878	149,693	194,037	17,375	2,499,583

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Prime Contractor Cost or Bid Cost w/o Esc Page 4

Description	Quantity	UOM	CostToPrime	JOOH_PRM	HOOH_PRM	Profit_PRM	Bond_PRM	ContractCost
LPP	1.00	EA	394,836,881	26,914,655	19,613,191	25,423,178	2,276,574	493,796,239
R-A-LPP Reach A - LPP	1.00	EA	54,782,444	5,378,244	4,141,248	5,368,004	480,690	70,745,360
11 Levees and Floodwalls	1.00	EA	42,836,965	4,283,697	3,298,446	4,275,540	382,863	55,077,511
13 Pumping Plants	1.00	EA	3,747,294	374,729	288,542	374,016	33,492	4,818,074
02 Relocations	1.00	EA	8,198,184	719,818	554,260	718,448	64,335	10,849,776
R-B-LPP Reach B - LPP	1.00	EA	90,241,870	3,519,066	2,709,681	3,512,366	314,522	111,596,269
06 Fish & Wildlife Facilities	1.00	EA	0	0	0	0	0	1,635,000
06-104 Fish & Wildlife Facilities - Section 104	1.00	EA	57,771	0	0	0	0	227,262
11 Levees & Floodwalls	1.00	EA	15,746,711	1,574,671	1,212,497	1,571,673	140,739	20,246,290
11-104 Levees & Floodwalls - Section 104	1.00	EA	45,948,278	0	0	0	0	53,850,689
13 Pumping Plants	1.00	EA	10,764,869	1,076,487	828,895	1,074,437	96,213	13,840,901
02 Relocations	1.00	EA	17,724,241	867,908	668,289	866,256	77,571	21,796,128
R-C-LPP Reach C - LPP	1.00	EA	44,202,371	1,557,551	1,199,314	1,554,585	139,209	53,518,991
06 Fish & Wildlife Facilities	1.00	EA	0	0	0	0	0	225,000
06-104 Fish & Wildlife Facilities - Section 104	1.00	EA	58,620	0	0	0	0	1,700,802
11 Levees & Floodwalls	1.00	EA	505,949	50,595	38,958	50,499	4,522	650,522
11-104 Levees & Floodwalls - Section 104	1.00	EA	22,992,454	0	0	0	0	25,291,699
13 Pumping Plants	1.00	EA	11,717,469	1,171,747	902,245	1,169,516	104,727	15,065,703
02 Relocations	1.00	EA	8,927,880	335,209	258,111	334,571	29,960	10,585,264

CWE

Prime Contractor Cost or Bid Cost w/o Esc Page 5

Description	Quantity	UOM	CostToPrime	JOOH_PRM	HOOH_PRM	Profit_PRM	Bond_PRM	ContractCost
R-D-LPP Reach D - LPP	1.00	EA	48,317,112	998,624	768,940	996,723	89,254	55,003,740
11 Levees & Floodwalls	1.00	EA	1,923,334	192,333	148,097	191,967	17,190	2,472,921
11-104 Levees & Floodwalls - Section 104	1.00	EA	35,764,544	0	0	0	0	39,340,998
13 Pumping Plants	1.00	EA	2,193,513	219,351	168,901	218,934	19,605	2,820,304
02 Relocations	1.00	EA	8,435,721	586,939	451,943	585,822	52,459	10,369,517
R-E-LPP Reach E - LPP	1.00	EA	38,552,931	3,428,031	2,639,584	3,421,504	306,386	49,742,795
06 Fish & Wildlife	1.00	LS	3,867,988	201,389	155,069	201,005	17,999	4,906,977
11 Levees & Floodwalls	1.00	EA	25,978,727	2,597,873	2,000,362	2,592,926	232,189	33,402,077
02 Relocations	1.00	LS	8,706,215	628,769	484,152	627,572	56,197	11,433,741
R-F-LPP Reach F - LPP	1.00	EA	37,569,397	3,506,996	2,700,387	3,500,318	313,444	48,409,289
11 Levees and Floodwalls	1.00	EA	28,641,933	2,864,193	2,205,429	2,858,740	255,992	36,826,287
02 Relocations	1.00	LS	8,927,463	642,802	494,958	641,579	57,452	11,583,001
R-G-LPP Reach G - LPP	1.00	EA	29,914,283	2,812,573	2,165,681	2,807,218	251,378	38,526,483
11 Levees and Floodwalls	1.00	EA	20,836,074	2,083,607	1,604,378	2,079,640	186,226	26,789,925
13 Pumping Plants	1.00	EA	1,616,350	161,635	124,459	161,327	14,446	2,078,217
02 Relocations	1.00	LS	7,461,860	567,330	436,844	566,250	50,706	9,658,341
R-H-LPP Reach H - LPP	1.00	EA	39,046,654	2,905,311	2,237,090	2,899,780	259,667	48,699,264
06 Fish and Wildlife Facilities	1.00	LS	6,465,180	0	0	0	0	6,480,180
11 Levees and Floodwalls	1.00	EA	23,687,698	2,368,770	1,823,953	2,364,260	211,713	30,456,393
13 Pumping Plants	1.00	EA	1,732,066	173,207	133,369	172,877	15,481	2,227,000
02 Relocations	1.00	LS	7,161,710	363,335	279,768	362,643	32,474	9,535,692

CWE

Prime Contractor Cost or Bid Cost w/o Esc Page 6

Description	Quantity	UOM	CostToPrime	JOOH_PRM	HOOH_PRM	Profit_PRM	Bond_PRM	ContractCost
R-I-LPP Reach I - LPP	1.00	EA	12,209,820	2,808,259	1,051,266	1,362,680	122,024	17,554,049
11 Levees and Floodwalls	1.00	EA	9,639,973	2,217,194	830,002	1,075,872	96,341	13,859,381
13 Pumping Plants	1.00	EA	831,248	191,187	71,570	92,772	8,307	1,195,085
02 Relocations	1.00	LS	1,738,599	399,878	149,693	194,037	17,375	2,499,583

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
1	Natomas PACR (NED)	2608.75 days	Mon 8/2/10	Sat 4/1/17																				
2	Construction of Reaches A, B (remaining), H, I, E, F, G, and B,C,D (utility relocations)	2608.75 days	Mon 8/2/10	Sat 4/1/17																				
3	Construction Contract 1 - Reach A	1433.75 days	Mon 8/2/10	Tue 4/1/14			SREL Sta 742+60 to Sta 956+83 and Sta 0+00 to 20+50. Work involves levee improvements and/or																	
4	Design	390 days	Mon 8/2/10	Mon 8/1/11																				
5	Collect field explorations	90 days	Mon 8/2/10	Mon 10/25/10		6																		
6	Conduct geotechnical evaluation	90 days	Mon 10/25/10	Mon 1/17/11	5	7																		
7	Develop Basis of Design Report	30 days	Mon 1/17/11	Mon 2/14/11	6	8																		
8	Develop Plans & Specifications	180 days	Mon 2/14/11	Mon 8/1/11	7																			
9	Pre-Construction	96.25 days	Mon 10/3/11	Sat 12/31/11																				
10	Project Bid	41.25 days	Mon 10/3/11	Thu 11/10/11		11																		
11	Award Task Order	8.75 days	Thu 11/10/11	Fri 11/18/11	10	12																		
12	Construction Contract Awarded	0 days	Fri 11/18/11	Fri 11/18/11	11	13FS+6.25 days																		
13	Issue NTP	0 days	Thu 11/24/11	Thu 11/24/11	12FS+6.25 days	14FS+1.25 days																		
14	NTP Acknowledged	0 days	Fri 11/25/11	Fri 11/25/11	13FS+1.25 days	15																		
15	Pre-Con Meeting	1.25 days	Fri 11/25/11	Sat 11/26/11	14	16																		
16	Prepare Pre-Construction Submittals	28.75 days	Sat 11/26/11	Fri 12/23/11	15	17SS																		
17	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/26/11	Sat 12/31/11	16SS																			
18	Construction	605.69 days	Mon 4/2/12	Fri 10/18/13																				
19	Levees & Floodwalls	603.5 days	Mon 4/2/12	Wed 10/16/13																				
20	Levees	603.5 days	Mon 4/2/12	Wed 10/16/13																				
21	Season 1	241.25 days	Mon 4/2/12	Tue 11/13/12																				
22	Site Mobilization - Levees	18 days	Mon 4/2/12	Wed 4/18/12		23,74SS,127SS																		
23	Haul Roads & Drainage	6 days	Wed 4/18/12	Tue 4/24/12	22	24SS																		
24	SWPP Installation - Levees	5 days	Wed 4/18/12	Mon 4/23/12	23SS		full duration of levee constr																	
25	Clearing & Grubbing	3 days	Tue 5/1/12	Thu 5/3/12		26SS+2 days																		
26	Levee Stripping	12 days	Wed 5/2/12	Mon 5/14/12	25SS+2 days	35SS+2 days																		
27	Site Mobilization - Borrow Areas	18 days	Mon 4/2/12	Wed 4/18/12		28																		
28	Haul Roads & Drainage - Borrow Areas	6 days	Wed 4/18/12	Tue 4/24/12	27	29SS																		
29	SWPP Installation - Borrow Areas	2 days	Wed 4/18/12	Fri 4/20/12	28SS	30	full duration of borrow area use																	
30	Borrow Areas - Surface Layer Removal & Stockpile	13 days	Fri 4/20/12	Wed 5/2/12	29																			
31	Borrow Areas - Excavation & Hauling (to replace std depth CO Wall Waste)	28 days	Fri 5/4/12	Wed 5/30/12	35SS		assumes 2 crews used																	

CESPK **AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE** Fri 8/13/10

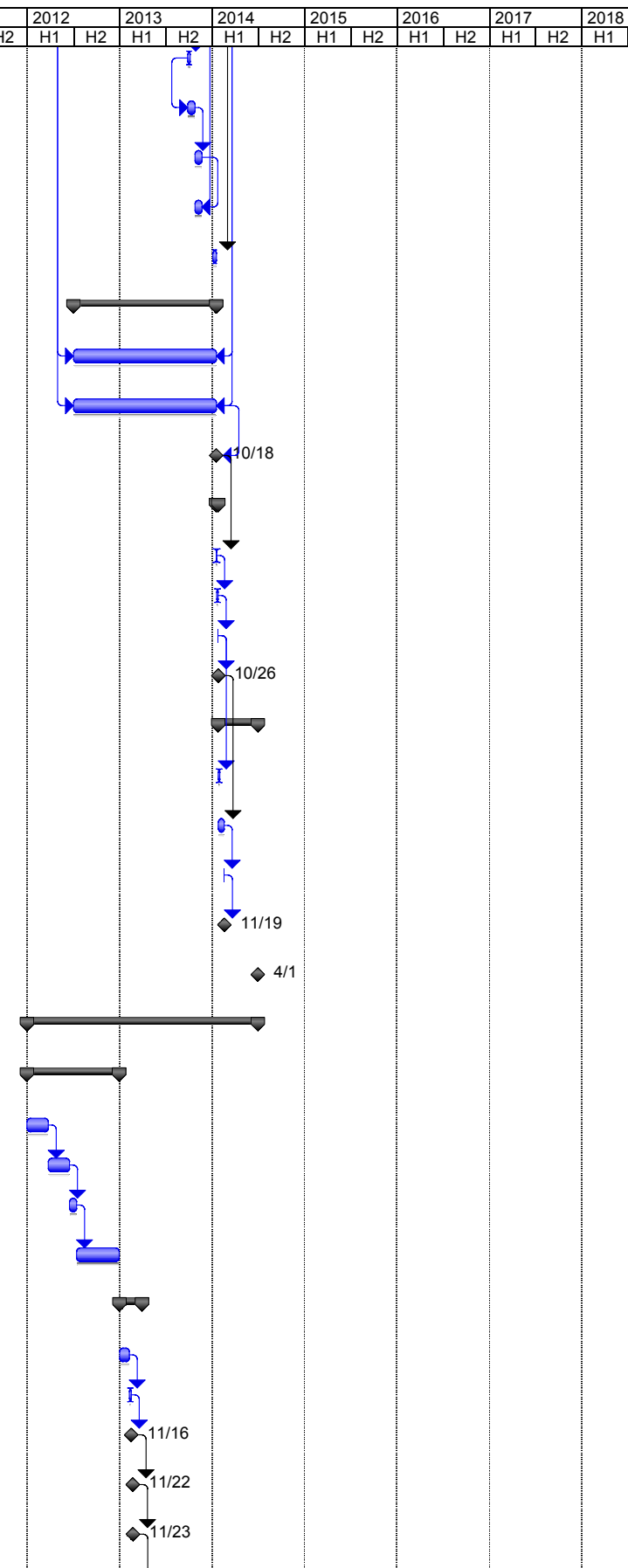
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
32	Borrow Areas - Excavation & Hauling (to replace deep CO Wall Waste)	115 days	Wed 5/30/12	Fri 9/14/12	36SS		assumes 2 crews used																	
33	Borrow Areas - Excavation & Hauling	143 days	Thu 5/24/12	Thu 10/4/12	37SS		assumes 2 crews used																	
34	Site Mobilization - Slurry Wall	15 days	Tue 4/17/12	Tue 5/1/12	35SS-18 days																			
35	Slurry Wall Construction (depth less than 75')	28 days	Fri 5/4/12	Wed 5/30/12	26SS+2 days	36,31SS,37SS+ days,34SS-18 days																		
36	Slurry Wall Construction (depth 75' or more)	115 days	Wed 5/30/12	Fri 9/14/12	35	38,32SS	Assumes 2 crews used																	
37	Select/Levee Fill & Random Fill	143 days	Thu 5/24/12	Thu 10/4/12	35SS+21 days	33SS,41,39FF+ days	assumes 2 crews used																	
38	Demob - Slurry Wall	12 days	Fri 9/14/12	Wed 9/26/12	36																			
39	Maintenance Road - ABC	3 days	Sat 10/6/12	Tue 10/9/12	37FF+5 days	40																		
40	Revegetation/Hydroseed	10 days	Tue 10/9/12	Thu 10/18/12	39																			
41	Surface Layer Restoration - Borrow Areas	15 days	Thu 10/4/12	Thu 10/18/12	37	42																		
42	Demob - Borrow Areas	6 days	Thu 10/18/12	Wed 10/24/12	41	43																		
43	Site Cleanup/Finish Work - Borrow Areas	5 days	Wed 10/24/12	Mon 10/29/12	42	44																		
44	Weather Delays	6 days	Mon 10/29/12	Sat 11/3/12	43	45																		
45	Demob - Levee Areas	5 days	Sat 11/3/12	Thu 11/8/12	44	46																		
46	Site Cleanup/Finish Work - Levee Areas	5 days	Thu 11/8/12	Tue 11/13/12	45																			
47	Season 2	213.5 days	Mon 4/1/13	Wed 10/16/13																				
48	Site Mobilization - Levees - Season 1	18 days	Mon 4/1/13	Wed 4/17/13		49																		
49	Haul Roads & Drainage	6 days	Wed 4/17/13	Tue 4/23/13	48	50SS																		
50	SWPP Installation - Levees	5 days	Wed 4/17/13	Mon 4/22/13	49SS		full duration of levee constr																	
51	Clearing & Grubbing	3 days	Wed 5/1/13	Fri 5/3/13		52SS+2 days																		
52	Levee Stripping	12 days	Thu 5/2/13	Tue 5/14/13	51SS+2 days	60SS+2 days																		
53	Site Mobilization - Borrow Areas	18 days	Mon 4/1/13	Wed 4/17/13		54																		
54	Haul Roads & Drainage - Borrow Areas	6 days	Wed 4/17/13	Tue 4/23/13	53	55SS																		
55	SWPP Installation - Borrow Areas	2 days	Wed 4/17/13	Fri 4/19/13	54SS	56	full duration of borrow area use																	
56	Borrow Areas - Surface Layer Removal & Stockpile	13 days	Fri 4/19/13	Wed 5/1/13	55																			
57	Borrow Areas - Excavation & Hauling (to replace deep CO Wall Waste)	115 days	Sat 5/4/13	Tue 8/20/13	60SS		assumes 2 crews used																	
58	Borrow Areas - Excavation & Hauling	115 days	Fri 5/24/13	Mon 9/9/13	61SS		assumes 2 crews used																	

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE												Fri 8/13/10										
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
59	Site Mobilization - Slurry Wall	15 days	Wed 4/17/13	Wed 5/1/13	60SS-18 days																			
60	Slurry Wall Construction (depth 75' or more)	115 days	Sat 5/4/13	Tue 8/20/13	52SS+2 days	57SS,62,61SS+Assumes 2 crews used days,59SS-18 days,101SS+20 days,110SS+45																		
61	Select/Levee Fill & Random Fill	115 days	Fri 5/24/13	Mon 9/9/13	60SS+21 days	58SS,65,63FF+assumes 2 crews used days																		
62	Demob - Slurry Wall	12 days	Tue 8/20/13	Fri 8/30/13	60																			
63	Maintenance Road - ABC	3 days	Tue 9/10/13	Fri 9/13/13	61FF+5 days	64																		
64	Revegetation/Hydroseed	10 days	Fri 9/13/13	Mon 9/23/13	63																			
65	Surface Layer Restoration - Borrow Areas	15 days	Mon 9/9/13	Mon 9/23/13	61	66																		
66	Demob - Borrow Areas	5 days	Mon 9/23/13	Fri 9/27/13	65	67																		
67	Site Cleanup/Finish Work - Borrow Areas	5 days	Fri 9/27/13	Wed 10/2/13	66	68																		
68	Weather Delays	6 days	Wed 10/2/13	Mon 10/7/13	67	69																		
69	Demob - Levee Areas	5 days	Mon 10/7/13	Fri 10/11/13	68	70																		
70	Site Cleanup/Finish Work - Levee Areas	5 days	Fri 10/11/13	Wed 10/16/13	69	127FF,126FF																		
71	Relocations	605.69 days	Mon 4/2/12	Fri 10/18/13																				
72	Utilities	605.69 days	Mon 4/2/12	Fri 10/18/13																				
73	Season 1	115.19 days	Mon 4/2/12	Wed 7/18/12																				
74	Site Mobilization - for Util Relocations	15 days	Mon 4/2/12	Mon 4/16/12	22SS	75																		
75	Utility Poles	100 days	Mon 4/16/12	Wed 7/18/12	74		1/day																	
76	Site Demob - for Util Relocations	15 days	Mon 4/2/12	Sat 4/14/12																				
77	Season 2	215.5 days	Mon 4/1/13	Fri 10/18/13																				
78	Site Mobilization - for Util Relocations	15 days	Mon 4/1/13	Mon 4/15/13																				
79	Riverside Canal, SREL 3B	168 days	Wed 5/1/13	Fri 10/4/13		124																		
80	Demo	16 days	Wed 5/1/13	Wed 5/15/13		81FF																		
81	Clear & Grub	8 days	Wed 5/8/13	Wed 5/15/13	80FF	82SS+2 days																		
82	Stripping	11 days	Fri 5/10/13	Mon 5/20/13	81SS+2 days	84FF+1 day																		
83	Compacted Embankment	89 days	Thu 6/13/13	Wed 9/4/13	89FS+5 days	85FF+20 days																		
84	Excavation to Stockpile	3 days	Sat 5/18/13	Tue 5/21/13	82FF+1 day	89,90																		
85	Concrete Canal Lining	14 days	Tue 9/10/13	Mon 9/23/13	83FF+20 days	86																		
86	ABC	9 days	Mon 9/23/13	Wed 10/2/13	85	88																		
87	Field Irrigation Turnouts	10 days	Sat 6/8/13	Tue 6/18/13	89																			
88	Erosion Control Seeding	3 days	Wed 10/2/13	Fri 10/4/13	86																			

CESPK **AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE** Fri 8/13/10

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
89	30-IN Solid Wall HDPE Pipeline	20 days	Tue 5/21/13	Sat 6/8/13	84	83FS+5 days,87																		
90	Pumping Plant Outfall	20 days	Tue 5/21/13	Sat 6/8/13	84	91SS																		
91	Water Control Facilities	30 days	Tue 5/21/13	Tue 6/18/13	90SS																			
92	Private Irrigation Facility Relocation (Tennet-Labvitch)	60 days	Wed 5/1/13	Wed 6/26/13			Sta ~853+00																	
93	Demo	2 days	Wed 5/1/13	Thu 5/2/13		94SS																		
94	Earthwork	20 days	Wed 5/1/13	Mon 5/20/13	93SS	95																		
95	Well Drilling	10 days	Mon 5/20/13	Wed 5/29/13	94	96																		
96	Well Development	5 days	Wed 5/29/13	Mon 6/3/13	95	97																		
97	Concrete Pad	5 days	Mon 6/3/13	Fri 6/7/13	96	98FS+10 days																		
98	Pump & Discharge Pipe	10 days	Mon 6/17/13	Wed 6/26/13	97FS+10 days	99FF																		
99	Electrical Service	10 days	Mon 6/17/13	Wed 6/26/13	98FF																			
100	Pumping Plant - Sump 160	80 days	Thu 5/23/13	Tue 8/6/13			Sta ~900+00																	
101	Demo	16 days	Thu 5/23/13	Fri 6/7/13	100SS+20 days	102FF	expected to commence about 20 days before levee construction reaches this point																	
102	Earthwork	4 days	Mon 6/3/13	Fri 6/7/13	101FF	104																		
103	Roads	4 days	Fri 8/2/13	Tue 8/6/13	108	106FF																		
104	Pipes	12 days	Fri 6/7/13	Tue 6/18/13	102	105SS																		
105	Positive Closure Vault	30 days	Fri 6/7/13	Fri 7/5/13	104SS	107																		
106	Security Fence	2 days	Sat 8/3/13	Tue 8/6/13	103FF																			
107	Pumps & Motors	30 days	Fri 7/5/13	Fri 8/2/13	105	108FF																		
108	Power & Controls	30 days	Fri 7/5/13	Fri 8/2/13	107FF	103																		
109	RD 1000, PP No 1A	56 days	Sat 6/15/13	Wed 8/7/13			Sta ~924+50																	
110	Demo	6 days	Sat 6/15/13	Fri 6/21/13	109SS+45 days	111	expected to commence about 20 days before levee construction reaches this point																	
111	Site Work	12 days	Fri 6/21/13	Tue 7/2/13	110	112																		
112	Construct Chamber for Sluice Gates & Flap Gates	10 days	Tue 7/2/13	Thu 7/11/13	111	113FS+10 days																		
113	New Slide/Sluice Gates	8 days	Sat 7/20/13	Mon 7/29/13	112FS+10 days	114																		
114	New Flap Gates & Power Winch for Opening	5 days	Mon 7/29/13	Fri 8/2/13	113	115FF+5 days																		
115	Power & Controls for Gate Facilities	10 days	Mon 7/29/13	Wed 8/7/13	114FF+5 days																			
116	RD 1000, PP No 1B	78 days	Sat 6/15/13	Tue 8/27/13			Sta ~924+50																	
117	Demo	13 days	Sat 6/15/13	Thu 6/27/13	116SS+45 days	118FF	expected to commence about 20 days before levee construction reaches this point																	
118	Earthwork	3 days	Tue 6/25/13	Thu 6/27/13	117FF	120																		
119	Roads	5 days	Thu 8/22/13	Tue 8/27/13	123																			

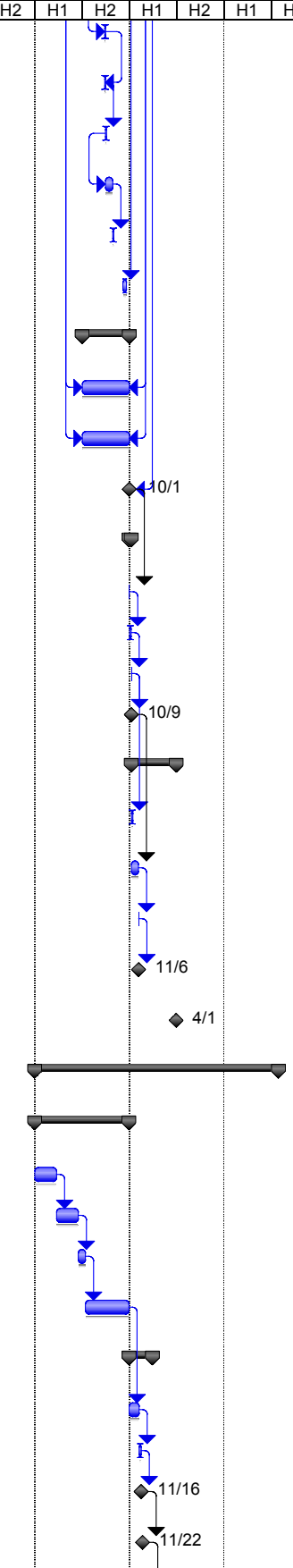
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
120	Pipes	10 days	Thu 6/27/13	Sat 7/6/13	118	121SS																		
121	Positive Closure Vault	30 days	Thu 6/27/13	Thu 7/25/13	120SS	122																		
122	Pumps & Motors	30 days	Thu 7/25/13	Thu 8/22/13	121	123FF																		
123	Power & Controls	30 days	Thu 7/25/13	Thu 8/22/13	122FF	119																		
124	Site Demob - for Util Relocations	15 days	Fri 10/4/13	Fri 10/18/13	79																			
125	Engineering during Construction, S&A and Construction Completion	605 days	Mon 4/2/12	Fri 10/18/13																				
126	Engineering During Construction	605 days	Mon 4/2/12	Fri 10/18/13	22SS,70FF																			
127	Supervision and Administration	605 days	Mon 4/2/12	Fri 10/18/13	22SS,70FF	128FF																		
128	Construction Completion	0 days	Fri 10/18/13	Fri 10/18/13	127FF	130																		
129	Inspection and Construction per Punch List	9 days	Fri 10/18/13	Sat 10/26/13																				
130	PreFinal Inspection	2 days	Fri 10/18/13	Sat 10/19/13	128	131																		
131	Contractor Implement Punch List Items	6 days	Sat 10/19/13	Fri 10/25/13	130	132																		
132	Final Inspection	1 day	Fri 10/25/13	Sat 10/26/13	131	133,135																		
133	Construction Physical Completion	0 days	Sat 10/26/13	Sat 10/26/13	132	136																		
134	Project Closeout	167.25 days	Sat 10/26/13	Tue 4/1/14																				
135	Construction Prepares Project Completion Letter	6 days	Sat 10/26/13	Fri 11/1/13	132																			
136	Contractors Complete As-Builts	24 days	Sat 10/26/13	Mon 11/18/13	133	137																		
137	Submit As-Builts	1 day	Mon 11/18/13	Tue 11/19/13	136	138																		
138	Notice of Completion/Assumption of OMR&R	0 days	Tue 11/19/13	Tue 11/19/13	137																			
139	Project Fiscally Complete	0 days	Tue 4/1/14	Tue 4/1/14																				
140	Construction Contract 2 - Reach B (remaining work)	977.5 days	Sat 10/1/11	Tue 4/1/14			SREL Sta 635+00 to 742+60 - Work involves changes to several pumping plants and canal																	
141	Design	390 days	Sat 10/1/11	Sat 9/29/12																				
142	Collect field explorations	90 days	Sat 10/1/11	Sat 12/24/11		143																		
143	Conduct geotechnical evaluation	90 days	Sat 12/24/11	Sat 3/17/12	142	144																		
144	Develop Basis of Design Report	30 days	Sat 3/17/12	Sat 4/14/12	143	145																		
145	Develop Plans & Specifications	180 days	Sat 4/14/12	Sat 9/29/12	144																			
146	Pre-Construction	96.25 days	Mon 10/1/12	Sat 12/29/12																				
147	Project Bid	41.25 days	Mon 10/1/12	Thu 11/8/12		148																		
148	Award Task Order	8.75 days	Thu 11/8/12	Fri 11/16/12	147	149																		
149	Construction Contract Awarded	0 days	Fri 11/16/12	Fri 11/16/12	148	150FS+6.25 days																		
150	Issue NTP	0 days	Thu 11/22/12	Thu 11/22/12	149FS+6.25 days	151FS+1.25 days																		
151	NTP Acknowledged	0 days	Fri 11/23/12	Fri 11/23/12	150FS+1.25 days	152																		



ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
152	Pre-Con Meeting	1.25 days	Fri 11/23/12	Sat 11/24/12	151	153																		
153	Prepare Pre-Construction Submittals	28.75 days	Sat 11/24/12	Fri 12/21/12	152	154SS																		
154	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/24/12	Sat 12/29/12	153SS																			
155	Construction	196.5 days	Mon 4/1/13	Tue 10/1/13																				
156	Levees & Floodwalls	196.5 days	Mon 4/1/13	Tue 10/1/13																				
157	Levees	196.5 days	Mon 4/1/13	Tue 10/1/13																				
158	General Construction Schedule	196.5 days	Mon 4/1/13	Tue 10/1/13																				
159	Season 1	196.5 days	Mon 4/1/13	Tue 10/1/13																				
160	Site Mobilization - Levees	18 days	Mon 4/1/13	Wed 4/17/13		161,218SS,219																		
161	Haul Roads & Drainage	6 days	Wed 4/17/13	Tue 4/23/13	160	162SS																		
162	SWPP Installation - Levees	8 days	Wed 4/17/13	Wed 4/24/13	161SS		full duration of levee constr																	
163	Clearing & Grubbing	3 days	Wed 5/1/13	Fri 5/3/13		164SS+2 days																		
164	Levee Stripping	12 days	Thu 5/2/13	Tue 5/14/13	163SS+2 days	173SS+2 days																		
165	Site Mobilization - Borrow Areas	18 days	Mon 4/1/13	Wed 4/17/13		166																		
166	Haul Roads & Drainage - Borrow Areas	6 days	Wed 4/17/13	Tue 4/23/13	165	167SS																		
167	SWPP Installation - Borrow Areas	2 days	Wed 4/17/13	Fri 4/19/13	166SS	168	full duration of borrow area use																	
168	Borrow Areas - Surface Layer Removal & Stockpile	10 days	Fri 4/19/13	Mon 4/29/13	167																			
169	Borrow Areas - Excavation & Hauling (to replace std depth CO Wall Waste)	34 days	Sat 5/4/13	Wed 6/5/13	173SS																			
170	Borrow Areas - Excavation & Hauling (to replace deep CO Wall Waste)	62 days	Wed 6/5/13	Fri 8/2/13	174SS																			
171	Borrow Areas - Excavation & Hauling	96 days	Fri 5/24/13	Wed 8/21/13	175SS		assumes 2 crews used																	
172	Site Mobilization - Slurry Wall	15 days	Wed 4/17/13	Wed 5/1/13	173SS-18 days																			
173	Slurry Wall Construction (depth 75' or more)	34 days	Sat 5/4/13	Wed 6/5/13	164SS+2 days	169SS,172SS-1 days,174,175SS days,200SS																		
174	Slurry Wall Construction (depth less than 75')	62 days	Wed 6/5/13	Fri 8/2/13	173	170SS,176,211	assumes 2 crews used days																	
175	Select/Levee Fill & Random Fill	96 days	Fri 5/24/13	Wed 8/21/13	173SS+21 days	171SS,179,177	assumes 2 crews used days																	
176	Demob - Slurry Wall	12 days	Fri 8/2/13	Tue 8/13/13	174																			
177	Maintenance Road - ABC	4 days	Thu 8/22/13	Mon 8/26/13	175FF+5 days	178																		
178	Revegetation/Hydroseed	16 days	Mon 8/26/13	Tue 9/10/13	177																			
179	Surface Layer Restoration - Borrow Areas	15 days	Wed 8/21/13	Wed 9/4/13	175	180																		

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE													Fri 8/13/10									
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
180	Demob - Borrow Areas	5 days	Wed 9/4/13	Mon 9/9/13	179	181																		
181	Site Cleanup/Finish Work - Borrow Areas	5 days	Mon 9/9/13	Fri 9/13/13	180	182																		
182	Weather Delays	6 days	Fri 9/13/13	Thu 9/19/13	181	183																		
183	Demob - Levee Areas	6 days	Thu 9/19/13	Wed 9/25/13	182	184																		
184	Site Cleanup/Finish Work - Levee Areas	6 days	Wed 9/25/13	Tue 10/1/13	183	218FF,219FF,2																		
185	Relocations	185.5 days	Mon 4/1/13	Fri 9/20/13																				
186	Utilities	185.5 days	Mon 4/1/13	Fri 9/20/13																				
187	Site Mobilization - for Util Relocations	15 days	Mon 4/1/13	Mon 4/15/13		188																		
188	Utility Poles	60 days	Mon 4/15/13	Mon 6/10/13	187		1/day																	
189	Elkhorn PP, Phase 2	100 days	Wed 5/1/13	Fri 8/2/13																				
190	Demo	5 days	Wed 5/1/13	Mon 5/6/13		191																		
191	Earthwork	8 days	Mon 5/6/13	Mon 5/13/13	190	193																		
192	Roads	4 days	Fri 7/26/13	Tue 7/30/13	197	195FF,198																		
193	Pipes	14 days	Mon 5/13/13	Sat 5/25/13	191	194SS																		
194	Positive Closure Vault	40 days	Mon 5/13/13	Wed 6/19/13	193SS	196																		
195	Pump Platform Rehab	20 days	Thu 7/11/13	Tue 7/30/13	192FF																			
196	Pumps & Motors	40 days	Wed 6/19/13	Fri 7/26/13	194	197FF																		
197	Power & Controls	30 days	Fri 6/28/13	Fri 7/26/13	196FF	192																		
198	Bank Stabilization	3 days	Tue 7/30/13	Fri 8/2/13	192																			
199	RD 1000, PP No 3	134 days	Sat 5/4/13	Fri 9/6/13			Sta ~676+00																	
200	Demo	35 days	Sat 5/4/13	Thu 6/6/13	173SS	201	expected to commence about 35 days before levee construction reaches this point																	
201	Earthwork	10 days	Thu 6/6/13	Sat 6/15/13	200	203																		
202	Roads	4 days	Thu 8/29/13	Mon 9/2/13	207	205FF,208																		
203	Pipes	20 days	Sat 6/15/13	Thu 7/4/13	201	204SS																		
204	Positive Closure & Flow Meter Vaults	40 days	Sat 6/15/13	Tue 7/23/13	203SS	206,209																		
205	Security Fence	2 days	Fri 8/30/13	Mon 9/2/13	202FF																			
206	Pumps & Motors	40 days	Tue 7/23/13	Thu 8/29/13	204	207FF																		
207	Power & Controls	30 days	Thu 8/1/13	Thu 8/29/13	206FF	202																		
208	Flap Gates	5 days	Mon 9/2/13	Fri 9/6/13	202	216																		
209	C-I-P Concrete Baffles	30 days	Tue 7/23/13	Tue 8/20/13	204																			
210	Riverside PP, Phase 1	37 days	Fri 6/28/13	Fri 8/2/13			Sta ~707+50																	

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
211	Demo	2 days	Fri 6/28/13	Mon 7/1/13	174SS+25 days	212FF	expected to commence about 5 days before levee construction reaches this point																	
212	Earthwork	2 days	Fri 6/28/13	Mon 7/1/13	211FF	213																		
213	Pipes	5 days	Mon 7/1/13	Fri 7/5/13	212	214SS																		
214	Flow Meter Vault	30 days	Mon 7/1/13	Mon 7/29/13	213SS	215																		
215	Bollards	5 days	Mon 7/29/13	Fri 8/2/13	214																			
216	Site Demobilization - for Util Relocations	15 days	Fri 9/6/13	Fri 9/20/13	208																			
217	Engineering during Construction, S&A and Construction Completion	195 days	Tue 4/2/13	Tue 10/1/13																				
218	Engineering During Construction	195 days	Tue 4/2/13	Tue 10/1/13	160SS,184FF																			
219	Supervision and Administration	195 days	Tue 4/2/13	Tue 10/1/13	160SS,184FF																			
220	Construction Completion	0 days	Tue 10/1/13	Tue 10/1/13	184FF	222																		
221	Inspection and Construction per Punch List	8.75 days	Tue 10/1/13	Wed 10/9/13																				
222	PreFinal Inspection	1.25 days	Tue 10/1/13	Wed 10/2/13	220	223																		
223	Contractor Implement Punch List Items	6.25 days	Wed 10/2/13	Tue 10/8/13	222	224																		
224	Final Inspection	1.25 days	Tue 10/8/13	Wed 10/9/13	223	225,227																		
225	Construction Physical Completion	0 days	Wed 10/9/13	Wed 10/9/13	224	228																		
226	Project Closeout	186 days	Wed 10/9/13	Tue 4/1/14																				
227	Construction Prepares Project Completion Letter	6.25 days	Wed 10/9/13	Tue 10/15/13	224																			
228	Contractors Complete As-Builts	28.75 days	Wed 10/9/13	Tue 11/5/13	225	229																		
229	Submit As-Builts	1.25 days	Tue 11/5/13	Wed 11/6/13	228	230																		
230	Notice of Completion/Assumption of OMRR&R	0 days	Wed 11/6/13	Wed 11/6/13	229																			
231	Project Fiscally Complete	0 days	Tue 4/1/14	Tue 4/1/14																				
232	Construction Contract 3 - Reach H	1010 days	Mon 10/1/12	Fri 5/1/15			Sta 0+00 to 237+00 - Work involves levee improvements and/or soil bentonite slurry wall																	
233	Design	390 days	Mon 10/1/12	Mon 9/30/13																				
234	Collect field explorations	90 days	Mon 10/1/12	Mon 12/24/12		235																		
235	Conduct geotechnical evaluation	90 days	Mon 12/24/12	Mon 3/18/13	234	236																		
236	Develop Basis of Design Report	30 days	Mon 3/18/13	Mon 4/15/13	235	237																		
237	Develop Plans & Specifications	180 days	Mon 4/15/13	Mon 9/30/13	236	239																		
238	Pre-Construction	96.25 days	Tue 10/1/13	Mon 12/30/13																				
239	Project Bid	41.25 days	Tue 10/1/13	Fri 11/8/13	237	240																		
240	Award Task Order	8.75 days	Fri 11/8/13	Sat 11/16/13	239	241																		
241	Construction Contract Awarded	0 days	Sat 11/16/13	Sat 11/16/13	240	242FS+6.25 days																		
242	Issue NTP	0 days	Fri 11/22/13	Fri 11/22/13	241FS+6.25 days	243FS+1.25 days																		



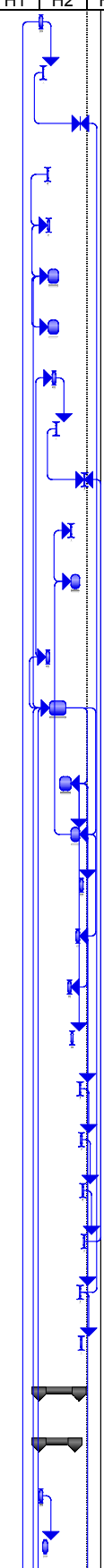
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
243	NTP Acknowledged	0 days	Sat 11/23/13	Sat 11/23/13	242FS+1.25 days	244											11/23							
244	Pre-Con Meeting	1.25 days	Sat 11/23/13	Mon 11/25/13	243	245																		
245	Prepare Pre-Construction Submittals	28.75 days	Mon 11/25/13	Sat 12/21/13	244	246SS																		
246	Corps Approve Pre-Constructon Submittals	37.5 days	Mon 11/25/13	Mon 12/30/13	245SS																			
247	Construction	249.5 days	Tue 4/1/14	Wed 11/19/14																				
248	Levees & Floodwalls	198.75 days	Tue 4/1/14	Fri 10/3/14																				
249	Levees	198.75 days	Tue 4/1/14	Fri 10/3/14																				
250	Site Mobilization - Levees	18 days	Tue 4/1/14	Thu 4/17/14		251,299SS																		
251	Haul Roads & Drainage	6 days	Thu 4/17/14	Wed 4/23/14	250	252SS	maintain for full duration of levee constr																	
252	SWPP Installation - Levees	13 days	Thu 4/17/14	Tue 4/29/14	251SS		full duration of levee constr																	
253	Clearing & Grubbing	5 days	Thu 5/1/14	Tue 5/6/14		254SS+2 days,282SS																		
254	Levee Stripping	16 days	Fri 5/2/14	Sat 5/17/14	253SS+2 days	255SS+2 days	2 crews																	
255	Levee Degrading	31 days	Mon 5/5/14	Tue 6/3/14	254SS+2 days	262SS+2 days	2 crews																	
256	Site Mobilization - Borrow Areas	18 days	Thu 5/1/14	Sat 5/17/14		257																		
257	Haul Roads & Drainage - Borrow Areas	5 days	Sat 5/17/14	Thu 5/22/14	256	258SS	full duration of borrow area use																	
258	SWPP Installation - Borrow Areas	2 days	Sat 5/17/14	Tue 5/20/14	257SS		full duration of borrow area use																	
259	Surface Layer Removal & Stockpile - Borrow Areas	5 days	Tue 7/1/14	Sat 7/5/14	260SS-2 days		0.66 AC/hr, 4 scrapers																	
260	Excavation & Hauling - Borrow Areas	70 days	Thu 7/3/14	Sat 9/6/14	264SS	259SS-2 days																		
261	Site Mobilization - Slurry Wall	18 days	Sat 4/19/14	Tue 5/6/14	262SS-18 days	265SS+12 days																		
262	Slurry Wall Construction	90 days	Tue 5/6/14	Tue 7/29/14	255SS+2 days	261SS-18 days,303SS,261 days,263SS+12	2 rigs/crews																	
263	Embankment Fill, from Levee Degrading	50 days	Sat 5/17/14	Thu 7/3/14	262SS+12 days	264	2 crews																	
264	Emankment Fill, from Borrow	70 days	Thu 7/3/14	Sat 9/6/14	263	260SS,271,269	2 crews																	
265	Site Mobilization - Jet Grouting	18 days	Thu 5/1/14	Sat 5/17/14	261SS+12 days																			
266	Jet GroutingConstruction	60 days	Sat 5/17/14	Sat 7/12/14	262SS+12 days	267,307SS+12 days,315SS+55 days,316SS+55	assume start about 2 weeks after slurry wall																	
267	Demob - Jet Grouting	12 days	Sat 7/12/14	Thu 7/24/14	266																			
268	Demob - Slurry Wall	12 days	Tue 7/29/14	Sat 8/9/14	262																			
269	Bike Trail (at Levee Crown)	10 days	Sat 9/6/14	Tue 9/16/14	264	274,270FF+6 days																		
270	Revegetation/Hydroseed	18 days	Thu 9/4/14	Mon 9/22/14	269FF+6 days		3.72 AC/day																	
271	Surface Layer Restoration - Borrow Areas	5 days	Sat 9/6/14	Thu 9/11/14	264	272																		
272	Demob - Borrow Areas	6 days	Thu 9/11/14	Wed 9/17/14	271	273																		

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
273	Site Cleanup/Finish Work - Borrow Areas	6 days	Wed 9/17/14	Tue 9/23/14	272																			
274	Weather Delays	6.25 days	Tue 9/16/14	Mon 9/22/14	269	275																		
275	Demob - Levee Areas	6 days	Mon 9/22/14	Sat 9/27/14	274	276																		
276	Site Cleanup/Finish Work - Levee Areas	6 days	Sat 9/27/14	Fri 10/3/14	275	334FF																		
277	Relocations	249.5 days	Tue 4/1/14	Wed 11/19/14																				
278	Roads, Construction Activities	249.5 days	Tue 4/1/14	Wed 11/19/14																				
279	Site Mobilization - for Rd Relocations	15 days	Tue 4/1/14	Tue 4/15/14																				
280	Paving Demo	34 days	Thu 5/1/14	Mon 6/2/14																				
281	Demolition	34 days	Thu 5/1/14	Mon 6/2/14																				
282	Arden-Garden Connector	8 days	Thu 5/1/14	Thu 5/8/14	253SS	283																		
283	Bike Trail at Levee Crown	23 days	Thu 5/8/14	Thu 5/29/14	282	284																		
284	East Levee Road	3 days	Thu 5/29/14	Mon 6/2/14	283	287FF																		
285	Dead End Roads	5 days	Thu 5/1/14	Tue 5/6/14		286	about 2 days each but will be done as levee improvement passes thru area																	
286	Natoma Street	2 days	Tue 5/6/14	Wed 5/7/14	285		will be done as levee improvement passes thru area																	
287	Northgate Blvd	6 days	Tue 5/27/14	Mon 6/2/14	284FF		will be done as levee improvement passes thru area																	
288	Road Surfacing	64 days	Sat 9/6/14	Wed 11/5/14																				
289	Site Work	64 days	Sat 9/6/14	Wed 11/5/14																				
290	Arden-Garden Connector	40 days	Sat 9/6/14	Tue 10/14/14	264	291																		
291	Bike Trail at Levee Crown	12 days	Tue 10/14/14	Sat 10/25/14	290	292																		
292	East Levee Road	12 days	Sat 10/25/14	Wed 11/5/14	291	296																		
293	Dead End Roads	10 days	Sat 9/6/14	Tue 9/16/14	264		about 2 days each but will be done as levee improvement passes thru area																	
294	Natoma Street	5 days	Sat 9/6/14	Thu 9/11/14	264		will be done as levee improvement passes thru area																	
295	Northgate Blvd	15 days	Sat 9/6/14	Sat 9/20/14	264		will be done as levee improvement passes thru area																	
296	Site Demobilization - for Rd Relocations	15 days	Wed 11/5/14	Wed 11/19/14	292	336FF,337FF																		
297	Cemeteries, Utils, Structures	241.5 days	Tue 4/1/14	Wed 11/12/14																				
298	Utils	241.5 days	Tue 4/1/14	Wed 11/12/14																				
299	Site Mobilization - for Util Relocations	18 days	Tue 4/1/14	Thu 4/17/14	250SS	301																		
300	Electrical	56 days	Thu 4/17/14	Mon 6/9/14																				
301	Utility Poles	56 days	Thu 4/17/14	Mon 6/9/14	299		1/day																	
302	Utility Crossing Relocations	45 days	Tue 5/6/14	Tue 6/17/14																				
303	6" Gas Main	30 days	Tue 5/6/14	Tue 6/3/14	262SS	304SS,305SS																		

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE													Fri 8/13/10									
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
304	8" Water Main	30 days	Tue 5/6/14	Tue 6/3/14	303SS																			
305	Fiber Optic Line	45 days	Tue 5/6/14	Tue 6/17/14	303SS																			
306	PP - Sump 102	77 days	Thu 5/29/14	Fri 8/8/14																				
307	Demo	8 days	Thu 5/29/14	Thu 6/5/14	266SS+12 days	308	expected to commence about 10 days before levee construction reaches this point																	
308	Earthwork	5 days	Thu 6/5/14	Tue 6/10/14	307	310																		
309	Roads	4 days	Tue 8/5/14	Fri 8/8/14	313																			
310	Pipes	8 days	Tue 6/10/14	Tue 6/17/14	308	311SS																		
311	Positive Closure Vault	30 days	Tue 6/10/14	Tue 7/8/14	310SS	312																		
312	Pumps & Motors	30 days	Tue 7/8/14	Tue 8/5/14	311	313FF																		
313	Power & Controls	30 days	Tue 7/8/14	Tue 8/5/14	312FF	309																		
314	RD 1000, PP No 8	124 days	Tue 7/8/14	Fri 10/31/14																				
315	Temporary Fencing	5 days	Tue 7/8/14	Sat 7/12/14	266SS+55 days		expected to commence about 10 days before levee construction reaches this point																	
316	Asphalt Removal	1 day	Tue 7/8/14	Wed 7/9/14	266SS+55 days	328SS																		
317	Excavate, Fill & Compact	5 days	Sat 7/26/14	Thu 7/31/14	328	318																		
318	Remove Existing WSP	1 day	Thu 7/31/14	Fri 8/1/14	317	319																		
319	Positive Closure Vault	60 days	Fri 8/1/14	Fri 9/26/14	318	320,322																		
320	Closure Valve, 54-IN	3 days	Fri 9/26/14	Mon 9/29/14	319	321																		
321	Dismantling Joint, 54-IN	2 days	Mon 9/29/14	Wed 10/1/14	320																			
322	Closure Valve, 36-IN	3 days	Fri 9/26/14	Mon 9/29/14	319	323																		
323	Dismantling Joint, 36-IN	2 days	Mon 9/29/14	Wed 10/1/14	322	324																		
324	Siphon Breakers	2 days	Wed 10/1/14	Thu 10/2/14	323	325																		
325	Backfill	1 day	Thu 10/2/14	Fri 10/3/14	324	326,327																		
326	ABC	1 day	Fri 10/3/14	Sat 10/4/14	325																			
327	Electrical Control Equipment	30 days	Fri 10/3/14	Fri 10/31/14	325	329																		
328	Locate & Relocate Utils prior to excavation	20 days	Tue 7/8/14	Sat 7/26/14	316SS	317																		
329	Site Demobilization - for Util Relocations	12 days	Fri 10/31/14	Wed 11/12/14	327																			
330	Fish & Wildlife Facilities	150 days	Fri 5/16/14	Fri 10/3/14																				
331	Wildlife Facilities & Sanctuaries	150 days	Fri 5/16/14	Fri 10/3/14																				
332	Dry Creek	150 days	Fri 5/16/14	Fri 10/3/14																				
333	Woodland Corridor & Enhancement	150 days	Fri 5/16/14	Fri 10/3/14																				
334	Mob, Prep Work, Planting & Irrigation, Demob	150 days	Fri 5/16/14	Fri 10/3/14	276FF		sans O&M																	

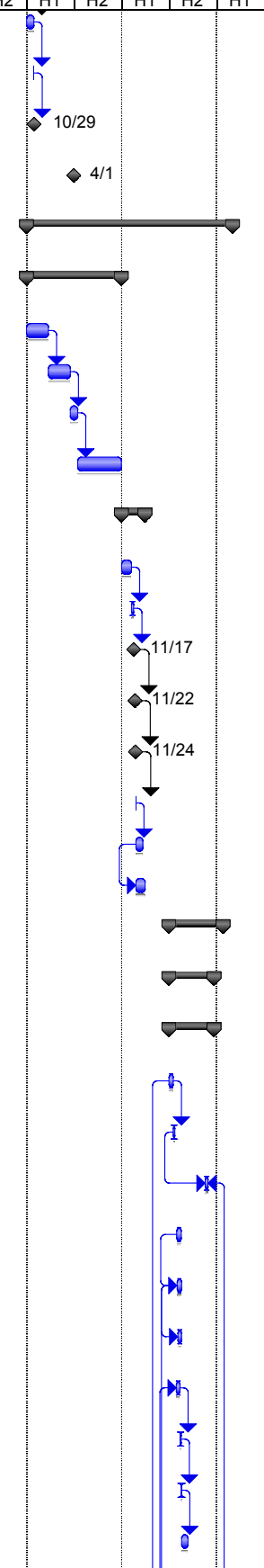
CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE													Fri 8/13/10									
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
335	Engineering during Construction, S&A and Construction Completion	249 days	Tue 4/1/14	Wed 11/19/14																				
336	Engineering During Construction	249 days	Tue 4/1/14	Wed 11/19/14	296FF																			
337	Supervision and Administration	249 days	Tue 4/1/14	Wed 11/19/14	296FF	338FF																		
338	Construction Completion	0 days	Wed 11/19/14	Wed 11/19/14	337FF	340																		
339	Inspection and Construction per Punch List	8.75 days	Wed 11/19/14	Thu 11/27/14																				
340	PreFinal Inspection	1.25 days	Wed 11/19/14	Thu 11/20/14	338	341																		
341	Contractor Implement Punch List Items	6.25 days	Thu 11/20/14	Wed 11/26/14	340	342																		
342	Final Inspection	1.25 days	Wed 11/26/14	Thu 11/27/14	341	343,345																		
343	Construction Physical Completion	0 days	Thu 11/27/14	Thu 11/27/14	342	346																		
344	Project Closeout	165.5 days	Thu 11/27/14	Fri 5/1/15																				
345	Construction Prepares Project Completion Letter	6.25 days	Thu 11/27/14	Wed 12/3/14	342																			
346	Contractors Complete As-Builts	28.75 days	Thu 11/27/14	Wed 12/24/14	343	347																		
347	Submit As-Builts	1.25 days	Wed 12/24/14	Thu 12/25/14	346	348																		
348	Notice of Completion/Assumption of OMRR&R	0 days	Thu 12/25/14	Thu 12/25/14	347																			
349	Project Fiscally Complete	0 days	Fri 5/1/15	Fri 5/1/15																				
350	Construction Contract 4- Reach I	976.25 days	Mon 10/3/11	Tue 4/1/14			Sta 20+50 to 115+73.3 - Work involves levee improvements and/or soil-bentonite slurry wall along the																	
351	Design	390 days	Mon 10/3/11	Mon 10/1/12																				
352	Collect field explorations	90 days	Mon 10/3/11	Mon 12/26/11		353																		
353	Conduct geotechnical evaluation	90 days	Mon 12/26/11	Mon 3/19/12	352	354																		
354	Develop Basis of Design Report	30 days	Mon 3/19/12	Mon 4/16/12	353	355																		
355	Develop Plans & Specifications	180 days	Mon 4/16/12	Mon 10/1/12	354																			
356	Pre-Construction	96.25 days	Mon 10/1/12	Sat 12/29/12																				
357	Project Bid	41.25 days	Mon 10/1/12	Thu 11/8/12		358																		
358	Award Task Order	8.75 days	Thu 11/8/12	Fri 11/16/12	357	359																		
359	Construction Contract Awarded	0 days	Fri 11/16/12	Fri 11/16/12	358	360FS+6.25 days																		
360	Issue NTP	0 days	Thu 11/22/12	Thu 11/22/12	359FS+6.25 days	361FS+1.25 days																		
361	NTP Acknowledged	0 days	Fri 11/23/12	Fri 11/23/12	360FS+1.25 days	362																		
362	Pre-Con Meeting	1.25 days	Fri 11/23/12	Sat 11/24/12	361	363																		
363	Prepare Pre-Construction Submittals	28.75 days	Sat 11/24/12	Fri 12/21/12	362	364SS																		
364	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/24/12	Sat 12/29/12	363SS																			
365	Construction	188 days	Mon 4/1/13	Mon 9/23/13																				
366	Levees & Floodwalls	188 days	Mon 4/1/13	Mon 9/23/13		419FF,420FF																		
367	Levees	188 days	Mon 4/1/13	Mon 9/23/13																				

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
368	Site Mobilization - Levees	15 days	Mon 4/1/13	Mon 4/15/13		369,402SS																		
369	Haul Roads & Drainage	3.75 days	Mon 4/15/13	Thu 4/18/13	368	370SS																		
370	Care & Diversion of Water - Erosion Control - SWPC	1.25 days	Fri 9/6/13	Sat 9/7/13	369SS,392FF		full duration of levee constr																	
371	Clearing & Grubbing	5 days	Wed 5/1/13	Mon 5/6/13		372SS+2.5 days																		
372	Levee Stripping	8.75 days	Fri 5/3/13	Sat 5/11/13	371SS+2.5 days	373SS+2.5 days																		
373	Levee Degrading	42.5 days	Mon 5/6/13	Fri 6/14/13	372SS+2.5 days	374SS,381SS+ days																		
374	Temporary Fill, Placement	42.5 days	Mon 5/6/13	Fri 6/14/13	373SS																			
375	Site Mobilization - Borrow Areas	15 days	Tue 5/21/13	Tue 6/4/13	380SS+25 days	376																		
376	Haul Roads & Drainage - Borrow Areas	3.75 days	Tue 6/4/13	Fri 6/7/13	375	377SS																		
377	Care & Diversion of Water - Erosion Control - SWPC - Borrow Areas	1.25 days	Sat 9/21/13	Mon 9/23/13	376SS,391FF		full duration of borrow area use																	
378	Surface Layer Removal & Stockpile - Borrow Areas	5 days	Tue 7/30/13	Sat 8/3/13	379SS-2.5 days																			
379	Excavation & Hauling - Borrow Areas	35 days	Thu 8/1/13	Tue 9/3/13	383SS	378SS-2.5 days																		
380	Site Mobilization - Slurry Wall	15 days	Sat 4/27/13	Sat 5/11/13	381SS-15 days	375SS+25 days																		
381	Slurry Wall Construction	67 days	Sat 5/11/13	Fri 7/12/13	373SS+6.25 days	380SS-15 days,406SS,38: days,383FF+12																		
382	Embankment Fill, from Levee Degrading	46.25 days	Wed 6/19/13	Thu 8/1/13	381FF+21 days	383,386FF,387, days																		
383	Emankment Fill, from Borrow	35 days	Thu 8/1/13	Tue 9/3/13	381FF+12.5 days,382	379SS,384,385																		
384	Demob - Slurry Wall	15 days	Tue 9/3/13	Tue 9/17/13	383																			
385	Temporary Fill, Removal	15 days	Tue 8/20/13	Tue 9/3/13	383FF	388,392																		
386	Maintenance Road - ABC	12.5 days	Sat 7/20/13	Thu 8/1/13	382FF																			
387	Revegetation/Hydroseed	8.75 days	Thu 8/1/13	Fri 8/9/13	382																			
388	Surface Layer Restoration - Borrow Areas	5 days	Tue 9/3/13	Sat 9/7/13	385	389																		
389	Weather Delays	6.25 days	Sat 9/7/13	Fri 9/13/13	388	390																		
390	Demob - Borrow Areas	5 days	Fri 9/13/13	Wed 9/18/13	389	391																		
391	Site Cleanup/Finish Work - Borrow Areas	5 days	Wed 9/18/13	Mon 9/23/13	390	377FF																		
392	Demob - Levee Areas	5 days	Tue 9/3/13	Sat 9/7/13	385	370FF,393																		
393	Site Cleanup/Finish Work - Levee Areas	5 days	Sat 9/7/13	Thu 9/12/13	392																			
394	Relocations	165.75 days	Mon 4/1/13	Mon 9/2/13																				
395	Roads, Construction Activities	149.25 days	Mon 4/1/13	Sat 8/17/13																				
396	Site Mobilization - for Rd Relocations	15 days	Mon 4/1/13	Mon 4/15/13		397																		
397	Demo Pavement	20 days	Mon 4/15/13	Fri 5/3/13	396																			

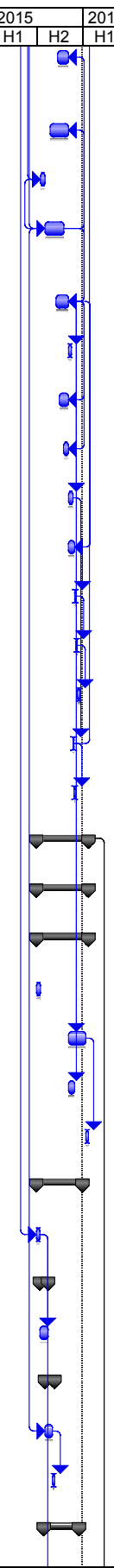


ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
398	AC Pavement	10 days	Thu 7/25/13	Sat 8/3/13	382FF+2.5 days	399																		
399	Site Demobilization - for Rd Relocations	15 days	Sat 8/3/13	Sat 8/17/13	398																			
400	Cemeteries, Utils, Structures	165.75 days	Mon 4/1/13	Mon 9/2/13																				
401	Utils	165.75 days	Mon 4/1/13	Mon 9/2/13																				
402	Site Mobilization - for Util Relocations	15 days	Mon 4/1/13	Mon 4/15/13	368SS	404																		
403	Electrical	40 days	Mon 4/15/13	Wed 5/22/13																				
404	Utility Poles	40 days	Mon 4/15/13	Wed 5/22/13	402		1/day																	
405	Utility Crossing Relocations	45 days	Sat 5/11/13	Sat 6/22/13																				
406	Mechanical	45 days	Sat 5/11/13	Sat 6/22/13	381SS	407SS																		
407	Electrical	45 days	Sat 5/11/13	Sat 6/22/13	406SS																			
408	Pump Station Rehab	87 days	Thu 5/30/13	Mon 8/19/13																				
409	PP - Sump 58	87 days	Thu 5/30/13	Mon 8/19/13			Sta ~70+00																	
410	Demo	12 days	Thu 5/30/13	Mon 6/10/13	381SS+20 days	411	expected to commence about 15 days before levee construction reaches this point																	
411	Earthwork	6 days	Mon 6/10/13	Sat 6/15/13	410	413																		
412	Roads	4 days	Thu 8/15/13	Mon 8/19/13	416	417																		
413	Pipes	5 days	Sat 6/15/13	Thu 6/20/13	411	414																		
414	Positive Closure Vault	30 days	Thu 6/20/13	Thu 7/18/13	413	415																		
415	Pumps & Motors	30 days	Thu 7/18/13	Thu 8/15/13	414	416FF																		
416	Power & Controls	30 days	Thu 7/18/13	Thu 8/15/13	415FF	412																		
417	Site Demobilization - for Util Relocations	15 days	Mon 8/19/13	Mon 9/2/13	412																			
418	Engineering during Construction, S&A and Construction Completion	188 days	Mon 4/1/13	Mon 9/23/13																				
419	Engineering During Construction	188 days	Mon 4/1/13	Mon 9/23/13	366FF																			
420	Supervision and Administration	188 days	Mon 4/1/13	Mon 9/23/13	366FF	421FF																		
421	Construction Completion	0 days	Mon 9/23/13	Mon 9/23/13	420FF	423																		
422	Inspection and Construction per Punch List	8.75 days	Mon 9/23/13	Tue 10/1/13																				
423	PreFinal Inspection	1.25 days	Mon 9/23/13	Tue 9/24/13	421	424																		
424	Contractor Implement Punch List Items	6.25 days	Tue 9/24/13	Mon 9/30/13	423	425																		
425	Final Inspection	1.25 days	Mon 9/30/13	Tue 10/1/13	424	426,428																		
426	Construction Physical Completion	0 days	Tue 10/1/13	Tue 10/1/13	425	429																		
427	Project Closeout	194.5 days	Tue 10/1/13	Tue 4/1/14																				
428	Construction Prepares Project Completion Letter	6.25 days	Tue 10/1/13	Mon 10/7/13	425																			

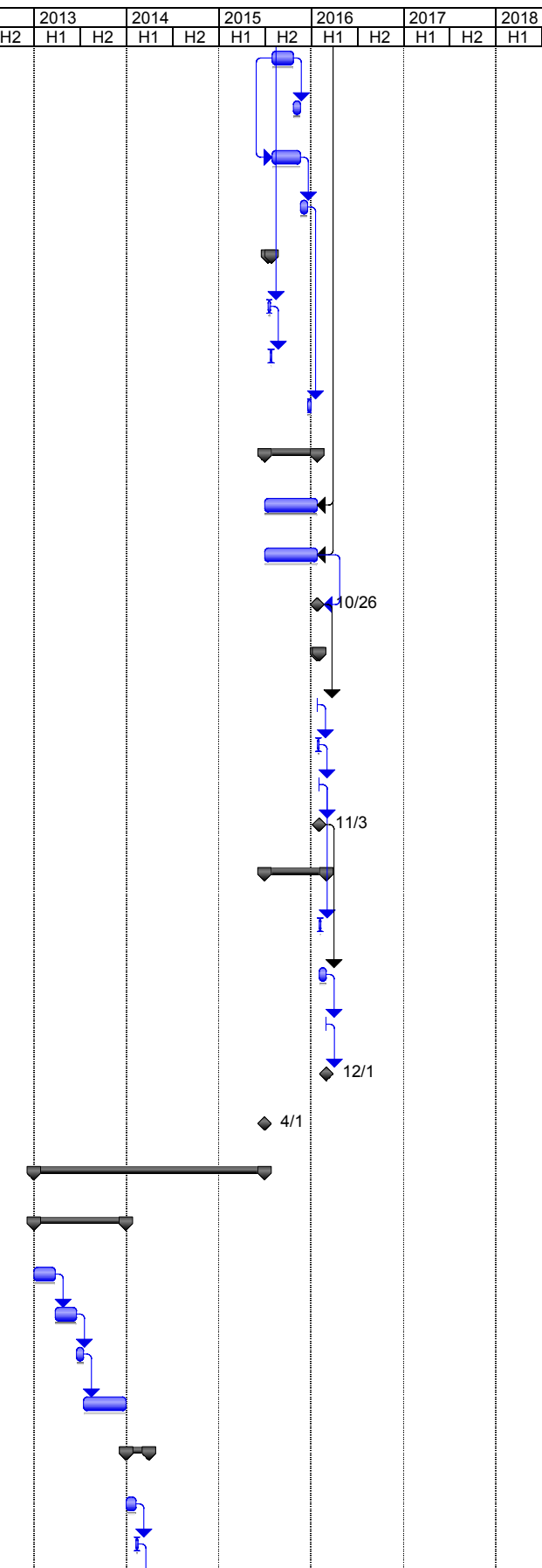
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
429	Contractors Complete As-Builts	28.75 days	Tue 10/1/13	Mon 10/28/13	426	430																		
430	Submit As-Builts	1.25 days	Mon 10/28/13	Tue 10/29/13	429	431																		
431	Notice of Completion/Assumption of OMRR&R	0 days	Tue 10/29/13	Tue 10/29/13	430																			
432	Project Fiscally Complete	0 days	Tue 4/1/14	Tue 4/1/14																				
433	Construction Contract 5 - Reach E	848.5 days	Tue 10/1/13	Tue 12/1/15			Sta 287+37 to 461+31 - Howsley Road to Sankey Road - Work involves levee improvements and/or																	
434	Design	390 days	Tue 10/1/13	Tue 9/30/14																				
435	Collect field explorations	90 days	Tue 10/1/13	Tue 12/24/13		436																		
436	Conduct geotechnical evaluation	90 days	Tue 12/24/13	Tue 3/18/14	435	437																		
437	Develop Basis of Design Report	30 days	Tue 3/18/14	Tue 4/15/14	436	438																		
438	Develop Plans & Specifications	180 days	Tue 4/15/14	Tue 9/30/14	437																			
439	Pre-Construction	96.25 days	Wed 10/1/14	Tue 12/30/14																				
440	Project Bid	41.25 days	Wed 10/1/14	Sat 11/8/14		441																		
441	Award Task Order	8.75 days	Sat 11/8/14	Mon 11/17/14	440	442																		
442	Construction Contract Awarded	0 days	Mon 11/17/14	Mon 11/17/14	441	443FS+6.25 days																		
443	Issue NTP	0 days	Sat 11/22/14	Sat 11/22/14	442FS+6.25 days	444FS+1.25 days																		
444	NTP Acknowledged	0 days	Mon 11/24/14	Mon 11/24/14	443FS+1.25 days	445																		
445	Pre-Con Meeting	1.25 days	Mon 11/24/14	Tue 11/25/14	444	446																		
446	Prepare Pre-Construction Submittals	28.75 days	Tue 11/25/14	Mon 12/22/14	445	447SS																		
447	Corps Approve Pre-Constructon Submittals	37.5 days	Tue 11/25/14	Tue 12/30/14	446SS																			
448	Construction	223.5 days	Wed 4/1/15	Mon 10/26/15																				
449	Levees & Floodwalls	185.75 days	Wed 4/1/15	Mon 9/21/15																				
450	Levees	185.75 days	Wed 4/1/15	Mon 9/21/15																				
451	Site Mobilization - Levees	18 days	Wed 4/1/15	Fri 4/17/15		452,484SS																		
452	Haul Roads & Drainage	6 days	Fri 4/17/15	Thu 4/23/15	451	453SS																		
453	SWPP Installation - Levees	12 days	Tue 8/18/15	Sat 8/29/15	452SS,474FF		full duration of levee constr																	
454	Clearing & Grubbing (also tree removal)	18 days	Fri 5/1/15	Mon 5/18/15		455SS+2 days																		
455	Levee Stripping	18 days	Sat 5/2/15	Wed 5/20/15	454SS+2 days	464SS+2 days,456SS+2																		
456	Levee Degrading	15 days	Tue 5/5/15	Tue 5/19/15	455SS+2 days																			
457	Site Mobilization - Borrow Areas	15 days	Wed 4/29/15	Wed 5/13/15	463SS+12 days	458																		
458	Haul Roads & Drainage - Borrow Areas	5 days	Wed 5/13/15	Mon 5/18/15	457	459																		
459	SWPP Installation - Borrow Areas	2 days	Mon 5/18/15	Wed 5/20/15	458	460	full duration of borrow area use																	
460	Surface Layer Removal & Stockpile - Borrow Areas	26 days	Wed 5/20/15	Fri 6/12/15	459		double crews																	



ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
461	Excavation & Hauling - Borrow Areas	48 days	Wed 6/24/15	Fri 8/7/15	464FF+21 days		double crews																	
462	Vinyl Sheet Pile	80 days	Mon 5/25/15	Fri 8/7/15	465FF																			
463	Site Mobilization - Slurry Wall	18 days	Fri 4/17/15	Tue 5/5/15	464SS-18 days	457SS+12 days																		
464	Slurry Wall Construction	81 days	Tue 5/5/15	Mon 7/20/15	455SS+2 days	461FF+21 days, 463SS-18 days, 465FF+21 days	double rig/crews																	
465	Embankment Fill, from Borrow	54 days	Thu 6/18/15	Fri 8/7/15	464FF+21 days	462FF, 470FF+21 days, 466, 468FF	double crews																	
466	Demob - Slurry Wall	12 days	Fri 8/7/15	Wed 8/19/15	465																			
467	Quarry Stone	40 days	Wed 7/1/15	Fri 8/7/15	465FF																			
468	Maintenance Road - ABC	22 days	Sat 7/18/15	Fri 8/7/15	465FF																			
469	Revegetation/Hydroseed	18 days	Fri 8/7/15	Tue 8/25/15	465	474																		
470	Surface Layer Restoration - Borrow Areas	26 days	Fri 8/7/15	Mon 8/31/15	465FF+25 days	471	double crews																	
471	Weather Delays	6.25 days	Mon 8/31/15	Sat 9/5/15	470	472																		
472	Demob - Borrow Areas	6 days	Sat 9/5/15	Fri 9/11/15	471	473																		
473	Site Cleanup/Finish Work - Borrow Areas	10 days	Fri 9/11/15	Mon 9/21/15	472																			
474	Demob - Levee Areas	5 days	Tue 8/25/15	Sat 8/29/15	469	453FF, 475																		
475	Site Cleanup/Finish Work - Levee Areas	5 days	Sat 8/29/15	Thu 9/3/15	474																			
476	Relocations	223.5 days	Wed 4/1/15	Mon 10/26/15		500FF, 501FF																		
477	Roads, Construction Activities	223.5 days	Wed 4/1/15	Mon 10/26/15																				
478	Roads	223.5 days	Wed 4/1/15	Mon 10/26/15																				
479	Site Mobilization - for Rd Relocations	18 days	Wed 4/1/15	Fri 4/17/15																				
480	Natomas Rd	73 days	Fri 8/7/15	Thu 10/15/15	465	482																		
481	Access Road (at berm adjacent to canal relocation)	25 days	Fri 8/7/15	Mon 8/31/15	465																			
482	Site Demobilization - for Rd Relocations	12 days	Thu 10/15/15	Mon 10/26/15	480																			
483	Utils	197.5 days	Wed 4/1/15	Fri 10/2/15																				
484	Site Mobilization - for Util Relocations	15 days	Wed 4/1/15	Wed 4/15/15	451SS	486, 496																		
485	Electrical	35 days	Wed 4/15/15	Mon 5/18/15																				
486	Utility Poles	35 days	Wed 4/15/15	Mon 5/18/15	484		1/day																	
487	Utility Crossing Relocations	42.5 days	Tue 5/5/15	Sat 6/13/15																				
488	Culverts	32.5 days	Tue 5/5/15	Thu 6/4/15	464SS	489																		
489	12" Discharge Pipe	10 days	Thu 6/4/15	Sat 6/13/15	488																			
490	Private Irrigation Relocations	150 days	Fri 5/1/15	Fri 9/18/15																				



ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
491	Brookfield	90 days	Fri 5/1/15	Fri 7/24/15		492,493SS																		
492	Linn	30 days	Fri 7/24/15	Fri 8/21/15	491																			
493	Odysseus	120 days	Fri 5/1/15	Fri 8/21/15	491SS	494																		
494	Kaufman	30 days	Fri 8/21/15	Fri 9/18/15	493	498																		
495	Canal Relocations	15 days	Wed 4/15/15	Wed 4/29/15																				
496	Drainage Canal Relocations	10 days	Wed 4/15/15	Fri 4/24/15	484	497																		
497	Irrigation Canal Relocations	5 days	Fri 4/24/15	Wed 4/29/15	496																			
498	Site Demobilization - for Util Relocations	15 days	Fri 9/18/15	Fri 10/2/15	494																			
499	Engineering during Construction, S&A and Construction Completion	223 days	Wed 4/1/15	Mon 10/26/15																				
500	Engineering During Construction	223 days	Wed 4/1/15	Mon 10/26/15	476FF																			
501	Supervision and Administration	223 days	Wed 4/1/15	Mon 10/26/15	476FF	502FF																		
502	Construction Completion	0 days	Mon 10/26/15	Mon 10/26/15	501FF	504																		
503	Inspection and Construction per Punch List	8.75 days	Mon 10/26/15	Tue 11/3/15																				
504	PreFinal Inspection	1.25 days	Mon 10/26/15	Tue 10/27/15	502	505																		
505	Contractor Implement Punch List Items	6.25 days	Tue 10/27/15	Mon 11/2/15	504	506																		
506	Final Inspection	1.25 days	Mon 11/2/15	Tue 11/3/15	505	507,509																		
507	Construction Physical Completion	0 days	Tue 11/3/15	Tue 11/3/15	506	510																		
508	Project Closeout	262.25 days	Wed 4/1/15	Tue 12/1/15																				
509	Construction Prepares Project Completion Letter	6.25 days	Tue 11/3/15	Mon 11/9/15	506																			
510	Contractors Complete As-Builts	28.75 days	Tue 11/3/15	Mon 11/30/15	507	511																		
511	Submit As-Builts	1.25 days	Mon 11/30/15	Tue 12/1/15	510	512																		
512	Notice of Completion/Assumption of OMRR&R	0 days	Tue 12/1/15	Tue 12/1/15	511																			
513	Project Fiscally Complete	0 days	Wed 4/1/15	Wed 4/1/15																				
514	Construction Contract 6 Reach F	977.5 days	Mon 10/1/12	Wed 4/1/15			Sta 426+30 to 678+85 - Sankey Road to Elverta Road - Work involves levee improvements and/or																	
515	Design	390 days	Mon 10/1/12	Mon 9/30/13																				
516	Collect field explorations	90 days	Mon 10/1/12	Mon 12/24/12		517																		
517	Conduct geotechnical evaluation	90 days	Mon 12/24/12	Mon 3/18/13	516	518																		
518	Develop Basis of Design Report	30 days	Mon 3/18/13	Mon 4/15/13	517	519																		
519	Develop Plans & Specifications	180 days	Mon 4/15/13	Mon 9/30/13	518																			
520	Pre-Construction	96.25 days	Tue 10/1/13	Mon 12/30/13																				
521	Project Bid	41.25 days	Tue 10/1/13	Fri 11/8/13		522																		
522	Award Task Order	8.75 days	Fri 11/8/13	Sat 11/16/13	521	523																		



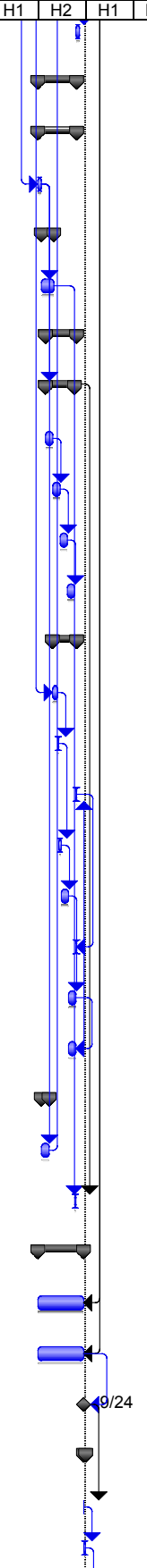
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
523	Construction Contract Awarded	0 days	Sat 11/16/13	Sat 11/16/13	522	524FS+6.25 days											11/16							
524	Issue NTP	0 days	Fri 11/22/13	Fri 11/22/13	523FS+6.25 days	525FS+1.25 days											11/22							
525	NTP Acknowledged	0 days	Sat 11/23/13	Sat 11/23/13	524FS+1.25 days	526											11/23							
526	Pre-Con Meeting	1.25 days	Sat 11/23/13	Mon 11/25/13	525	527																		
527	Prepare Pre-Construction Submittals	28.75 days	Mon 11/25/13	Sat 12/21/13	526	528SS																		
528	Corps Approve Pre-Constructon Submittals	37.5 days	Mon 11/25/13	Mon 12/30/13	527SS																			
529	Construction	215 days	Fri 3/14/14	Wed 10/1/14																				
530	Levees & Floodwalls	197 days	Tue 4/1/14	Wed 10/1/14		586FF,587FF																		
531	Levees	197 days	Tue 4/1/14	Wed 10/1/14																				
532	Site Mobilization - Levees - 1	15 days	Tue 4/1/14	Tue 4/15/14		533,535,536																		
533	Haul Roads & Drainage	3.75 days	Tue 4/15/14	Fri 4/18/14	532	534																		
534	Care & Diversion of Water - Erosion Control - SWPC	1.25 days	Fri 9/19/14	Sat 9/20/14	533,554FF		full duration of levee constr																	
535	Demo, Commercial Building	40 days	Tue 4/15/14	Thu 5/22/14	532																			
536	Demo, Homes	25 days	Tue 4/15/14	Thu 5/8/14	532																			
537	Clearing & Grubbing, Levee Stripping (plus tree removal)	21 days	Thu 5/1/14	Tue 5/20/14		538SS+2.5 days																		
538	Levee Degrading	30 days	Sat 5/3/14	Sat 5/31/14	537SS+2.5 days	544SS+2.5 days,545SS+6.5																		
539	Site Mobilization - Borrow Areas	15 days	Thu 5/1/14	Thu 5/15/14		540																		
540	Haul Roads & Drainage - Borrow Areas	5 days	Thu 5/15/14	Tue 5/20/14	539	541SS																		
541	Care & Diversion of Water - Erosion Control - SWPC - Borrow Areas	1.25 days	Tue 9/30/14	Wed 10/1/14	540SS,553FF		full duration of borrow area use																	
542	Surface Layer Removal & Stockpile - Borrow Areas	35 days	Wed 6/11/14	Mon 7/14/14	545FF-6.25 days	543SS+2.5 days	double crews																	
543	Excavation & Hauling - Borrow Areas	105 days	Fri 6/13/14	Fri 9/19/14	542SS+2.5 days		double crews																	
544	Site Mobilization - Slurry Wall - Season 1	15 days	Tue 5/6/14	Tue 5/20/14	538SS+2.5 days																			
545	Slurry Wall Construction	76.5 days	Fri 5/9/14	Sat 7/19/14	538SS+6.25 days	542FF-6.25 days,546FF+39 days	double crews																	
546	Emankment Fill, from Borrow	109 days	Thu 5/15/14	Mon 8/25/14	545FF+39 days	550FF+25 days,547,549,5	double crews																	
547	Demob - Slurry Wall - Season 1	15 days	Mon 8/25/14	Mon 9/8/14	546																			
548	Maintenance Road - ABC	15 days	Sat 8/16/14	Sat 8/30/14	546FF+6.25 days																			
549	Revegetation/Hydroseed	24 days	Mon 8/25/14	Tue 9/16/14	546	551,554																		
550	Surface Layer Restoration - Borrow Areas - Season 1	35 days	Fri 8/15/14	Wed 9/17/14	546FF+25 days		double crews																	
551	Weather Delays	6.25 days	Tue 9/16/14	Mon 9/22/14	549	552																		
552	Demob - Borrow Areas	5 days	Mon 9/22/14	Fri 9/26/14	551	553																		

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
553	Site Cleanup/Finish Work - Borrow Areas	5 days	Fri 9/26/14	Wed 10/1/14	552	541FF																		
554	Demob - Levee Areas	5 days	Tue 9/16/14	Sat 9/20/14	549	534FF,555																		
555	Site Cleanup/Finish Work - Levee Areas	5 days	Sat 9/20/14	Thu 9/25/14	554																			
556	Relocations	187.5 days	Tue 4/1/14	Tue 9/23/14																				
557	Roads, Construction Activities	160 days	Tue 4/1/14	Thu 8/28/14																				
558	Site Mobilization - for Rd Relocations	15 days	Tue 4/1/14	Tue 4/15/14		561																		
559	Road Surfacing	130 days	Tue 4/15/14	Thu 8/14/14																				
560	Site Work	130 days	Tue 4/15/14	Thu 8/14/14																				
561	Private Driveways	50 days	Tue 4/15/14	Sat 5/31/14	558	562																		
562	Natomas Road	80 days	Sat 5/31/14	Thu 8/14/14	561	564																		
563	Access Road (at berm adjacent to canal relocation)	25 days	Fri 5/23/14	Mon 6/16/14	577																			
564	Site Demobilization - for Rd Relocations	15 days	Thu 8/14/14	Thu 8/28/14	562																			
565	Cemeteries, Utils, Structures	187.5 days	Tue 4/1/14	Tue 9/23/14																				
566	Utils	187.5 days	Tue 4/1/14	Tue 9/23/14																				
567	Site Mobilization - for Util Relocations	15 days	Tue 4/1/14	Tue 4/15/14		569																		
568	Electrical	68 days	Tue 4/15/14	Tue 6/17/14																				
569	Utility Poles	68 days	Tue 4/15/14	Tue 6/17/14	567	584	1/day																	
570	Utility Crossing Relocations	150 days	Thu 5/1/14	Thu 9/18/14																				
571	Schiedel	30 days	Thu 5/1/14	Thu 5/29/14		572																		
572	De Wit	30 days	Thu 5/29/14	Thu 6/26/14	571	573																		
573	Calif Sunshine Fisheries	30 days	Thu 6/26/14	Thu 7/24/14	572	574																		
574	Odysseus	30 days	Thu 7/24/14	Thu 8/21/14	573	575																		
575	Family Real Properties	30 days	Thu 8/21/14	Thu 9/18/14	574	584																		
576	Canal Relocations	24 days	Thu 5/1/14	Fri 5/23/14																				
577	Reiego Rd Canal Relocations	24 days	Thu 5/1/14	Fri 5/23/14		563																		
578	Stripping	2 days	Thu 5/1/14	Fri 5/2/14		580																		
579	Compacted Embankment	7 days	Thu 5/15/14	Wed 5/21/14	583	582																		
580	Excavation to Stockpile	6 days	Fri 5/2/14	Thu 5/8/14	578	581																		
581	Field Irrigation Turnouts	2 days	Thu 5/8/14	Sat 5/10/14	580	583																		
582	Erosion Control Seeding	2 days	Wed 5/21/14	Fri 5/23/14	579																			
583	Misc Sitework	5 days	Sat 5/10/14	Thu 5/15/14	581	579																		

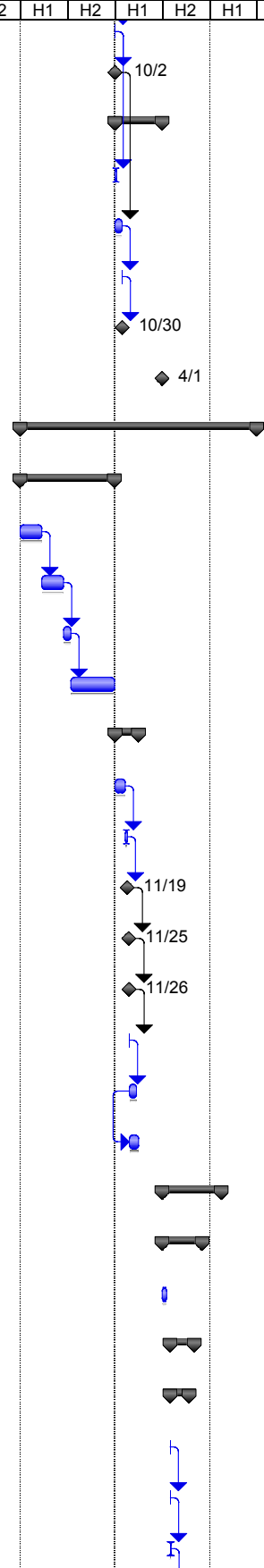
CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
584	Site Demob - for Util Relocations	5 days	Thu 9/18/14	Tue 9/23/14	569,575																			
585	Engineering during Construction, S&A and Construction Completion	215 days	Fri 3/14/14	Wed 10/1/14																				
586	Engineering During Construction	215 days	Fri 3/14/14	Wed 10/1/14	530FF																			
587	Supervision and Administration	215 days	Fri 3/14/14	Wed 10/1/14	530FF	588FF																		
588	Construction Completion	0 days	Wed 10/1/14	Wed 10/1/14	587FF	590																		
589	Inspection and Construction per Punch List	8.75 days	Wed 10/1/14	Thu 10/9/14																				
590	PreFinal Inspection	1.25 days	Wed 10/1/14	Thu 10/2/14	588	591																		
591	Contractor Implement Punch List Items	6.25 days	Thu 10/2/14	Wed 10/8/14	590	592																		
592	Final Inspection	1.25 days	Wed 10/8/14	Thu 10/9/14	591	593,595																		
593	Construction Physical Completion	0 days	Thu 10/9/14	Thu 10/9/14	592	596																		
594	Project Closeout	185.5 days	Thu 10/9/14	Wed 4/1/15																				
595	Construction Prepares Project Completion Letter	6.25 days	Thu 10/9/14	Wed 10/15/14	592																			
596	Contractors Complete As-Builts	28.75 days	Thu 10/9/14	Wed 11/5/14	593	597																		
597	Submit As-Builts	1.25 days	Wed 11/5/14	Thu 11/6/14	596	598																		
598	Notice of Completion/Assumption of OMRR&R	0 days	Thu 11/6/14	Thu 11/6/14	597																			
599	Project Fiscally Complete	0 days	Wed 4/1/15	Wed 4/1/15																				
600	Construction Contract 7 - Reach G	978.75 days	Tue 10/1/13	Fri 4/1/16			Sta 237+00 to 426+30 - Elverta Road to NEMDC Pump Station - Work involves levee improvements																	
601	Design	390 days	Tue 10/1/13	Tue 9/30/14																				
602	Collect field explorations	90 days	Tue 10/1/13	Tue 12/24/13		603																		
603	Conduct geotechnical evaluation	90 days	Tue 12/24/13	Tue 3/18/14	602	604																		
604	Develop Basis of Design Report	30 days	Tue 3/18/14	Tue 4/15/14	603	605																		
605	Develop Plans & Specifications	180 days	Tue 4/15/14	Tue 9/30/14	604																			
606	Pre-Construction	96.25 days	Wed 10/1/14	Tue 12/30/14																				
607	Project Bid	41.25 days	Wed 10/1/14	Sat 11/8/14		608																		
608	Award Task Order	8.75 days	Sat 11/8/14	Mon 11/17/14	607	609																		
609	Construction Contract Awarded	0 days	Mon 11/17/14	Mon 11/17/14	608	610FS+6.25 days																		
610	Issue NTP	0 days	Sat 11/22/14	Sat 11/22/14	609FS+6.25 days	611FS+1.25 days																		
611	NTP Acknowledged	0 days	Mon 11/24/14	Mon 11/24/14	610FS+1.25 days	612																		
612	Pre-Con Meeting	1.25 days	Mon 11/24/14	Tue 11/25/14	611	613																		
613	Prepare Pre-Construction Submittals	28.75 days	Tue 11/25/14	Mon 12/22/14	612	614SS																		
614	Corps Approve Pre-Constructon Submittals	37.5 days	Tue 11/25/14	Tue 12/30/14	613SS																			
615	Construction	189.5 days	Wed 4/1/15	Thu 9/24/15																				
616	Levees & Floodwalls	189.5 days	Wed 4/1/15	Thu 9/24/15		672FF,673FF																		

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
617	Levees	189.5 days	Wed 4/1/15	Thu 9/24/15																				
618	Site Mobilization - Levees	15 days	Wed 4/1/15	Wed 4/15/15		619,621,650SS																		
619	Haul Roads & Drainage	3.75 days	Wed 4/15/15	Sat 4/18/15	618	620SS																		
620	Care & Diversion of Water - Erosion Control - SWPC	1.25 days	Thu 9/3/15	Fri 9/4/15	619SS,639FF		full duration of levee constr																	
621	Demo, Homes	40 days	Wed 4/15/15	Fri 5/22/15	618																			
622	Clearing & Grubbing, Levee Stripping (plus tree removal)	31 days	Fri 5/1/15	Fri 5/29/15		623SS+2.5 days																		
623	Levee Degrading	27 days	Mon 5/4/15	Thu 5/28/15	622SS+2.5 days	630SS+6.25 days																		
624	Site Mobilization - Borrow Areas	15 days	Tue 5/19/15	Tue 6/2/15	629SS+25 days	625,627																		
625	Haul Roads & Drainage - Borrow Areas	5 days	Tue 6/2/15	Sat 6/6/15	624	626SS																		
626	Care & Diversion of Water - Erosion Control - SWPC - Borrow Areas	1.25 days	Wed 9/23/15	Thu 9/24/15	625SS,638FF		full duration of borrow area use																	
627	Surface Layer Removal & Stockpile - Borrow Areas	48 days	Tue 6/2/15	Thu 7/16/15	624																			
628	Excavation & Hauling - Borrow Areas	85 days	Fri 5/29/15	Mon 8/17/15	630FF+38 days		double crew																	
629	Site Mobilization - Slurry Wall	15 days	Sat 4/25/15	Sat 5/9/15	630SS-15 days	624SS+25 days																		
630	Slurry Wall Construction	69 days	Sat 5/9/15	Mon 7/13/15	623SS+6.25 days	628FF+38 days,629SS-15 days,631FF+38	double rigs/cres																	
631	Emankment Fill, from Borrow	90 days	Mon 5/25/15	Mon 8/17/15	630FF+38 days	635FF+25 days,632FF,634	double crew																	
632	Maintenance Road - ABC	12.5 days	Wed 8/5/15	Mon 8/17/15	631FF																			
633	Demob - Slurry Wall	15 days	Mon 7/13/15	Mon 7/27/15	630																			
634	Revegetation/Hydroseed	15 days	Mon 8/17/15	Mon 8/31/15	631	639																		
635	Surface Layer Restoration - Borrow Areas	48 days	Mon 7/27/15	Wed 9/9/15	631FF+25 days	636	double crews																	
636	Weather Delays	6.25 days	Wed 9/9/15	Tue 9/15/15	635	637																		
637	Demob - Borrow Areas	5 days	Tue 9/15/15	Sat 9/19/15	636	638																		
638	Site Cleanup/Finish Work - Borrow Areas	5 days	Sat 9/19/15	Thu 9/24/15	637	626FF																		
639	Demob - Levee Areas	5 days	Mon 8/31/15	Fri 9/4/15	634	620FF,640																		
640	Site Cleanup/Finish Work - Levee Areas	5 days	Fri 9/4/15	Wed 9/9/15	639																			
641	Relocations	172.5 days	Wed 4/1/15	Wed 9/9/15																				
642	Roads, Construction Activities	172.5 days	Wed 4/1/15	Wed 9/9/15																				
643	Site Mobilization - for Rd Relocations	15 days	Wed 4/1/15	Wed 4/15/15		644																		
644	Private Driveways	115 days	Wed 4/15/15	Fri 7/31/15	643																			
645	Natomas Road	80 days	Fri 6/12/15	Wed 8/26/15	631FF	647																		
646	Access Road (at berm adjacent to canal relocation)	42 days	Fri 5/15/15	Tue 6/23/15	669																			

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
647	Site Demobilization - for Rd Relocations	15 days	Wed 8/26/15	Wed 9/9/15	645																			
648	Cemeteries, Utils, Structures	161.25 days	Wed 4/1/15	Sat 8/29/15																				
649	Utils	161.25 days	Wed 4/1/15	Sat 8/29/15																				
650	Site Mobilization - for Util Relocations	15 days	Wed 4/1/15	Wed 4/15/15	618SS	669,652,654																		
651	Electrical	51 days	Wed 4/15/15	Mon 6/1/15																				
652	Utility Poles	51 days	Wed 4/15/15	Mon 6/1/15	650	670	1/day																	
653	Utility Crossing Relocations	128.75 days	Fri 5/1/15	Sat 8/29/15																				
654	Well Relocations	120 days	Fri 5/1/15	Fri 8/21/15	650	670																		
655	Avids	30 days	Fri 5/1/15	Fri 5/29/15		656																		
656	Cayocca	30 days	Fri 5/29/15	Fri 6/26/15	655	657																		
657	Driggs	30 days	Fri 6/26/15	Fri 7/24/15	656	658																		
658	Hendrix	30 days	Fri 7/24/15	Fri 8/21/15	657																			
659	PP - No 6	100 days	Thu 5/28/15	Sat 8/29/15			Sta ~362+50																	
660	Demo	21 days	Thu 5/28/15	Tue 6/16/15	630SS+20 days	661	expected to commence about 25 days before levee construction reaches this point																	
661	Earthwork	5 days	Tue 6/16/15	Sat 6/20/15	660	663																		
662	Roads	4 days	Tue 8/25/15	Sat 8/29/15	667	665FF																		
663	Pipes	10 days	Sat 6/20/15	Tue 6/30/15	661	664																		
664	Positive Closure Vault	30 days	Tue 6/30/15	Tue 7/28/15	663	666																		
665	Security Fence	3 days	Wed 8/26/15	Sat 8/29/15	662FF																			
666	Pumps & Motors	30 days	Tue 7/28/15	Tue 8/25/15	664	667FF																		
667	Power & Controls	30 days	Tue 7/28/15	Tue 8/25/15	666FF	662																		
668	Canal Relocations	32.5 days	Wed 4/15/15	Fri 5/15/15																				
669	Drainage Canal Relocations	32.5 days	Wed 4/15/15	Fri 5/15/15	650	646																		
670	Site Demob - for Util Relocations	5 days	Fri 8/21/15	Wed 8/26/15	652,654																			
671	Engineering during Construction, S&A and Construction Completion	189 days	Wed 4/1/15	Thu 9/24/15																				
672	Engineering During Construction	189 days	Wed 4/1/15	Thu 9/24/15	616FF																			
673	Supervision and Administration	189 days	Wed 4/1/15	Thu 9/24/15	616FF	674FF																		
674	Construction Completion	0 days	Thu 9/24/15	Thu 9/24/15	673FF	676																		
675	Inspection and Construction per Punch List	8.75 days	Thu 9/24/15	Fri 10/2/15																				
676	PreFinal Inspection	1.25 days	Thu 9/24/15	Fri 9/25/15	674	677																		
677	Contractor Implement Punch List Items	6.25 days	Fri 9/25/15	Thu 10/1/15	676	678																		



CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE												Fri 8/13/10										
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
678	Final Inspection	1.25 days	Thu 10/1/15	Fri 10/2/15	677	679,681																		
679	Construction Physical Completion	0 days	Fri 10/2/15	Fri 10/2/15	678	682																		
680	Project Closeout	194.25 days	Fri 10/2/15	Fri 4/1/16																				
681	Construction Prepares Project Completion Letter	6.25 days	Fri 10/2/15	Thu 10/8/15	678																			
682	Contractors Complete As-Builts	28.75 days	Fri 10/2/15	Thu 10/29/15	679	683																		
683	Submit As-Builts	1.25 days	Thu 10/29/15	Fri 10/30/15	682	684																		
684	Notice of Completion/Assumption of OMRR&R	0 days	Fri 10/30/15	Fri 10/30/15	683																			
685	Project Fiscally Complete	0 days	Fri 4/1/16	Fri 4/1/16																				
686	Construction Contract 8 - Reaches B, C, and D (utility relocations)	978.75 days	Wed 10/1/14	Sat 4/1/17			Work consists of required changes to Pumping Plants in Reaches B, C & D. Gaps were left in the cutoff																	
687	Design	390 days	Wed 10/1/14	Wed 9/30/15																				
688	Collect field explorations	90 days	Wed 10/1/14	Wed 12/24/14		689																		
689	Conduct geotechnical evaluation	90 days	Wed 12/24/14	Wed 3/18/15	688	690																		
690	Develop Basis of Design Report	30 days	Wed 3/18/15	Wed 4/15/15	689	691																		
691	Develop Plans & Specifications	180 days	Wed 4/15/15	Wed 9/30/15	690																			
692	Pre-Construction	96.25 days	Sat 10/3/15	Fri 1/1/16																				
693	Project Bid	41.25 days	Sat 10/3/15	Wed 11/11/15		694																		
694	Award Task Order	8.75 days	Wed 11/11/15	Thu 11/19/15	693	695																		
695	Construction Contract Awarded	0 days	Thu 11/19/15	Thu 11/19/15	694	696FS+6.25 days																		
696	Issue NTP	0 days	Wed 11/25/15	Wed 11/25/15	695FS+6.25 days	697FS+1.25 days																		
697	NTP Acknowledged	0 days	Thu 11/26/15	Thu 11/26/15	696FS+1.25 days	698																		
698	Pre-Con Meeting	1.25 days	Thu 11/26/15	Fri 11/27/15	697	699																		
699	Prepare Pre-Construction Submittals	28.75 days	Fri 11/27/15	Thu 12/24/15	698	700SS																		
700	Corps Approve Pre-Constructon Submittals	37.5 days	Fri 11/27/15	Fri 1/1/16	699SS																			
701	Construction	244 days	Fri 4/1/16	Tue 11/15/16																				
702	Levees, fill slurry wall gaps	165.94 days	Fri 4/1/16	Fri 9/2/16																				
703	Mobilization	18 days	Fri 4/1/16	Mon 4/18/16																				
704	Reach B	100.13 days	Mon 5/2/16	Wed 8/3/16																				
705	Elkhorn PP	78.81 days	Mon 5/2/16	Thu 7/14/16																				
706	Clearing & Grubbing	1 day	Mon 5/2/16	Mon 5/2/16		707																		
707	Stripping	1 day	Mon 5/2/16	Tue 5/3/16	706	708																		
708	Levee Degrading	2 days	Tue 5/3/16	Thu 5/5/16	707	710																		



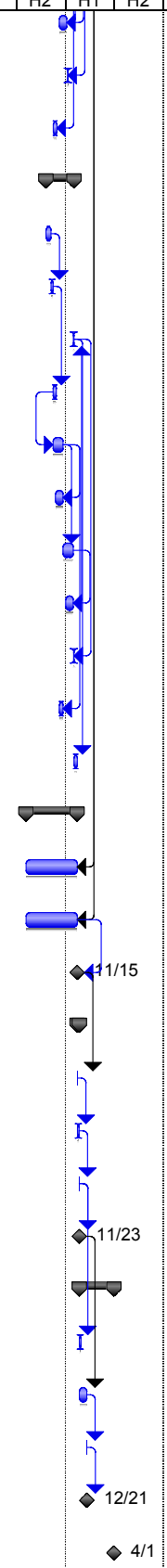
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
709	Levee Fill	3 days	Thu 6/16/16	Sat 6/18/16	710FS+21 days	711																		
710	Cutoff Wall	10 days	Thu 5/5/16	Fri 5/27/16	708	709FS+21 days,717FS+2																		
711	Revegetation	1 day	Mon 6/20/16	Thu 7/14/16	709																			
712	RD 1000, PP No 5	75.13 days	Wed 5/25/16	Wed 8/3/16																				
713	Clearing & Grubbing	1 day	Wed 5/25/16	Wed 5/25/16		714																		
714	Stripping	1 day	Wed 5/25/16	Thu 5/26/16	713	715																		
715	Levee Degrading	2 days	Thu 5/26/16	Sat 5/28/16	714																			
716	Levee Fill	3 days	Wed 7/6/16	Sat 7/9/16	717FS+21 days	718																		
717	Cutoff Wall	5 days	Mon 5/30/16	Thu 6/16/16	710FS+2 days	716FS+21 days,725FS+2																		
718	Revegetation	1 day	Sat 7/9/16	Wed 8/3/16	716																			
719	Reach C	75.19 days	Tue 6/14/16	Tue 8/23/16																				
720	Prichard PP & RD 1000, PP No 2	75.19 days	Tue 6/14/16	Tue 8/23/16																				
721	Clearing & Grubbing	1 day	Tue 6/14/16	Tue 6/14/16		722																		
722	Stripping	1 day	Tue 6/14/16	Wed 6/15/16	721	723																		
723	Levee Degrading	2 days	Wed 6/15/16	Fri 6/17/16	722																			
724	Levee Fill	3 days	Tue 7/26/16	Fri 7/29/16	725FS+21 days	726																		
725	Cutoff Wall	5 days	Sat 6/18/16	Wed 7/6/16	717FS+2 days	724FS+21 days,772,779																		
726	Revegetation	1 day	Fri 7/29/16	Tue 8/23/16	724	727																		
727	Demobilization	12 days	Tue 8/23/16	Fri 9/2/16	726																			
728	Relocations	244 days	Fri 4/1/16	Tue 11/15/16		819FF,818FF																		
729	Mobilization	18 days	Fri 4/1/16	Mon 4/18/16																				
730	Reach B	138.63 days	Mon 5/2/16	Thu 9/8/16																				
731	W Drainage Canal (EOPC)	47.5 days	Mon 5/2/16	Wed 6/15/16																				
732	Demolition	12.5 days	Mon 5/2/16	Fri 5/13/16																				
733	Clearing & Grubbing	3.75 days	Mon 5/2/16	Thu 5/5/16		734																		
734	Stripping	11.25 days	Thu 5/5/16	Mon 5/16/16	733	735SS+2.5 days																		
735	Excavation	25 days	Sat 5/7/16	Tue 5/31/16	734SS+2.5 days	736																		
736	Fill	10 days	Tue 5/31/16	Thu 6/9/16	735	737																		
737	Demob	6.25 days	Thu 6/9/16	Wed 6/15/16	736																			
738	Elkhorn PP	100.56 days	Sat 5/14/16	Tue 8/16/16																				
739	Demo	5 days	Sat 5/14/16	Thu 5/19/16		740																		

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
740	Earthwork	8 days	Thu 5/19/16	Thu 5/26/16	739	742																		
741	Roads	4 days	Wed 8/10/16	Sat 8/13/16	746	744FF,747																		
742	Pipes	14 days	Fri 5/27/16	Thu 6/9/16	740,710	743SS	follows cutoff wall placement																	
743	Positive Closure & Flow Meter Vaults	40 days	Fri 5/27/16	Mon 7/4/16	742SS	745																		
744	Pump Platform Rehabilitation	15 days	Mon 8/1/16	Sat 8/13/16	741FF																			
745	Pumps & Motors	40 days	Mon 7/4/16	Wed 8/10/16	743	746FF																		
746	Power & Controls	30 days	Wed 7/13/16	Wed 8/10/16	745FF	741																		
747	Bank Stabilization	2 days	Mon 8/15/16	Tue 8/16/16	741																			
748	Riverside PP, Phase 2	108 days	Mon 5/2/16	Wed 8/10/16			assumption is this takes place after the Riverside Canal work																	
749	Demo	17 days	Mon 5/2/16	Tue 5/17/16		750																		
750	Earthwork	2 days	Tue 5/17/16	Thu 5/19/16	749	752																		
751	Roads	4 days	Tue 8/2/16	Fri 8/5/16	756	754FF,757																		
752	Pipes	10 days	Thu 5/19/16	Sat 5/28/16	750	753SS																		
753	Positive Closure & Flow Meter Vaults	40 days	Thu 5/19/16	Sat 6/25/16	752SS	755																		
754	Security Fence	2 days	Wed 8/3/16	Fri 8/5/16	751FF																			
755	Pumps & Motors	40 days	Sat 6/25/16	Tue 8/2/16	753	756FF																		
756	Power & Controls	30 days	Tue 7/5/16	Tue 8/2/16	755FF	751																		
757	Flow Meters	5 days	Fri 8/5/16	Wed 8/10/16	751																			
758	RD 1000, PP No 5	109.88 days	Sat 5/28/16	Thu 9/8/16																				
759	Demo	17 days	Sat 5/28/16	Mon 6/13/16		760																		
760	Earthwork	2 days	Mon 6/13/16	Wed 6/15/16	759	762																		
761	Roads	4 days	Tue 8/30/16	Sat 9/3/16	766	764FF,767																		
762	Pipes	10 days	Thu 6/16/16	Sat 6/25/16	760,717	763SS	follows cutoff wall placement																	
763	Positive Closure & Flow Meter Vaults	40 days	Thu 6/16/16	Sat 7/23/16	762SS	765																		
764	Security Fence	2 days	Thu 9/1/16	Sat 9/3/16	761FF																			
765	Pumps & Motors	40 days	Sat 7/23/16	Tue 8/30/16	763	766FF																		
766	Power & Controls	30 days	Tue 8/2/16	Tue 8/30/16	765FF	761																		
767	Flow Meters	5 days	Sat 9/3/16	Thu 9/8/16	761																			
768	Reach C	109.94 days	Fri 6/17/16	Wed 9/28/16																				
769	Prichard PP	40.94 days	Mon 6/27/16	Wed 8/3/16																				
770	Demo	2 days	Mon 6/27/16	Tue 6/28/16		771																		

CESPK **AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE** Fri 8/13/10

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
771	Earthwork	7 days	Tue 6/28/16	Tue 7/5/16	770	772																		
772	Pipes	9 days	Wed 7/6/16	Fri 7/15/16	771,725	773SS	follows cutoff wall placement																	
773	Transition Structure	30 days	Wed 7/6/16	Wed 8/3/16	772SS	774SS																		
774	Concrete Outlet Structure	30 days	Wed 7/6/16	Wed 8/3/16	773SS																			
775	RD 1000, PP No 2	109.94 days	Fri 6/17/16	Wed 9/28/16																				
776	Demo	17 days	Fri 6/17/16	Sat 7/2/16		777																		
777	Earthwork	2 days	Sat 7/2/16	Tue 7/5/16	776	779																		
778	Roads	4 days	Mon 9/19/16	Fri 9/23/16	783	781FF,784																		
779	Pipes	10 days	Wed 7/6/16	Fri 7/15/16	777,725	780SS	follows cutoff wall placement																	
780	Positive Closure & Flow Meter Vaults	40 days	Wed 7/6/16	Fri 8/12/16	779SS	782																		
781	Security Fence	2 days	Wed 9/21/16	Fri 9/23/16	778FF																			
782	Pumps & Motors	40 days	Fri 8/12/16	Mon 9/19/16	780	783FF																		
783	Power & Controls	30 days	Mon 8/22/16	Mon 9/19/16	782FF	778																		
784	Flow Meters	5 days	Fri 9/23/16	Wed 9/28/16	778																			
785	Reach D	199.5 days	Mon 5/2/16	Thu 11/3/16																				
786	RD 1000, PP No 4	65 days	Mon 5/2/16	Fri 7/1/16																				
787	Demo	2 days	Mon 5/2/16	Tue 5/3/16		788																		
788	Earthwork	2 days	Tue 5/3/16	Thu 5/5/16	787	790																		
789	Roads	1 day	Thu 6/30/16	Fri 7/1/16	793																			
790	Concrete Footing	10 days	Thu 5/5/16	Sat 5/14/16	788	791SS																		
791	New Building	50 days	Thu 5/5/16	Tue 6/21/16	790SS	792																		
792	Pumps & Motors	10 days	Tue 6/21/16	Thu 6/30/16	791	793FF																		
793	Power & Controls	10 days	Tue 6/21/16	Thu 6/30/16	792FF	789																		
794	Bennett PP	110 days	Fri 7/1/16	Wed 10/12/16																				
795	Demo	20 days	Fri 7/1/16	Wed 7/20/16		796																		
796	Earthwork	6 days	Wed 7/20/16	Mon 7/25/16	795	798																		
797	Roads	4 days	Fri 10/7/16	Wed 10/12/16	802	803FF																		
798	Pipes	9 days	Mon 7/25/16	Wed 8/3/16	796	799SS	follows cutoff wall placement																	
799	Positive Closure & Flow Meter Vaults	40 days	Mon 7/25/16	Wed 8/31/16	798SS	801,800FF,804																		
800	Concrete Outlet Structure	30 days	Wed 8/3/16	Wed 8/31/16	799FF																			
801	Pumps & Motors	40 days	Wed 8/31/16	Fri 10/7/16	799	802FF																		

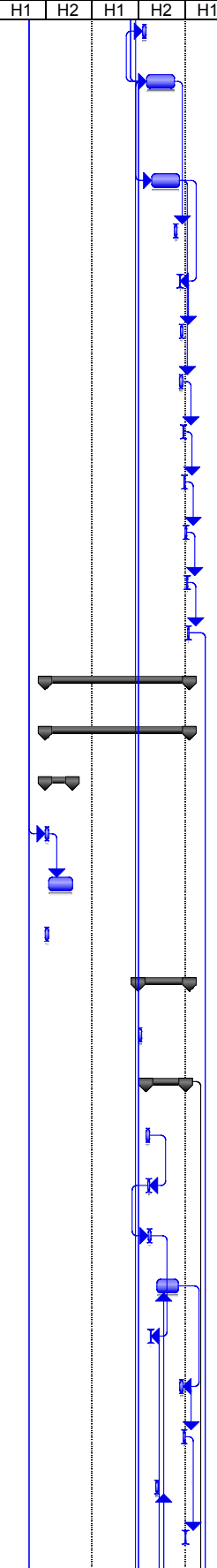
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
802	Power & Controls	30 days	Fri 9/9/16	Fri 10/7/16	801FF	797																		
803	Security Fence	2 days	Mon 10/10/16	Wed 10/12/16	797FF																			
804	Misc Repairs	15 days	Wed 8/17/16	Wed 8/31/16	799FF																			
805	Northern PP	112 days	Fri 7/22/16	Thu 11/3/16																				
806	Demo	20 days	Fri 7/22/16	Wed 8/10/16		807																		
807	Earthwork	8 days	Wed 8/10/16	Wed 8/17/16	806	809																		
808	Roads	4 days	Mon 10/31/16	Thu 11/3/16	813	814FF,816																		
809	Pipes	13 days	Wed 8/17/16	Mon 8/29/16	807	810SS	follows cutoff wall placement																	
810	Positive Closure & Flow Meter Vaults	40 days	Wed 8/17/16	Fri 9/23/16	809SS	812,811FF,815																		
811	Concrete Outlet Structure	30 days	Fri 8/26/16	Fri 9/23/16	810FF																			
812	Pumps & Motors	40 days	Fri 9/23/16	Mon 10/31/16	810	813FF																		
813	Power & Controls	30 days	Mon 10/3/16	Mon 10/31/16	812FF	808																		
814	Security Fence	2 days	Wed 11/2/16	Thu 11/3/16	808FF																			
815	Misc Repairs	15 days	Fri 9/9/16	Fri 9/23/16	810FF																			
816	Demobilization	12 days	Thu 11/3/16	Tue 11/15/16	808																			
817	Engineering during Construction, S&A and Construction Completion	204 days	Mon 5/9/16	Tue 11/15/16																				
818	Engineering During Construction	204 days	Mon 5/9/16	Tue 11/15/16	728FF																			
819	Supervision and Administration	204 days	Mon 5/9/16	Tue 11/15/16	728FF	820FF																		
820	Construction Completion	0 days	Tue 11/15/16	Tue 11/15/16	819FF	822																		
821	Inspection and Construction per Punch List	8.75 days	Tue 11/15/16	Wed 11/23/16																				
822	PreFinal Inspection	1.25 days	Tue 11/15/16	Wed 11/16/16	820	823																		
823	Contractor Implement Punch List Items	6.25 days	Wed 11/16/16	Tue 11/22/16	822	824																		
824	Final Inspection	1.25 days	Tue 11/22/16	Wed 11/23/16	823	825,827																		
825	Construction Physical Completion	0 days	Wed 11/23/16	Wed 11/23/16	824	828																		
826	Project Closeout	138.5 days	Wed 11/23/16	Sat 4/1/17																				
827	Construction Prepares Project Completion Letter	6.25 days	Wed 11/23/16	Tue 11/29/16	824																			
828	Contractors Complete As-Builts	28.75 days	Wed 11/23/16	Tue 12/20/16	825	829																		
829	Submit As-Builts	1.25 days	Tue 12/20/16	Wed 12/21/16	828	830																		
830	Notice of Completion/Assumption of OMR&R	0 days	Wed 12/21/16	Wed 12/21/16	829																			
831	Project Fiscally Complete	0 days	Sat 4/1/17	Sat 4/1/17																				



ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
1	Natomas PACR (LPP)	2608.75 days	Mon 8/2/10	Sat 4/1/17																				
2	Construction of Reaches A, B (remaining), H, I, E, F, G, and B,C,D (utility relocations)	2608.75 days	Mon 8/2/10	Sat 4/1/17																				
3	Construction Contract 1 - Reach A	1433.75 days	Mon 8/2/10	Tue 4/1/14			SREL Sta 742+60 to Sta 956+83 and Sta 0+00 to 20+50. Work involves levee improvements and/or																	
4	Design	390 days	Mon 8/2/10	Mon 8/1/11																				
5	Collect field explorations	90 days	Mon 8/2/10	Mon 10/25/10		6																		
6	Conduct geotechnical evaluation	90 days	Mon 10/25/10	Mon 1/17/11	5	7																		
7	Develop Basis of Design Report	30 days	Mon 1/17/11	Mon 2/14/11	6	8																		
8	Develop Plans & Specifications	180 days	Mon 2/14/11	Mon 8/1/11	7																			
9	Pre-Construction	96.25 days	Mon 10/3/11	Sat 12/31/11																				
10	Project Bid	41.25 days	Mon 10/3/11	Thu 11/10/11		11																		
11	Award Task Order	8.75 days	Thu 11/10/11	Fri 11/18/11	10	12																		
12	Construction Contract Awarded	0 days	Fri 11/18/11	Fri 11/18/11	11	13FS+6.25 days																		
13	Issue NTP	0 days	Thu 11/24/11	Thu 11/24/11	12FS+6.25 days	14FS+1.25 days																		
14	NTP Acknowledged	0 days	Fri 11/25/11	Fri 11/25/11	13FS+1.25 days	15																		
15	Pre-Con Meeting	1.25 days	Fri 11/25/11	Sat 11/26/11	14	16																		
16	Prepare Pre-Construction Submittals	28.75 days	Sat 11/26/11	Fri 12/23/11	15	17SS																		
17	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/26/11	Sat 12/31/11	16SS																			
18	Construction	605.69 days	Mon 4/2/12	Fri 10/18/13																				
19	Levees & Floodwalls	603.5 days	Mon 4/2/12	Wed 10/16/13																				
20	Levees	603.5 days	Mon 4/2/12	Wed 10/16/13																				
21	Season 1	241.25 days	Mon 4/2/12	Tue 11/13/12																				
22	Site Mobilization - Levees	18 days	Mon 4/2/12	Wed 4/18/12		23,74SS,127SS																		
23	Haul Roads & Drainage	6 days	Wed 4/18/12	Tue 4/24/12	22	24SS																		
24	SWPP Installation - Levees	5 days	Wed 4/18/12	Mon 4/23/12	23SS		full duration of levee constr																	
25	Clearing & Grubbing	3 days	Tue 5/1/12	Thu 5/3/12		26SS+2 days																		
26	Levee Stripping	12 days	Wed 5/2/12	Mon 5/14/12	25SS+2 days	35SS+2 days																		
27	Site Mobilization - Borrow Areas	18 days	Mon 4/2/12	Wed 4/18/12		28																		
28	Haul Roads & Drainage - Borrow Areas	6 days	Wed 4/18/12	Tue 4/24/12	27	29SS																		
29	SWPP Installation - Borrow Areas	2 days	Wed 4/18/12	Fri 4/20/12	28SS	30	full duration of borrow area use																	
30	Borrow Areas - Surface Layer Removal & Stockpile	13 days	Fri 4/20/12	Wed 5/2/12	29																			
31	Borrow Areas - Excavation & Hauling (to replace std depth CO Wall Waste)	28 days	Fri 5/4/12	Wed 5/30/12	35SS		assumes 2 crews used																	

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
32	Borrow Areas - Excavation & Hauling (to replace deep CO Wall Waste)	115 days	Wed 5/30/12	Fri 9/14/12	36SS		assumes 2 crews used																	
33	Borrow Areas - Excavation & Hauling	143 days	Thu 5/24/12	Thu 10/4/12	37SS		assumes 2 crews used																	
34	Site Mobilization - Slurry Wall	15 days	Tue 4/17/12	Tue 5/1/12	35SS-18 days																			
35	Slurry Wall Construction (depth less than 75')	28 days	Fri 5/4/12	Wed 5/30/12	26SS+2 days	36,31SS,37SS+ days,34SS-18 days																		
36	Slurry Wall Construction (depth 75' or more)	115 days	Wed 5/30/12	Fri 9/14/12	35	38,32SS	Assumes 2 crews used																	
37	Select/Levee Fill & Random Fill	143 days	Thu 5/24/12	Thu 10/4/12	35SS+21 days	33SS,41,39FF+ days	assumes 2 crews used																	
38	Demob - Slurry Wall	12 days	Fri 9/14/12	Wed 9/26/12	36																			
39	Maintenance Road - ABC	3 days	Sat 10/6/12	Tue 10/9/12	37FF+5 days	40																		
40	Revegetation/Hydroseed	10 days	Tue 10/9/12	Thu 10/18/12	39																			
41	Surface Layer Restoration - Borrow Areas	15 days	Thu 10/4/12	Thu 10/18/12	37	42																		
42	Demob - Borrow Areas	6 days	Thu 10/18/12	Wed 10/24/12	41	43																		
43	Site Cleanup/Finish Work - Borrow Areas	5 days	Wed 10/24/12	Mon 10/29/12	42	44																		
44	Weather Delays	6 days	Mon 10/29/12	Sat 11/3/12	43	45																		
45	Demob - Levee Areas	5 days	Sat 11/3/12	Thu 11/8/12	44	46																		
46	Site Cleanup/Finish Work - Levee Areas	5 days	Thu 11/8/12	Tue 11/13/12	45																			
47	Season 2	213.5 days	Mon 4/1/13	Wed 10/16/13																				
48	Site Mobilization - Levees - Season 1	18 days	Mon 4/1/13	Wed 4/17/13		49																		
49	Haul Roads & Drainage	6 days	Wed 4/17/13	Tue 4/23/13	48	50SS																		
50	SWPP Installation - Levees	5 days	Wed 4/17/13	Mon 4/22/13	49SS		full duration of levee constr																	
51	Clearing & Grubbing	3 days	Wed 5/1/13	Fri 5/3/13		52SS+2 days																		
52	Levee Stripping	12 days	Thu 5/2/13	Tue 5/14/13	51SS+2 days	60SS+2 days																		
53	Site Mobilization - Borrow Areas	18 days	Mon 4/1/13	Wed 4/17/13		54																		
54	Haul Roads & Drainage - Borrow Areas	6 days	Wed 4/17/13	Tue 4/23/13	53	55SS																		
55	SWPP Installation - Borrow Areas	2 days	Wed 4/17/13	Fri 4/19/13	54SS	56	full duration of borrow area use																	
56	Borrow Areas - Surface Layer Removal & Stockpile	13 days	Fri 4/19/13	Wed 5/1/13	55																			
57	Borrow Areas - Excavation & Hauling (to replace deep CO Wall Waste)	115 days	Sat 5/4/13	Tue 8/20/13	60SS		assumes 2 crews used																	
58	Borrow Areas - Excavation & Hauling	115 days	Fri 5/24/13	Mon 9/9/13	61SS		assumes 2 crews used																	

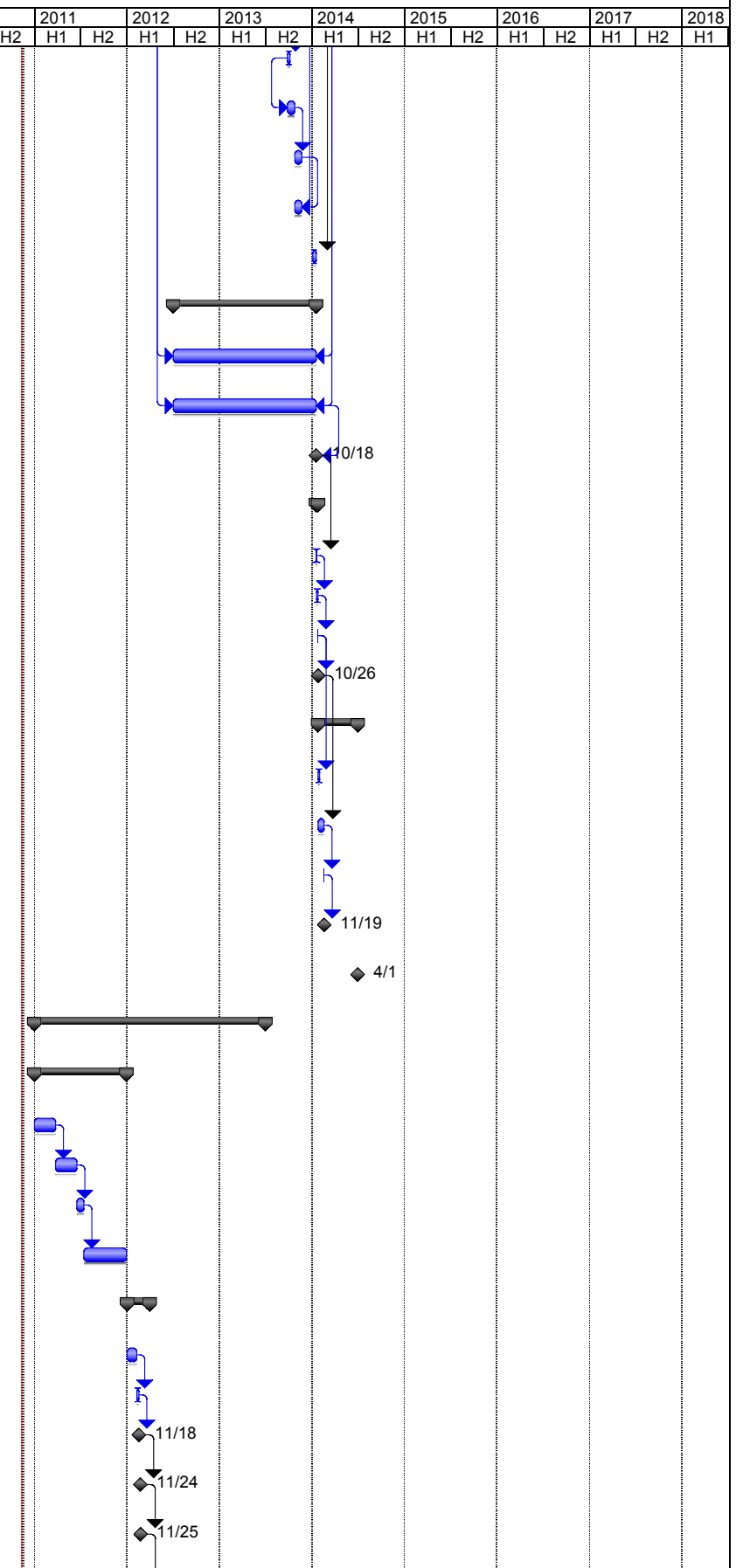
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
59	Site Mobilization - Slurry Wall	15 days	Wed 4/17/13	Wed 5/1/13	60SS-18 days																			
60	Slurry Wall Construction (depth 75' or more)	115 days	Sat 5/4/13	Tue 8/20/13	52SS+2 days	57SS,62,61SS+Assumes 2 crews used days,59SS-18 days,101SS+20 days,110SS+45																		
61	Select/Levee Fill & Random Fill	115 days	Fri 5/24/13	Mon 9/9/13	60SS+21 days	58SS,65,63FF+assumes 2 crews used days																		
62	Demob - Slurry Wall	12 days	Tue 8/20/13	Fri 8/30/13	60																			
63	Maintenance Road - ABC	3 days	Tue 9/10/13	Fri 9/13/13	61FF+5 days	64																		
64	Revegetation/Hydroseed	10 days	Fri 9/13/13	Mon 9/23/13	63																			
65	Surface Layer Restoration - Borrow Areas	15 days	Mon 9/9/13	Mon 9/23/13	61	66																		
66	Demob - Borrow Areas	5 days	Mon 9/23/13	Fri 9/27/13	65	67																		
67	Site Cleanup/Finish Work - Borrow Areas	5 days	Fri 9/27/13	Wed 10/2/13	66	68																		
68	Weather Delays	6 days	Wed 10/2/13	Mon 10/7/13	67	69																		
69	Demob - Levee Areas	5 days	Mon 10/7/13	Fri 10/11/13	68	70																		
70	Site Cleanup/Finish Work - Levee Areas	5 days	Fri 10/11/13	Wed 10/16/13	69	127FF,126FF																		
71	Pumping Plants & Relocations	605.69 days	Mon 4/2/12	Fri 10/18/13																				
72	Utilities	605.69 days	Mon 4/2/12	Fri 10/18/13																				
73	Season 1	115.19 days	Mon 4/2/12	Wed 7/18/12																				
74	Site Mobilization - for Util Relocations	15 days	Mon 4/2/12	Mon 4/16/12	22SS	75																		
75	Utility Poles	100 days	Mon 4/16/12	Wed 7/18/12	74		1/day																	
76	Site Demob - for Util Relocations	15 days	Mon 4/2/12	Sat 4/14/12																				
77	Season 2	215.5 days	Mon 4/1/13	Fri 10/18/13																				
78	Site Mobilization - for Util Relocations	15 days	Mon 4/1/13	Mon 4/15/13																				
79	Riverside Canal, SREL 3B	168 days	Wed 5/1/13	Fri 10/4/13		124																		
80	Demo	16 days	Wed 5/1/13	Wed 5/15/13		81FF																		
81	Clear & Grub	8 days	Wed 5/8/13	Wed 5/15/13	80FF	82SS+2 days																		
82	Stripping	11 days	Fri 5/10/13	Mon 5/20/13	81SS+2 days	84FF+1 day																		
83	Compacted Embankment	89 days	Thu 6/13/13	Wed 9/4/13	89FS+5 days	85FF+20 days																		
84	Excavation to Stockpile	3 days	Sat 5/18/13	Tue 5/21/13	82FF+1 day	89,90																		
85	Concrete Canal Lining	14 days	Tue 9/10/13	Mon 9/23/13	83FF+20 days	86																		
86	ABC	9 days	Mon 9/23/13	Wed 10/2/13	85	88																		
87	Field Irrigation Turnouts	10 days	Sat 6/8/13	Tue 6/18/13	89																			
88	Erosion Control Seeding	3 days	Wed 10/2/13	Fri 10/4/13	86																			



CESPK **AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE** Fri 8/13/10

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
89	30-IN Solid Wall HDPE Pipeline	20 days	Tue 5/21/13	Sat 6/8/13	84	83FS+5 days,87																		
90	Pumping Plant Outfall	20 days	Tue 5/21/13	Sat 6/8/13	84	91SS																		
91	Water Control Facilities	30 days	Tue 5/21/13	Tue 6/18/13	90SS																			
92	Private Irrigation Facility Relocation (Tennet-Labvitch)	60 days	Wed 5/1/13	Wed 6/26/13			Sta ~853+00																	
93	Demo	2 days	Wed 5/1/13	Thu 5/2/13		94SS																		
94	Earthwork	20 days	Wed 5/1/13	Mon 5/20/13	93SS	95																		
95	Well Drilling	10 days	Mon 5/20/13	Wed 5/29/13	94	96																		
96	Well Development	5 days	Wed 5/29/13	Mon 6/3/13	95	97																		
97	Concrete Pad	5 days	Mon 6/3/13	Fri 6/7/13	96	98FS+10 days																		
98	Pump & Discharge Pipe	10 days	Mon 6/17/13	Wed 6/26/13	97FS+10 days	99FF																		
99	Electrical Service	10 days	Mon 6/17/13	Wed 6/26/13	98FF																			
100	Pumping Plant - Sump 160	80 days	Thu 5/23/13	Tue 8/6/13			Sta ~900+00																	
101	Demo	16 days	Thu 5/23/13	Fri 6/7/13	100SS+20 days	102FF	expected to commence about 20 days before levee construction reaches this point																	
102	Earthwork	4 days	Mon 6/3/13	Fri 6/7/13	101FF	104																		
103	Roads	4 days	Fri 8/2/13	Tue 8/6/13	108	106FF																		
104	Pipes	12 days	Fri 6/7/13	Tue 6/18/13	102	105SS																		
105	Positive Closure Vault	30 days	Fri 6/7/13	Fri 7/5/13	104SS	107																		
106	Security Fence	2 days	Sat 8/3/13	Tue 8/6/13	103FF																			
107	Pumps & Motors	30 days	Fri 7/5/13	Fri 8/2/13	105	108FF																		
108	Power & Controls	30 days	Fri 7/5/13	Fri 8/2/13	107FF	103																		
109	RD 1000, PP No 1A	56 days	Sat 6/15/13	Wed 8/7/13			Sta ~924+50																	
110	Demo	6 days	Sat 6/15/13	Fri 6/21/13	109SS+45 days	111	expected to commence about 20 days before levee construction reaches this point																	
111	Site Work	12 days	Fri 6/21/13	Tue 7/2/13	110	112																		
112	Construct Chamber for Sluice Gates & Flap Gates	10 days	Tue 7/2/13	Thu 7/11/13	111	113FS+10 days																		
113	New Slide/Sluice Gates	8 days	Sat 7/20/13	Mon 7/29/13	112FS+10 days	114																		
114	New Flap Gates & Power Winch for Opening	5 days	Mon 7/29/13	Fri 8/2/13	113	115FF+5 days																		
115	Power & Controls for Gate Facilities	10 days	Mon 7/29/13	Wed 8/7/13	114FF+5 days																			
116	RD 1000, PP No 1B	78 days	Sat 6/15/13	Tue 8/27/13			Sta ~924+50																	
117	Demo	13 days	Sat 6/15/13	Thu 6/27/13	116SS+45 days	118FF	expected to commence about 20 days before levee construction reaches this point																	
118	Earthwork	3 days	Tue 6/25/13	Thu 6/27/13	117FF	120																		
119	Roads	5 days	Thu 8/22/13	Tue 8/27/13	123																			

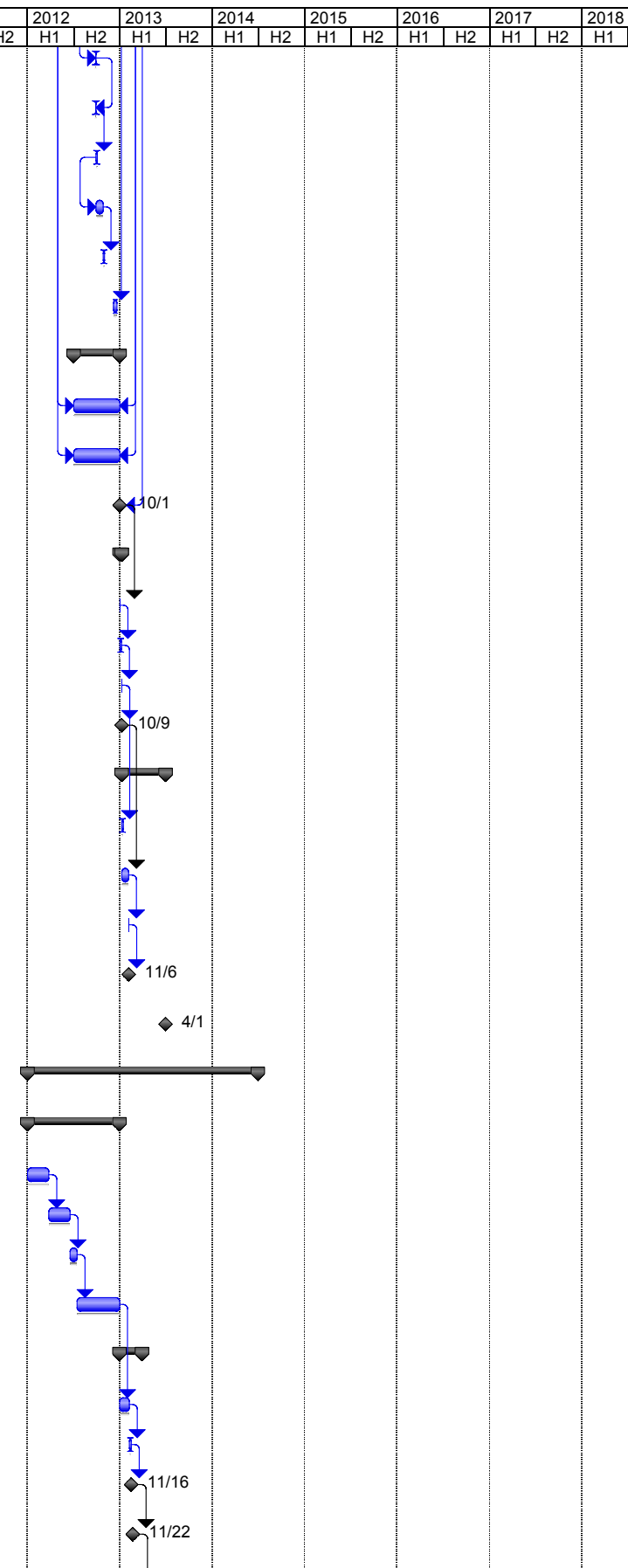
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
120	Pipes	10 days	Thu 6/27/13	Sat 7/6/13	118	121SS																		
121	Positive Closure Vault	30 days	Thu 6/27/13	Thu 7/25/13	120SS	122																		
122	Pumps & Motors	30 days	Thu 7/25/13	Thu 8/22/13	121	123FF																		
123	Power & Controls	30 days	Thu 7/25/13	Thu 8/22/13	122FF	119																		
124	Site Demob - for Util Relocations	15 days	Fri 10/4/13	Fri 10/18/13	79																			
125	Engineering during Construction, S&A and Construction Completion	605 days	Mon 4/2/12	Fri 10/18/13																				
126	Engineering During Construction	605 days	Mon 4/2/12	Fri 10/18/13	22SS,70FF																			
127	Supervision and Administration	605 days	Mon 4/2/12	Fri 10/18/13	22SS,70FF	128FF																		
128	Construction Completion	0 days	Fri 10/18/13	Fri 10/18/13	127FF	130																		
129	Inspection and Construction per Punch List	9 days	Fri 10/18/13	Sat 10/26/13																				
130	PreFinal Inspection	2 days	Fri 10/18/13	Sat 10/19/13	128	131																		
131	Contractor Implement Punch List Items	6 days	Sat 10/19/13	Fri 10/25/13	130	132																		
132	Final Inspection	1 day	Fri 10/25/13	Sat 10/26/13	131	133,135																		
133	Construction Physical Completion	0 days	Sat 10/26/13	Sat 10/26/13	132	136																		
134	Project Closeout	167.25 days	Sat 10/26/13	Tue 4/1/14																				
135	Construction Prepares Project Completion Letter	6 days	Sat 10/26/13	Fri 11/1/13	132																			
136	Contractors Complete As-Builts	24 days	Sat 10/26/13	Mon 11/18/13	133	137																		
137	Submit As-Builts	1 day	Mon 11/18/13	Tue 11/19/13	136	138																		
138	Notice of Completion/Assumption of OMRR&R	0 days	Tue 11/19/13	Tue 11/19/13	137																			
139	Project Fiscally Complete	0 days	Tue 4/1/14	Tue 4/1/14																				
140	Construction Contract 2 - Reach B (remaining work)	977.5 days	Fri 10/1/10	Mon 4/1/13			SREL Sta 635+00 to 742+60 - Work involves changes to several pumping plants and canal																	
141	Design	390 days	Fri 10/1/10	Fri 9/30/11																				
142	Collect field explorations	90 days	Fri 10/1/10	Fri 12/24/10		143																		
143	Conduct geotechnical evaluation	90 days	Fri 12/24/10	Fri 3/18/11	142	144																		
144	Develop Basis of Design Report	30 days	Fri 3/18/11	Fri 4/15/11	143	145																		
145	Develop Plans & Specifications	180 days	Fri 4/15/11	Fri 9/30/11	144																			
146	Pre-Construction	96.25 days	Mon 10/3/11	Sat 12/31/11																				
147	Project Bid	41.25 days	Mon 10/3/11	Thu 11/10/11		148																		
148	Award Task Order	8.75 days	Thu 11/10/11	Fri 11/18/11	147	149																		
149	Construction Contract Awarded	0 days	Fri 11/18/11	Fri 11/18/11	148	150FS+6.25 days																		
150	Issue NTP	0 days	Thu 11/24/11	Thu 11/24/11	149FS+6.25 days	151FS+1.25 days																		
151	NTP Acknowledged	0 days	Fri 11/25/11	Fri 11/25/11	150FS+1.25 days	152																		



ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
152	Pre-Con Meeting	1.25 days	Fri 11/25/11	Sat 11/26/11	151	153																		
153	Prepare Pre-Construction Submittals	28.75 days	Sat 11/26/11	Fri 12/23/11	152	154SS																		
154	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/26/11	Sat 12/31/11	153SS																			
155	Construction	195.44 days	Mon 4/2/12	Mon 10/1/12																				
156	Levees & Floodwalls	195.25 days	Mon 4/2/12	Mon 10/1/12																				
157	Levees	195.25 days	Mon 4/2/12	Mon 10/1/12																				
158	General Construction Schedule	195.25 days	Mon 4/2/12	Mon 10/1/12																				
159	Season 1	195.25 days	Mon 4/2/12	Mon 10/1/12																				
160	Site Mobilization - Levees	18 days	Mon 4/2/12	Wed 4/18/12		161,218SS,219																		
161	Haul Roads & Drainage	6 days	Wed 4/18/12	Tue 4/24/12	160	162SS																		
162	SWPP Installation - Levees	8 days	Wed 4/18/12	Wed 4/25/12	161SS		full duration of levee constr																	
163	Clearing & Grubbing	3 days	Tue 5/1/12	Thu 5/3/12		164SS+2 days																		
164	Levee Stripping	12 days	Wed 5/2/12	Mon 5/14/12	163SS+2 days	173SS+2 days																		
165	Site Mobilization - Borrow Areas	18 days	Mon 4/2/12	Wed 4/18/12		166																		
166	Haul Roads & Drainage - Borrow Areas	6 days	Wed 4/18/12	Tue 4/24/12	165	167SS																		
167	SWPP Installation - Borrow Areas	2 days	Wed 4/18/12	Fri 4/20/12	166SS	168	full duration of borrow area use																	
168	Borrow Areas - Surface Layer Removal & Stockpile	10 days	Fri 4/20/12	Mon 4/30/12	167																			
169	Borrow Areas - Excavation & Hauling (to replace std depth CO Wall Waste)	34 days	Fri 5/4/12	Tue 6/5/12	173SS																			
170	Borrow Areas - Excavation & Hauling (to replace deep CO Wall Waste)	62 days	Tue 6/5/12	Thu 8/2/12	174SS																			
171	Borrow Areas - Excavation & Hauling	96 days	Thu 5/24/12	Tue 8/21/12	175SS		assumes 2 crews used																	
172	Site Mobilization - Slurry Wall	15 days	Tue 4/17/12	Tue 5/1/12	173SS-18 days																			
173	Slurry Wall Construction (depth 75' or more)	34 days	Fri 5/4/12	Tue 6/5/12	164SS+2 days	169SS,172SS-1 days,174,175SS days,200SS																		
174	Slurry Wall Construction (depth less than 75')	62 days	Tue 6/5/12	Thu 8/2/12	173	170SS,176,211	assumes 2 crews used days																	
175	Select/Levee Fill & Random Fill	96 days	Thu 5/24/12	Tue 8/21/12	173SS+21 days	171SS,179,177	assumes 2 crews used days																	
176	Demob - Slurry Wall	12 days	Thu 8/2/12	Mon 8/13/12	174																			
177	Maintenance Road - ABC	4 days	Wed 8/22/12	Sat 8/25/12	175FF+5 days	178																		
178	Revegetation/Hydroseed	16 days	Sat 8/25/12	Mon 9/10/12	177																			
179	Surface Layer Restoration - Borrow Areas	15 days	Tue 8/21/12	Tue 9/4/12	175	180																		

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
180	Demob - Borrow Areas	5 days	Tue 9/4/12	Sat 9/8/12	179	181																		
181	Site Cleanup/Finish Work - Borrow Areas	5 days	Sat 9/8/12	Thu 9/13/12	180	182																		
182	Weather Delays	6 days	Thu 9/13/12	Wed 9/19/12	181	183																		
183	Demob - Levee Areas	6 days	Wed 9/19/12	Tue 9/25/12	182	184																		
184	Site Cleanup/Finish Work - Levee Areas	6 days	Tue 9/25/12	Mon 10/1/12	183	218FF,219FF,2																		
185	Pumping Plants & Relocations	184.44 days	Mon 4/2/12	Thu 9/20/12																				
186	Utilities	184.44 days	Mon 4/2/12	Thu 9/20/12																				
187	Site Mobilization - for Util Relocations	15 days	Mon 4/2/12	Sat 4/14/12		188																		
188	Utility Poles	60 days	Mon 4/16/12	Sat 6/9/12	187		1/day																	
189	Elkhorn PP, Phase 2	100 days	Tue 5/1/12	Thu 8/2/12																				
190	Demo	5 days	Tue 5/1/12	Sat 5/5/12		191																		
191	Earthwork	8 days	Sat 5/5/12	Sat 5/12/12	190	193																		
192	Roads	4 days	Thu 7/26/12	Mon 7/30/12	197	195FF,198																		
193	Pipes	14 days	Sat 5/12/12	Fri 5/25/12	191	194SS																		
194	Positive Closure Vault	40 days	Sat 5/12/12	Tue 6/19/12	193SS	196																		
195	Pump Platform Rehab	20 days	Wed 7/11/12	Mon 7/30/12	192FF																			
196	Pumps & Motors	40 days	Tue 6/19/12	Thu 7/26/12	194	197FF																		
197	Power & Controls	30 days	Thu 6/28/12	Thu 7/26/12	196FF	192																		
198	Bank Stabilization	3 days	Mon 7/30/12	Thu 8/2/12	192																			
199	RD 1000, PP No 3	134 days	Fri 5/4/12	Thu 9/6/12			Sta ~676+00																	
200	Demo	35 days	Fri 5/4/12	Wed 6/6/12	173SS	201	expected to commence about 35 days before levee construction reaches this point																	
201	Earthwork	10 days	Wed 6/6/12	Fri 6/15/12	200	203																		
202	Roads	4 days	Wed 8/29/12	Sat 9/1/12	207	205FF,208																		
203	Pipes	20 days	Fri 6/15/12	Wed 7/4/12	201	204SS																		
204	Positive Closure & Flow Meter Vaults	40 days	Fri 6/15/12	Mon 7/23/12	203SS	206,209																		
205	Security Fence	2 days	Thu 8/30/12	Sat 9/1/12	202FF																			
206	Pumps & Motors	40 days	Mon 7/23/12	Wed 8/29/12	204	207FF																		
207	Power & Controls	30 days	Wed 8/1/12	Wed 8/29/12	206FF	202																		
208	Flap Gates	5 days	Sat 9/1/12	Thu 9/6/12	202	216																		
209	C-I-P Concrete Baffles	30 days	Mon 7/23/12	Mon 8/20/12	204																			
210	Riverside PP, Phase 1	37 days	Thu 6/28/12	Thu 8/2/12			Sta ~707+50																	

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
211	Demo	2 days	Thu 6/28/12	Sat 6/30/12	174SS+25 days	212FF	expected to commence about 5 days before levee construction reaches this point																	
212	Earthwork	2 days	Thu 6/28/12	Sat 6/30/12	211FF	213																		
213	Pipes	5 days	Sat 6/30/12	Thu 7/5/12	212	214SS																		
214	Flow Meter Vault	30 days	Sat 6/30/12	Sat 7/28/12	213SS	215																		
215	Bollards	5 days	Sat 7/28/12	Thu 8/2/12	214																			
216	Site Demobilization - for Util Relocations	15 days	Thu 9/6/12	Thu 9/20/12	208																			
217	Engineering during Construction, S&A and Construction Completion	195 days	Mon 4/2/12	Mon 10/1/12																				
218	Engineering During Construction	195 days	Mon 4/2/12	Mon 10/1/12	160SS,184FF																			
219	Supervision and Administration	195 days	Mon 4/2/12	Mon 10/1/12	160SS,184FF																			
220	Construction Completion	0 days	Mon 10/1/12	Mon 10/1/12	184FF	222																		
221	Inspection and Construction per Punch List	8.75 days	Mon 10/1/12	Tue 10/9/12																				
222	PreFinal Inspection	1.25 days	Mon 10/1/12	Tue 10/2/12	220	223																		
223	Contractor Implement Punch List Items	6.25 days	Tue 10/2/12	Mon 10/8/12	222	224																		
224	Final Inspection	1.25 days	Mon 10/8/12	Tue 10/9/12	223	225,227																		
225	Construction Physical Completion	0 days	Tue 10/9/12	Tue 10/9/12	224	228																		
226	Project Closeout	186 days	Tue 10/9/12	Mon 4/1/13																				
227	Construction Prepares Project Completion Letter	6.25 days	Tue 10/9/12	Mon 10/15/12	224																			
228	Contractors Complete As-Builts	28.75 days	Tue 10/9/12	Mon 11/5/12	225	229																		
229	Submit As-Builts	1.25 days	Mon 11/5/12	Tue 11/6/12	228	230																		
230	Notice of Completion/Assumption of OMRR&R	0 days	Tue 11/6/12	Tue 11/6/12	229																			
231	Project Fiscally Complete	0 days	Mon 4/1/13	Mon 4/1/13																				
232	Construction Contract 3 - Reach H	976.25 days	Mon 10/3/11	Tue 4/1/14			Sta 0+00 to 237+00 - Work involves levee improvements and/or soil bentonite slurry wall																	
233	Design	390 days	Mon 10/3/11	Mon 10/1/12																				
234	Collect field explorations	90 days	Mon 10/3/11	Mon 12/26/11		235																		
235	Conduct geotechnical evaluation	90 days	Mon 12/26/11	Mon 3/19/12	234	236																		
236	Develop Basis of Design Report	30 days	Mon 3/19/12	Mon 4/16/12	235	237																		
237	Develop Plans & Specifications	180 days	Mon 4/16/12	Mon 10/1/12	236	239																		
238	Pre-Construction	96.25 days	Mon 10/1/12	Sat 12/29/12																				
239	Project Bid	41.25 days	Mon 10/1/12	Thu 11/8/12	237	240																		
240	Award Task Order	8.75 days	Thu 11/8/12	Fri 11/16/12	239	241																		
241	Construction Contract Awarded	0 days	Fri 11/16/12	Fri 11/16/12	240	242FS+6.25 days																		
242	Issue NTP	0 days	Thu 11/22/12	Thu 11/22/12	241FS+6.25 days	243FS+1.25 days																		



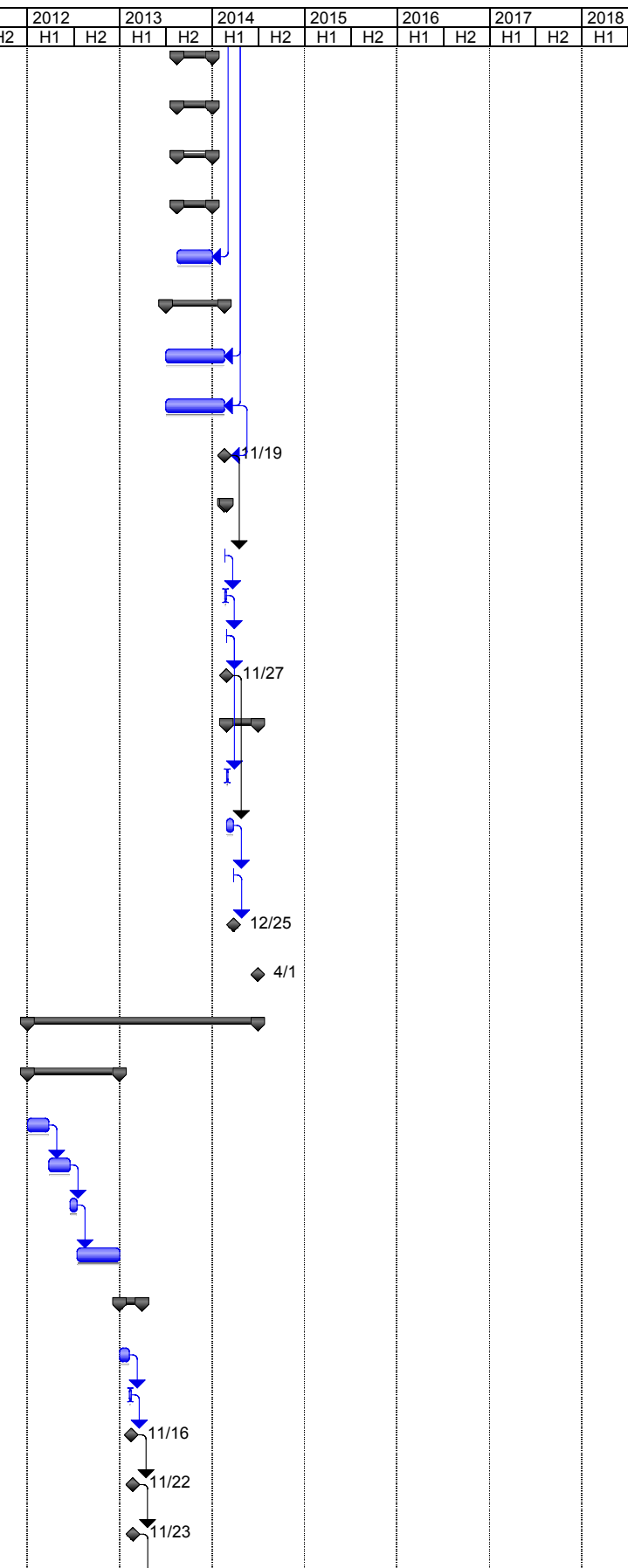
CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE													Fri 8/13/10									
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
243	NTP Acknowledged	0 days	Fri 11/23/12	Fri 11/23/12	242FS+1.25 days	244								11/23										
244	Pre-Con Meeting	1.25 days	Fri 11/23/12	Sat 11/24/12	243	245																		
245	Prepare Pre-Construction Submittals	28.75 days	Sat 11/24/12	Fri 12/21/12	244	246SS																		
246	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/24/12	Sat 12/29/12	245SS																			
247	Construction	249.5 days	Mon 4/1/13	Tue 11/19/13																				
248	Levees & Floodwalls	198.75 days	Mon 4/1/13	Thu 10/3/13																				
249	Levees	198.75 days	Mon 4/1/13	Thu 10/3/13																				
250	Site Mobilization - Levees	18 days	Mon 4/1/13	Wed 4/17/13		251,304SS																		
251	Haul Roads & Drainage	6 days	Wed 4/17/13	Tue 4/23/13	250	252SS	maintain for full duration of levee constr																	
252	SWPP Installation - Levees	13 days	Wed 4/17/13	Mon 4/29/13	251SS		full duration of levee constr																	
253	Clearing & Grubbing	5 days	Wed 5/1/13	Mon 5/6/13		254SS+2 days,282SS																		
254	Levee Stripping	16 days	Thu 5/2/13	Fri 5/17/13	253SS+2 days	255SS+2 days	2 crews																	
255	Levee Degrading	31 days	Sat 5/4/13	Mon 6/3/13	254SS+2 days	262SS+2 days	2 crews																	
256	Site Mobilization - Borrow Areas	18 days	Wed 5/1/13	Fri 5/17/13		257																		
257	Haul Roads & Drainage - Borrow Areas	5 days	Fri 5/17/13	Wed 5/22/13	256	258SS	full duration of borrow area use																	
258	SWPP Installation - Borrow Areas	2 days	Fri 5/17/13	Mon 5/20/13	257SS		full duration of borrow area use																	
259	Surface Layer Removal & Stockpile - Borrow Areas	5 days	Mon 7/1/13	Fri 7/5/13	260SS-2 days		0.66 AC/hr, 4 scrapers																	
260	Excavation & Hauling - Borrow Areas	70 days	Wed 7/3/13	Fri 9/6/13	264SS	259SS-2 days																		
261	Site Mobilization - Slurry Wall	18 days	Fri 4/19/13	Mon 5/6/13	262SS-18 days	299SS,265SS+ days																		
262	Slurry Wall Construction	90 days	Mon 5/6/13	Mon 7/29/13	255SS+2 days	261SS-18 days,308SS,261 days,263SS+12	2 rigs/crews																	
263	Embankment Fill, from Levee Degrading	50 days	Fri 5/17/13	Wed 7/3/13	262SS+12 days	264	2 crews																	
264	Emankment Fill, from Borrow	70 days	Wed 7/3/13	Fri 9/6/13	263	260SS,271,269	2 crews																	
265	Site Mobilization - Jet Grouting	18 days	Wed 5/1/13	Fri 5/17/13	261SS+12 days																			
266	Jet GroutingConstruction	60 days	Fri 5/17/13	Fri 7/12/13	262SS+12 days	267,312SS+12 days,320SS+55 days,321SS+55	assume start about 2 weeks after slurry wall																	
267	Demob - Jet Grouting	12 days	Fri 7/12/13	Wed 7/24/13	266																			
268	Demob - Slurry Wall	12 days	Mon 7/29/13	Fri 8/9/13	262																			
269	Bike Trail (at Levee Crown)	10 days	Fri 9/6/13	Mon 9/16/13	264	274,270FF+6 days																		
270	Revegetation/Hydroseed	18 days	Wed 9/4/13	Sat 9/21/13	269FF+6 days		3.72 AC/day																	
271	Surface Layer Restoration - Borrow Areas	5 days	Fri 9/6/13	Wed 9/11/13	264	272																		
272	Demob - Borrow Areas	6 days	Wed 9/11/13	Tue 9/17/13	271	273																		

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
273	Site Cleanup/Finish Work - Borrow Areas	6 days	Tue 9/17/13	Mon 9/23/13	272																			
274	Weather Delays	6.25 days	Mon 9/16/13	Sat 9/21/13	269	275																		
275	Demob - Levee Areas	6 days	Sat 9/21/13	Fri 9/27/13	274	276																		
276	Site Cleanup/Finish Work - Levee Areas	6 days	Fri 9/27/13	Thu 10/3/13	275	339FF																		
277	Pumping Plants & Relocations	249.5 days	Mon 4/1/13	Tue 11/19/13																				
278	Roads, Construction Activities	248.25 days	Tue 4/2/13	Tue 11/19/13																				
279	Site Mobilization - for Rd Relocations	15 days	Tue 4/2/13	Tue 4/16/13																				
280	Paving Demo	34 days	Wed 5/1/13	Sat 6/1/13																				
281	Demolition	34 days	Wed 5/1/13	Sat 6/1/13																				
282	Arden-Garden Connector	8 days	Wed 5/1/13	Wed 5/8/13	253SS	283																		
283	Bike Trail at Levee Crown	23 days	Wed 5/8/13	Wed 5/29/13	282	284																		
284	East Levee Road	3 days	Wed 5/29/13	Sat 6/1/13	283	287FF																		
285	Dead End Roads	5 days	Wed 5/1/13	Mon 5/6/13		286	about 2 days each but will be done as levee improvement passes thru area																	
286	Natoma Street	2 days	Mon 5/6/13	Tue 5/7/13	285		will be done as levee improvement passes thru area																	
287	Northgate Blvd	6 days	Mon 5/27/13	Sat 6/1/13	284FF		will be done as levee improvement passes thru area																	
288	Road Surfacing	64 days	Fri 9/6/13	Tue 11/5/13																				
289	Site Work	64 days	Fri 9/6/13	Tue 11/5/13																				
290	Arden-Garden Connector	40 days	Fri 9/6/13	Mon 10/14/13	264	291																		
291	Bike Trail at Levee Crown	12 days	Mon 10/14/13	Fri 10/25/13	290	292																		
292	East Levee Road	12 days	Fri 10/25/13	Tue 11/5/13	291	296																		
293	Dead End Roads	10 days	Fri 9/6/13	Mon 9/16/13	264		about 2 days each but will be done as levee improvement passes thru area																	
294	Natoma Street	5 days	Fri 9/6/13	Wed 9/11/13	264		will be done as levee improvement passes thru area																	
295	Northgate Blvd	15 days	Fri 9/6/13	Fri 9/20/13	264		will be done as levee improvement passes thru area																	
296	Site Demobilization - for Rd Relocations	15 days	Tue 11/5/13	Tue 11/19/13	292	341FF,342FF																		
297	Bridge Modifications, W El Camino	205 days	Fri 4/19/13	Mon 10/28/13																				
298	Site Work	205 days	Fri 4/19/13	Mon 10/28/13																				
299	Mob for Bridge Work	15 days	Fri 4/19/13	Fri 5/3/13	261SS	300																		
300	Bridge Modifications, W El Camino	180 days	Fri 5/3/13	Fri 10/18/13	299	301																		
301	Demob for Bridge Work	10 days	Fri 10/18/13	Mon 10/28/13	300																			
302	Cemeteries, Utils, Structures	241.5 days	Mon 4/1/13	Tue 11/12/13																				
303	Utils	241.5 days	Mon 4/1/13	Tue 11/12/13																				

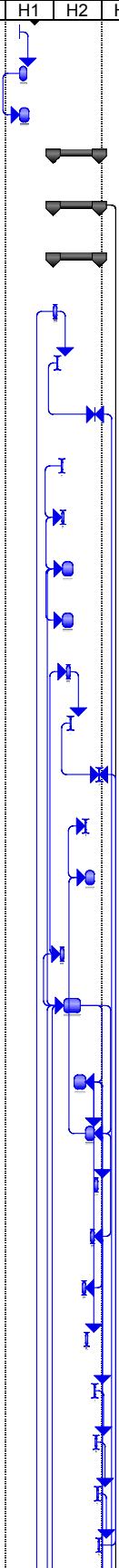
CESPK **AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE** Fri 8/13/10

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
304	Site Mobilization - for Util Relocations	18 days	Mon 4/1/13	Wed 4/17/13	250SS	306																		
305	Electrical	56 days	Wed 4/17/13	Sat 6/8/13																				
306	Utility Poles	56 days	Wed 4/17/13	Sat 6/8/13	304		1/day																	
307	Utility Crossing Relocations	45 days	Mon 5/6/13	Mon 6/17/13																				
308	6" Gas Main	30 days	Mon 5/6/13	Mon 6/3/13	262SS	309SS,310SS																		
309	8" Water Main	30 days	Mon 5/6/13	Mon 6/3/13	308SS																			
310	Fiber Optic Line	45 days	Mon 5/6/13	Mon 6/17/13	308SS																			
311	PP - Sump 102	77 days	Wed 5/29/13	Thu 8/8/13			Sta ~59+80																	
312	Demo	8 days	Wed 5/29/13	Wed 6/5/13	266SS+12 days	313	expected to commence about 10 days before levee construction reaches this point																	
313	Earthwork	5 days	Wed 6/5/13	Mon 6/10/13	312	315																		
314	Roads	4 days	Mon 8/5/13	Thu 8/8/13	318																			
315	Pipes	8 days	Mon 6/10/13	Mon 6/17/13	313	316SS																		
316	Positive Closure Vault	30 days	Mon 6/10/13	Mon 7/8/13	315SS	317																		
317	Pumps & Motors	30 days	Mon 7/8/13	Mon 8/5/13	316	318FF																		
318	Power & Controls	30 days	Mon 7/8/13	Mon 8/5/13	317FF	314																		
319	RD 1000, PP No 8	124 days	Mon 7/8/13	Thu 10/31/13			Sta ~178+00																	
320	Temporary Fencing	5 days	Mon 7/8/13	Fri 7/12/13	266SS+55 days		expected to commence about 10 days before levee construction reaches this point																	
321	Asphalt Removal	1 day	Mon 7/8/13	Tue 7/9/13	266SS+55 days	333SS																		
322	Excavate, Fill & Compact	5 days	Fri 7/26/13	Wed 7/31/13	333	323																		
323	Remove Existing WSP	1 day	Wed 7/31/13	Thu 8/1/13	322	324																		
324	Positive Closure Vault	60 days	Thu 8/1/13	Thu 9/26/13	323	325,327																		
325	Closure Valve, 54-IN	3 days	Thu 9/26/13	Sat 9/28/13	324	326																		
326	Dismantling Joint, 54-IN	2 days	Sat 9/28/13	Tue 10/1/13	325																			
327	Closure Valve, 36-IN	3 days	Thu 9/26/13	Sat 9/28/13	324	328																		
328	Dismantling Joint, 36-IN	2 days	Sat 9/28/13	Tue 10/1/13	327	329																		
329	Siphon Breakers	2 days	Tue 10/1/13	Wed 10/2/13	328	330																		
330	Backfill	1 day	Wed 10/2/13	Thu 10/3/13	329	331,332																		
331	ABC	1 day	Thu 10/3/13	Fri 10/4/13	330																			
332	Electrical Control Equipment	30 days	Thu 10/3/13	Thu 10/31/13	330	334																		
333	Locate & Relocate Utils prior to excavation	20 days	Mon 7/8/13	Fri 7/26/13	321SS	322																		
334	Site Demobilization - for Util Relocations	12 days	Thu 10/31/13	Tue 11/12/13	332																			

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
335	Fish & Wildlife Facilities	150 days	Thu 5/16/13	Thu 10/3/13																				
336	Wildlife Facilities & Sanctuaries	150 days	Thu 5/16/13	Thu 10/3/13																				
337	Dry Creek	150 days	Thu 5/16/13	Thu 10/3/13																				
338	Woodland Corridor & Enhancement	150 days	Thu 5/16/13	Thu 10/3/13																				
339	Mob, Prep Work, Planting & Irrigation, Demob	150 days	Thu 5/16/13	Thu 10/3/13	276FF		sans O&M																	
340	Engineering during Construction, S&A and Construction Completion	249 days	Mon 4/1/13	Tue 11/19/13																				
341	Engineering During Construction	249 days	Mon 4/1/13	Tue 11/19/13	296FF																			
342	Supervision and Administration	249 days	Mon 4/1/13	Tue 11/19/13	296FF	343FF																		
343	Construction Completion	0 days	Tue 11/19/13	Tue 11/19/13	342FF	345																		
344	Inspection and Construction per Punch List	8.75 days	Tue 11/19/13	Wed 11/27/13																				
345	PreFinal Inspection	1.25 days	Tue 11/19/13	Wed 11/20/13	343	346																		
346	Contractor Implement Punch List Items	6.25 days	Wed 11/20/13	Tue 11/26/13	345	347																		
347	Final Inspection	1.25 days	Tue 11/26/13	Wed 11/27/13	346	348,350																		
348	Construction Physical Completion	0 days	Wed 11/27/13	Wed 11/27/13	347	351																		
349	Project Closeout	133 days	Wed 11/27/13	Tue 4/1/14																				
350	Construction Prepares Project Completion Letter	6.25 days	Wed 11/27/13	Tue 12/3/13	347																			
351	Contractors Complete As-Builts	28.75 days	Wed 11/27/13	Tue 12/24/13	348	352																		
352	Submit As-Builts	1.25 days	Tue 12/24/13	Wed 12/25/13	351	353																		
353	Notice of Completion/Assumption of OMRR&R	0 days	Wed 12/25/13	Wed 12/25/13	352																			
354	Project Fiscally Complete	0 days	Tue 4/1/14	Tue 4/1/14																				
355	Construction Contract 4- Reach I	976.25 days	Mon 10/3/11	Tue 4/1/14			Sta 20+50 to 115+73.3 - Work involves levee improvements and/or soil-bentonite slurry wall along the																	
356	Design	390 days	Mon 10/3/11	Mon 10/1/12																				
357	Collect field explorations	90 days	Mon 10/3/11	Mon 12/26/11		358																		
358	Conduct geotechnical evaluation	90 days	Mon 12/26/11	Mon 3/19/12	357	359																		
359	Develop Basis of Design Report	30 days	Mon 3/19/12	Mon 4/16/12	358	360																		
360	Develop Plans & Specifications	180 days	Mon 4/16/12	Mon 10/1/12	359																			
361	Pre-Construction	96.25 days	Mon 10/1/12	Sat 12/29/12																				
362	Project Bid	41.25 days	Mon 10/1/12	Thu 11/8/12		363																		
363	Award Task Order	8.75 days	Thu 11/8/12	Fri 11/16/12	362	364																		
364	Construction Contract Awarded	0 days	Fri 11/16/12	Fri 11/16/12	363	365FS+6.25 days																		
365	Issue NTP	0 days	Thu 11/22/12	Thu 11/22/12	364FS+6.25 days	366FS+1.25 days																		
366	NTP Acknowledged	0 days	Fri 11/23/12	Fri 11/23/12	365FS+1.25 days	367																		

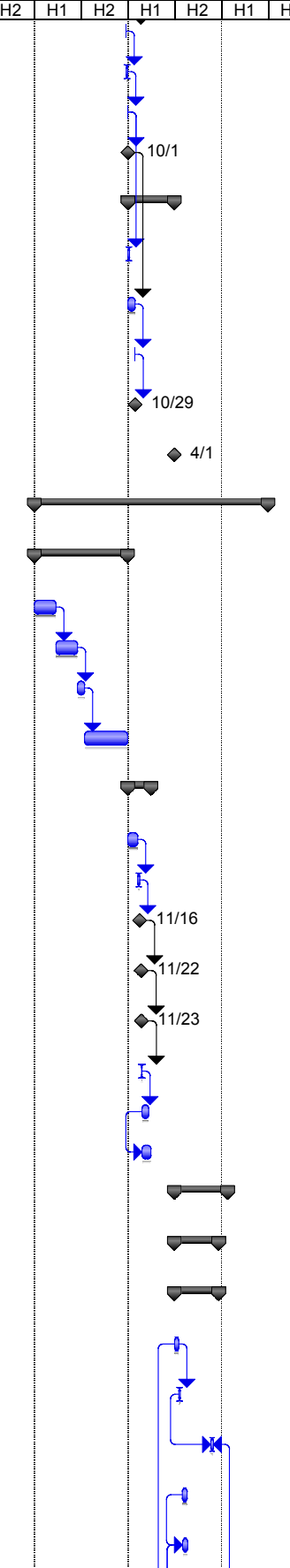


ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
367	Pre-Con Meeting	1.25 days	Fri 11/23/12	Sat 11/24/12	366	368																		
368	Prepare Pre-Construction Submittals	28.75 days	Sat 11/24/12	Fri 12/21/12	367	369SS																		
369	Corps Approve Pre-Constructon Submittals	37.5 days	Sat 11/24/12	Sat 12/29/12	368SS																			
370	Construction	188 days	Mon 4/1/13	Mon 9/23/13																				
371	Levees & Floodwalls	188 days	Mon 4/1/13	Mon 9/23/13		424FF,425FF																		
372	Levees	188 days	Mon 4/1/13	Mon 9/23/13																				
373	Site Mobilization - Levees	15 days	Mon 4/1/13	Mon 4/15/13		374,407SS																		
374	Haul Roads & Drainage	3.75 days	Mon 4/15/13	Thu 4/18/13	373	375SS																		
375	Care & Diversion of Water - Erosion Control - SWPC	1.25 days	Fri 9/6/13	Sat 9/7/13	374SS,397FF		full duration of levee constr																	
376	Clearing & Grubbing	5 days	Wed 5/1/13	Mon 5/6/13		377SS+2.5 days																		
377	Levee Stripping	8.75 days	Fri 5/3/13	Sat 5/11/13	376SS+2.5 days	378SS+2.5 days																		
378	Levee Degrading	42.5 days	Mon 5/6/13	Fri 6/14/13	377SS+2.5 days	379SS,386SS+	days																	
379	Temporary Fill, Placement	42.5 days	Mon 5/6/13	Fri 6/14/13	378SS																			
380	Site Mobilization - Borrow Areas	15 days	Tue 5/21/13	Tue 6/4/13	385SS+25 days	381																		
381	Haul Roads & Drainage - Borrow Areas	3.75 days	Tue 6/4/13	Fri 6/7/13	380	382SS																		
382	Care & Diversion of Water - Erosion Control - SWPC - Borrow Areas	1.25 days	Sat 9/21/13	Mon 9/23/13	381SS,396FF		full duration of borrow area use																	
383	Surface Layer Removal & Stockpile - Borrow Areas	5 days	Tue 7/30/13	Sat 8/3/13	384SS-2.5 days																			
384	Excavation & Hauling - Borrow Areas	35 days	Thu 8/1/13	Tue 9/3/13	388SS	383SS-2.5 days																		
385	Site Mobilization - Slurry Wall	15 days	Sat 4/27/13	Sat 5/11/13	386SS-15 days	380SS+25 days																		
386	Slurry Wall Construction	67 days	Sat 5/11/13	Fri 7/12/13	378SS+6.25 days	385SS-15 days,411SS,387 days,388FF+12																		
387	Embankment Fill, from Levee Degrading	46.25 days	Wed 6/19/13	Thu 8/1/13	386FF+21 days	388,391FF,392, days																		
388	Emankment Fill, from Borrow	35 days	Thu 8/1/13	Tue 9/3/13	386FF+12.5 days,387	384SS,389,390																		
389	Demob - Slurry Wall	15 days	Tue 9/3/13	Tue 9/17/13	388																			
390	Temporary Fill, Removal	15 days	Tue 8/20/13	Tue 9/3/13	388FF	393,397																		
391	Maintenance Road - ABC	12.5 days	Sat 7/20/13	Thu 8/1/13	387FF																			
392	Revegetation/Hydroseed	8.75 days	Thu 8/1/13	Fri 8/9/13	387																			
393	Surface Layer Restoration - Borrow Areas	5 days	Tue 9/3/13	Sat 9/7/13	390	394																		
394	Weather Delays	6.25 days	Sat 9/7/13	Fri 9/13/13	393	395																		
395	Demob - Borrow Areas	5 days	Fri 9/13/13	Wed 9/18/13	394	396																		
396	Site Cleanup/Finish Work - Borrow Areas	5 days	Wed 9/18/13	Mon 9/23/13	395	382FF																		



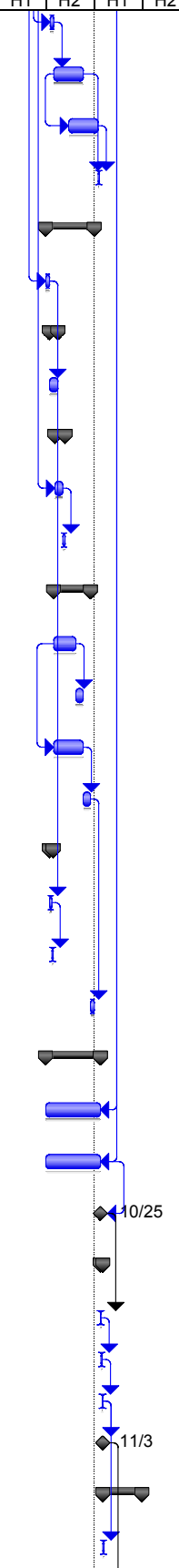
CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
397	Demob - Levee Areas	5 days	Tue 9/3/13	Sat 9/7/13	390	375FF,398																		
398	Site Cleanup/Finish Work - Levee Areas	5 days	Sat 9/7/13	Thu 9/12/13	397																			
399	Pumping Plants & Relocations	165.75 days	Mon 4/1/13	Mon 9/2/13																				
400	Roads, Construction Activities	149.25 days	Mon 4/1/13	Sat 8/17/13																				
401	Site Mobilization - for Rd Relocations	15 days	Mon 4/1/13	Mon 4/15/13		402																		
402	Demo Pavement	20 days	Mon 4/15/13	Fri 5/3/13	401																			
403	AC Pavement	10 days	Thu 7/25/13	Sat 8/3/13	387FF+2.5 days	404																		
404	Site Demobilization - for Rd Relocations	15 days	Sat 8/3/13	Sat 8/17/13	403																			
405	Cemeteries, Utils, Structures	165.75 days	Mon 4/1/13	Mon 9/2/13																				
406	Utils	165.75 days	Mon 4/1/13	Mon 9/2/13																				
407	Site Mobilization - for Util Relocations	15 days	Mon 4/1/13	Mon 4/15/13	373SS	409																		
408	Electrical	40 days	Mon 4/15/13	Wed 5/22/13																				
409	Utility Poles	40 days	Mon 4/15/13	Wed 5/22/13	407		1/day																	
410	Utility Crossing Relocations	45 days	Sat 5/11/13	Sat 6/22/13																				
411	Mechanical	45 days	Sat 5/11/13	Sat 6/22/13	386SS	412SS																		
412	Electrical	45 days	Sat 5/11/13	Sat 6/22/13	411SS																			
413	Pump Station Rehab	87 days	Thu 5/30/13	Mon 8/19/13																				
414	PP - Sump 58	87 days	Thu 5/30/13	Mon 8/19/13			Sta ~70+00																	
415	Demo	12 days	Thu 5/30/13	Mon 6/10/13	386SS+20 days	416	expected to commence about 15 days before levee construction reaches this point																	
416	Earthwork	6 days	Mon 6/10/13	Sat 6/15/13	415	418																		
417	Roads	4 days	Thu 8/15/13	Mon 8/19/13	421	422																		
418	Pipes	5 days	Sat 6/15/13	Thu 6/20/13	416	419																		
419	Positive Closure Vault	30 days	Thu 6/20/13	Thu 7/18/13	418	420																		
420	Pumps & Motors	30 days	Thu 7/18/13	Thu 8/15/13	419	421FF																		
421	Power & Controls	30 days	Thu 7/18/13	Thu 8/15/13	420FF	417																		
422	Site Demobilization - for Util Relocations	15 days	Mon 8/19/13	Mon 9/2/13	417																			
423	Engineering during Construction, S&A and Construction Completion	188 days	Mon 4/1/13	Mon 9/23/13																				
424	Engineering During Construction	188 days	Mon 4/1/13	Mon 9/23/13	371FF																			
425	Supervision and Administration	188 days	Mon 4/1/13	Mon 9/23/13	371FF	426FF																		
426	Construction Completion	0 days	Mon 9/23/13	Mon 9/23/13	425FF	428																		
427	Inspection and Construction per Punch List	8.75 days	Mon 9/23/13	Tue 10/1/13																				

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE												Fri 8/13/10										
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
428	PreFinal Inspection	1.25 days	Mon 9/23/13	Tue 9/24/13	426	429																		
429	Contractor Implement Punch List Items	6.25 days	Tue 9/24/13	Mon 9/30/13	428	430																		
430	Final Inspection	1.25 days	Mon 9/30/13	Tue 10/1/13	429	431,433																		
431	Construction Physical Completion	0 days	Tue 10/1/13	Tue 10/1/13	430	434																		
432	Project Closeout	194.5 days	Tue 10/1/13	Tue 4/1/14																				
433	Construction Prepares Project Completion Letter	6.25 days	Tue 10/1/13	Mon 10/7/13	430																			
434	Contractors Complete As-Builts	28.75 days	Tue 10/1/13	Mon 10/28/13	431	435																		
435	Submit As-Builts	1.25 days	Mon 10/28/13	Tue 10/29/13	434	436																		
436	Notice of Completion/Assumption of OMRR&R	0 days	Tue 10/29/13	Tue 10/29/13	435																			
437	Project Fiscally Complete	0 days	Tue 4/1/14	Tue 4/1/14																				
438	Construction Contract 5 - Reach E	977.5 days	Mon 10/1/12	Wed 4/1/15			Sta 287+37 to 461+31 - Howsley Road to Sankey Road - Work involves levee improvements and/or																	
439	Design	390 days	Mon 10/1/12	Mon 9/30/13																				
440	Collect field explorations	90 days	Mon 10/1/12	Mon 12/24/12		441																		
441	Conduct geotechnical evaluation	90 days	Mon 12/24/12	Mon 3/18/13	440	442																		
442	Develop Basis of Design Report	30 days	Mon 3/18/13	Mon 4/15/13	441	443																		
443	Develop Plans & Specifications	180 days	Mon 4/15/13	Mon 9/30/13	442																			
444	Pre-Construction	96.25 days	Tue 10/1/13	Mon 12/30/13																				
445	Project Bid	41.25 days	Tue 10/1/13	Fri 11/8/13		446																		
446	Award Task Order	8.75 days	Fri 11/8/13	Sat 11/16/13	445	447																		
447	Construction Contract Awarded	0 days	Sat 11/16/13	Sat 11/16/13	446	448FS+6.25 days																		
448	Issue NTP	0 days	Fri 11/22/13	Fri 11/22/13	447FS+6.25 days	449FS+1.25 days																		
449	NTP Acknowledged	0 days	Sat 11/23/13	Sat 11/23/13	448FS+1.25 days	450																		
450	Pre-Con Meeting	1.25 days	Sat 11/23/13	Mon 11/25/13	449	451																		
451	Prepare Pre-Construction Submittals	28.75 days	Mon 11/25/13	Sat 12/21/13	450	452SS																		
452	Corps Approve Pre-Constructon Submittals	37.5 days	Mon 11/25/13	Mon 12/30/13	451SS																			
453	Construction	223.5 days	Tue 4/1/14	Sat 10/25/14																				
454	Levees & Floodwalls	185.75 days	Tue 4/1/14	Sat 9/20/14																				
455	Levees	185.75 days	Tue 4/1/14	Sat 9/20/14																				
456	Site Mobilization - Levees	18 days	Tue 4/1/14	Thu 4/17/14		457,496SS																		
457	Haul Roads & Drainage	6 days	Thu 4/17/14	Wed 4/23/14	456	458SS																		
458	SWPP Installation - Levees	12 days	Wed 8/20/14	Sat 8/30/14	457SS,479FF		full duration of levee constr																	
459	Clearing & Grubbing (also tree removal)	20 days	Thu 5/1/14	Tue 5/20/14		460SS+2 days																		
460	Levee Stripping	21 days	Fri 5/2/14	Thu 5/22/14	459SS+2 days	469SS+2 days,461SS+2																		

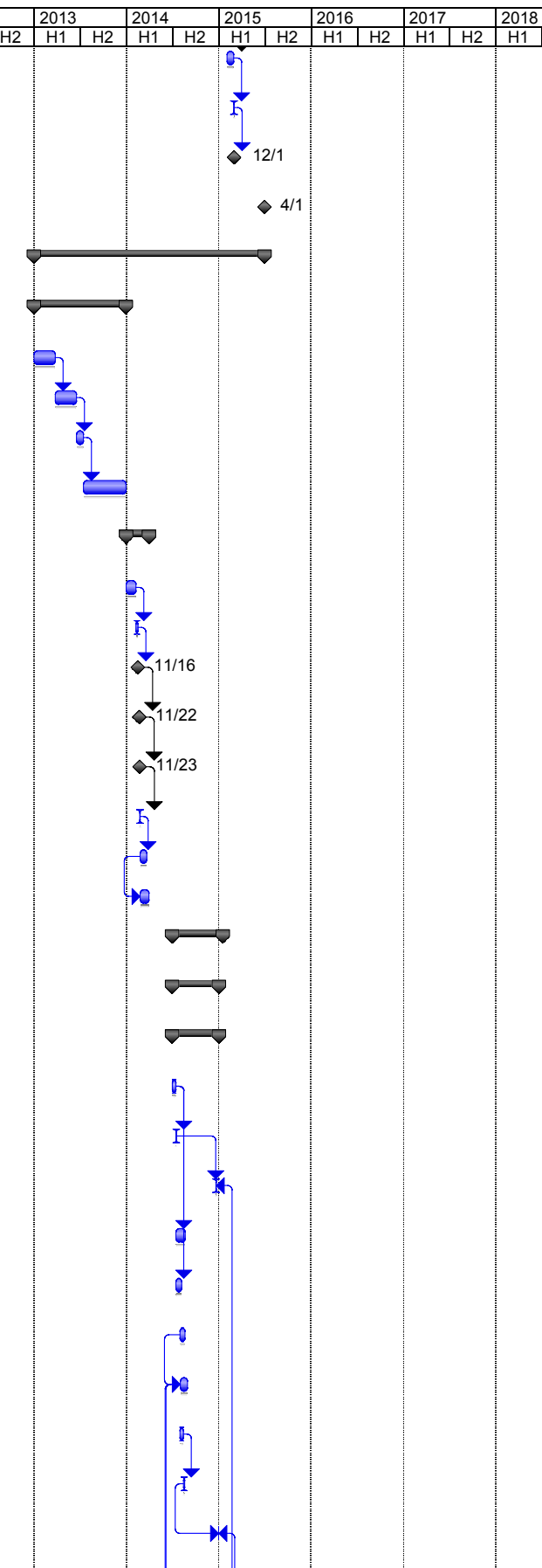


CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE													Fri 8/13/10									
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
461	Levee Degrading	15 days	Mon 5/5/14	Mon 5/19/14	460SS+2 days																			
462	Site Mobilization - Borrow Areas	15 days	Tue 4/29/14	Tue 5/13/14	468SS+12 days	463																		
463	Haul Roads & Drainage - Borrow Areas	5 days	Tue 5/13/14	Sat 5/17/14	462	464																		
464	SWPP Installation - Borrow Areas	2 days	Sat 5/17/14	Tue 5/20/14	463	465	full duration of borrow area use																	
465	Surface Layer Removal & Stockpile - Borrow Areas	46 days	Tue 5/20/14	Tue 7/1/14	464		double crews																	
466	Excavation & Hauling - Borrow Areas	84 days	Wed 5/21/14	Thu 8/7/14	469FF+21 days		double crews																	
467	Vinyl Sheet Pile	80 days	Sat 5/24/14	Thu 8/7/14	470FF																			
468	Site Mobilization - Slurry Wall	18 days	Thu 4/17/14	Mon 5/5/14	469SS-18 days	462SS+12 days, 491SS																		
469	Slurry Wall Construction	81 days	Mon 5/5/14	Sat 7/19/14	460SS+2 days	466FF+21 days, 468SS-18 days, 470FF+21 days	double rig/crews																	
470	Embankment Fill, from Borrow	84 days	Wed 5/21/14	Thu 8/7/14	469FF+21 days	467FF, 475FF+21 days, 471, 473FF	double crews																	
471	Demob - Slurry Wall	12 days	Thu 8/7/14	Tue 8/19/14	470																			
472	Quarry Stone	46 days	Thu 6/26/14	Thu 8/7/14	470FF																			
473	Maintenance Road - ABC	22 days	Fri 7/18/14	Thu 8/7/14	470FF																			
474	Revegetation/Hydroseed	20 days	Thu 8/7/14	Tue 8/26/14	470	479																		
475	Surface Layer Restoration - Borrow Areas	45 days	Sat 7/19/14	Sat 8/30/14	470FF+25 days	476	double crews																	
476	Weather Delays	6.25 days	Sat 8/30/14	Fri 9/5/14	475	477																		
477	Demob - Borrow Areas	6 days	Fri 9/5/14	Thu 9/11/14	476	478																		
478	Site Cleanup/Finish Work - Borrow Areas	10 days	Thu 9/11/14	Sat 9/20/14	477																			
479	Demob - Levee Areas	5 days	Tue 8/26/14	Sat 8/30/14	474	458FF, 480																		
480	Site Cleanup/Finish Work - Levee Areas	5 days	Sat 8/30/14	Thu 9/4/14	479																			
481	Relocations	223.5 days	Tue 4/1/14	Sat 10/25/14																				
482	Roads, Construction Activities	223.5 days	Tue 4/1/14	Sat 10/25/14																				
483	Roads	223.5 days	Tue 4/1/14	Sat 10/25/14																				
484	Site Mobilization - for Rd Relocations	18 days	Tue 4/1/14	Thu 4/17/14																				
485	Howsley Road	30 days	Thu 8/7/14	Thu 9/4/14	470																			
486	Fifeld Road	5 days	Thu 8/7/14	Tue 8/12/14	470																			
487	Natomas Rd	73 days	Thu 8/7/14	Wed 10/15/14	470	489																		
488	Access Road (at berm adjacent to canal relocation)	25 days	Thu 8/7/14	Sat 8/30/14	470																			
489	Site Demobilization - for Rd Relocations	12 days	Wed 10/15/14	Sat 10/25/14	487	512FF, 513FF																		
490	Bridge Modifications, Howsley Rd & Fifeld Rd	200 days	Thu 4/17/14	Tue 10/21/14																				

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
491	Mob for Bridge Work	15 days	Thu 4/17/14	Thu 5/1/14	468SS	492																		
492	Bridge Modifications, Howsley Road	120 days	Thu 5/1/14	Thu 8/21/14	491	494,493SS+60 days																		
493	Bridge Modifications, Fifeld Road	120 days	Thu 6/26/14	Thu 10/16/14	492SS+60 days	494																		
494	Demob for Bridge Work	5 days	Thu 10/16/14	Tue 10/21/14	492,493																			
495	Utils	197.5 days	Tue 4/1/14	Thu 10/2/14																				
496	Site Mobilization - for Util Relocations	15 days	Tue 4/1/14	Tue 4/15/14	456SS	498,508																		
497	Electrical	35 days	Tue 4/15/14	Sat 5/17/14																				
498	Utility Poles	35 days	Tue 4/15/14	Sat 5/17/14	496		1/day																	
499	Utility Crossing Relocations	42.5 days	Mon 5/5/14	Fri 6/13/14																				
500	Culverts	32.5 days	Mon 5/5/14	Wed 6/4/14	469SS	501																		
501	12" Discharge Pipe	10 days	Wed 6/4/14	Fri 6/13/14	500																			
502	Private Irrigation Relocations	150 days	Thu 5/1/14	Thu 9/18/14																				
503	Brookfield	90 days	Thu 5/1/14	Thu 7/24/14		504,505SS																		
504	Linn	30 days	Thu 7/24/14	Thu 8/21/14	503																			
505	Odysseus	120 days	Thu 5/1/14	Thu 8/21/14	503SS	506																		
506	Kaufman	30 days	Thu 8/21/14	Thu 9/18/14	505	510																		
507	Canal Relocations	15 days	Tue 4/15/14	Tue 4/29/14																				
508	Drainage Canal Relocations	10 days	Tue 4/15/14	Thu 4/24/14	496	509																		
509	Irrigation Canal Relocations	5 days	Thu 4/24/14	Tue 4/29/14	508																			
510	Site Demobilization - for Util Relocations	15 days	Thu 9/18/14	Thu 10/2/14	506																			
511	Engineering during Construction, S&A and Construction Completion	223.5 days	Tue 4/1/14	Sat 10/25/14																				
512	Engineering During Construction	223.5 days	Tue 4/1/14	Sat 10/25/14	489FF																			
513	Supervision and Administration	223.5 days	Tue 4/1/14	Sat 10/25/14	489FF	514FF																		
514	Construction Completion	0 days	Sat 10/25/14	Sat 10/25/14	513FF	516																		
515	Inspection and Construction per Punch List	8.75 days	Sat 10/25/14	Mon 11/3/14																				
516	PreFinal Inspection	1.25 days	Sat 10/25/14	Mon 10/27/14	514	517																		
517	Contractor Implement Punch List Items	6.25 days	Mon 10/27/14	Sat 11/1/14	516	518																		
518	Final Inspection	1.25 days	Sat 11/1/14	Mon 11/3/14	517	519,521																		
519	Construction Physical Completion	0 days	Mon 11/3/14	Mon 11/3/14	518	522																		
520	Project Closeout	159 days	Mon 11/3/14	Wed 4/1/15																				
521	Construction Prepares Project Completion Letter	6.25 days	Mon 11/3/14	Sat 11/8/14	518																			

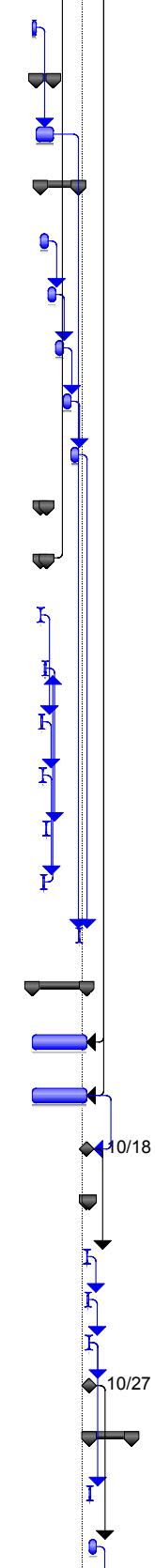


ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
522	Contractors Complete As-Builts	28.75 days	Mon 11/3/14	Sat 11/29/14	519	523																		
523	Submit As-Builts	1.25 days	Sat 11/29/14	Mon 12/1/14	522	524																		
524	Notice of Completion/Assumption of OMRR&R	0 days	Mon 12/1/14	Mon 12/1/14	523																			
525	Project Fiscally Complete	0 days	Wed 4/1/15	Wed 4/1/15																				
526	Construction Contract 6 Reach F	977.5 days	Mon 10/1/12	Wed 4/1/15			Sta 426+30 to 678+85 - Sankey Road to Elverta Road - Work involves levee improvements and/or																	
527	Design	390 days	Mon 10/1/12	Mon 9/30/13																				
528	Collect field explorations	90 days	Mon 10/1/12	Mon 12/24/12		529																		
529	Conduct geotechnical evaluation	90 days	Mon 12/24/12	Mon 3/18/13	528	530																		
530	Develop Basis of Design Report	30 days	Mon 3/18/13	Mon 4/15/13	529	531																		
531	Develop Plans & Specifications	180 days	Mon 4/15/13	Mon 9/30/13	530																			
532	Pre-Construction	96.25 days	Tue 10/1/13	Mon 12/30/13																				
533	Project Bid	41.25 days	Tue 10/1/13	Fri 11/8/13		534																		
534	Award Task Order	8.75 days	Fri 11/8/13	Sat 11/16/13	533	535																		
535	Construction Contract Awarded	0 days	Sat 11/16/13	Sat 11/16/13	534	536FS+6.25 days																		
536	Issue NTP	0 days	Fri 11/22/13	Fri 11/22/13	535FS+6.25 days	537FS+1.25 days																		
537	NTP Acknowledged	0 days	Sat 11/23/13	Sat 11/23/13	536FS+1.25 days	538																		
538	Pre-Con Meeting	1.25 days	Sat 11/23/13	Mon 11/25/13	537	539																		
539	Prepare Pre-Construction Submittals	28.75 days	Mon 11/25/13	Sat 12/21/13	538	540SS																		
540	Corps Approve Pre-Constructon Submittals	37.5 days	Mon 11/25/13	Mon 12/30/13	539SS																			
541	Construction	215 days	Tue 4/1/14	Sat 10/18/14																				
542	Levees & Floodwalls	198 days	Tue 4/1/14	Thu 10/2/14																				
543	Levees	198 days	Tue 4/1/14	Thu 10/2/14																				
544	Site Mobilization - Levees - 1	15 days	Tue 4/1/14	Tue 4/15/14		545,547,548																		
545	Haul Roads & Drainage	3.75 days	Tue 4/15/14	Fri 4/18/14	544	546																		
546	Care & Diversion of Water - Erosion Control - SWPC	1.25 days	Sat 9/20/14	Mon 9/22/14	545,566FF		full duration of levee constr																	
547	Demo, Commercial Building	40 days	Tue 4/15/14	Thu 5/22/14	544																			
548	Demo, Homes	25 days	Tue 4/15/14	Thu 5/8/14	544																			
549	Clearing & Grubbing, Levee Stripping (plus tree removal)	22 days	Thu 5/1/14	Wed 5/21/14		550SS+2.5 days																		
550	Levee Degrading	30 days	Sat 5/3/14	Sat 5/31/14	549SS+2.5 days	556SS+2.5 days,557SS+6.																		
551	Site Mobilization - Borrow Areas	15 days	Thu 5/1/14	Thu 5/15/14		552																		
552	Haul Roads & Drainage - Borrow Areas	5 days	Thu 5/15/14	Tue 5/20/14	551	553SS																		
553	Care & Diversion of Water - Erosion Control - SWPC - Borrow Areas	1.25 days	Wed 10/1/14	Thu 10/2/14	552SS,565FF		full duration of borrow area use																	

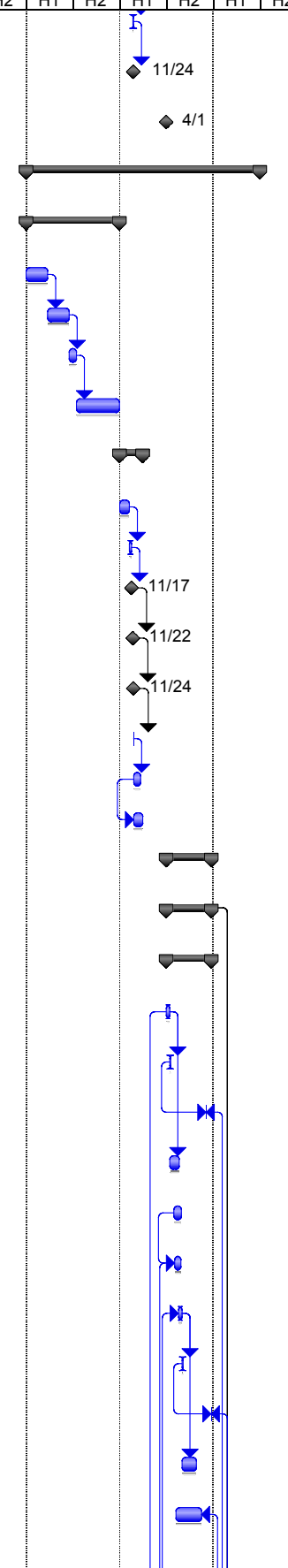


CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
554	Surface Layer Removal & Stockpile - Borrow Areas	85 days	Fri 4/25/14	Mon 7/14/14	557FF-6.25 days	555SS+2.5 days	double crews																	
555	Excavation & Hauling - Borrow Areas	128 days	Mon 4/28/14	Mon 8/25/14	554SS+2.5 days		double crews																	
556	Site Mobilization - Slurry Wall - Season 1	15 days	Tue 5/6/14	Tue 5/20/14	550SS+2.5 days																			
557	Slurry Wall Construction	76.5 days	Fri 5/9/14	Sat 7/19/14	550SS+6.25 days	554FF-6.25 days,558FF+39 days	double crews																	
558	Emankment Fill, from Borrow	129 days	Sat 4/26/14	Mon 8/25/14	557FF+39 days	562FF+25 days,559,561,5	double crews																	
559	Demob - Slurry Wall - Season 1	15 days	Mon 8/25/14	Mon 9/8/14	558																			
560	Maintenance Road - ABC	15 days	Sat 8/16/14	Sat 8/30/14	558FF+6.25 days																			
561	Revegetation/Hydroseed	25 days	Mon 8/25/14	Wed 9/17/14	558	563,566																		
562	Surface Layer Restoration - Borrow Areas - Season 1	52.5 days	Wed 7/30/14	Wed 9/17/14	558FF+25 days		double crews																	
563	Weather Delays	6.25 days	Wed 9/17/14	Tue 9/23/14	561	564																		
564	Demob - Borrow Areas	5 days	Tue 9/23/14	Sat 9/27/14	563	565																		
565	Site Cleanup/Finish Work - Borrow Areas	5 days	Sat 9/27/14	Thu 10/2/14	564	553FF																		
566	Demob - Levee Areas	5 days	Wed 9/17/14	Mon 9/22/14	561	546FF,567																		
567	Site Cleanup/Finish Work - Levee Areas	5 days	Mon 9/22/14	Fri 9/26/14	566																			
568	Relocations	215 days	Tue 4/1/14	Sat 10/18/14		604FF,605FF																		
569	Roads, Construction Activities	215 days	Tue 4/1/14	Sat 10/18/14																				
570	Site Mobilization - for Rd Relocations	15 days	Tue 4/1/14	Tue 4/15/14		579,573																		
571	Road Surfacing	130 days	Tue 4/15/14	Thu 8/14/14																				
572	Site Work	130 days	Tue 4/15/14	Thu 8/14/14																				
573	Private Driveways	50 days	Tue 4/15/14	Sat 5/31/14	570	574																		
574	Natomas Road	80 days	Sat 5/31/14	Thu 8/14/14	573	576																		
575	Access Road (at berm adjacent to canal relocation)	25 days	Fri 5/23/14	Mon 6/16/14	595																			
576	Site Demobilization - for Rd Relocations	15 days	Thu 8/14/14	Thu 8/28/14	574																			
577	Bridge Modifications, Riego Rd & Elverta Rd	200 days	Tue 4/15/14	Sat 10/18/14																				
578	Site Work	200 days	Tue 4/15/14	Sat 10/18/14																				
579	Mob for Bridge Work	15 days	Tue 4/15/14	Tue 4/29/14	570	580																		
580	Bridge Modifications, Riego Rd	120 days	Tue 4/29/14	Tue 8/19/14	579	582,581SS+60 days																		
581	Bridge Modifications, Elverta Rd	120 days	Tue 6/24/14	Tue 10/14/14	580SS+60 days	582																		
582	Demob for Bridge Work	5 days	Tue 10/14/14	Sat 10/18/14	581,580																			
583	Cemeteries, Utils, Structures	187.5 days	Tue 4/1/14	Tue 9/23/14																				

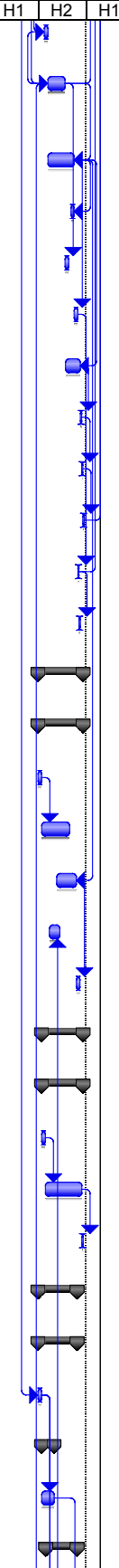
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
584	Utils	187.5 days	Tue 4/1/14	Tue 9/23/14																				
585	Site Mobilization - for Util Relocations	15 days	Tue 4/1/14	Tue 4/15/14		587																		
586	Electrical	68 days	Tue 4/15/14	Tue 6/17/14																				
587	Utility Poles	68 days	Tue 4/15/14	Tue 6/17/14	585	602	1/day																	
588	Utility Crossing Relocations	150 days	Thu 5/1/14	Thu 9/18/14																				
589	Schiedel	30 days	Thu 5/1/14	Thu 5/29/14		590																		
590	De Wit	30 days	Thu 5/29/14	Thu 6/26/14	589	591																		
591	Calif Sunshine Fisheries	30 days	Thu 6/26/14	Thu 7/24/14	590	592																		
592	Odysseus	30 days	Thu 7/24/14	Thu 8/21/14	591	593																		
593	Family Real Properties	30 days	Thu 8/21/14	Thu 9/18/14	592	602																		
594	Canal Relocations	24 days	Thu 5/1/14	Fri 5/23/14																				
595	Reiego Rd Canal Relocations	24 days	Thu 5/1/14	Fri 5/23/14		575																		
596	Stripping	2 days	Thu 5/1/14	Fri 5/2/14		598																		
597	Compacted Embankment	7 days	Thu 5/15/14	Wed 5/21/14	601	600																		
598	Excavation to Stockpile	6 days	Fri 5/2/14	Thu 5/8/14	596	599																		
599	Field Irrigation Turnouts	2 days	Thu 5/8/14	Sat 5/10/14	598	601																		
600	Erosion Control Seeding	2 days	Wed 5/21/14	Fri 5/23/14	597																			
601	Misc Sitework	5 days	Sat 5/10/14	Thu 5/15/14	599	597																		
602	Site Demob - for Util Relocations	5 days	Thu 9/18/14	Tue 9/23/14	587,593																			
603	Engineering during Construction, S&A and Construction Completion	215 days	Tue 4/1/14	Sat 10/18/14																				
604	Engineering During Construction	215 days	Tue 4/1/14	Sat 10/18/14	568FF																			
605	Supervision and Administration	215 days	Tue 4/1/14	Sat 10/18/14	568FF	606FF																		
606	Construction Completion	0 days	Sat 10/18/14	Sat 10/18/14	605FF	608																		
607	Inspection and Construction per Punch List	8.75 days	Sat 10/18/14	Mon 10/27/14																				
608	PreFinal Inspection	1.25 days	Sat 10/18/14	Mon 10/20/14	606	609																		
609	Contractor Implement Punch List Items	6.25 days	Mon 10/20/14	Sat 10/25/14	608	610																		
610	Final Inspection	1.25 days	Sat 10/25/14	Mon 10/27/14	609	611,613																		
611	Construction Physical Completion	0 days	Mon 10/27/14	Mon 10/27/14	610	614																		
612	Project Closeout	167.5 days	Mon 10/27/14	Wed 4/1/15																				
613	Construction Prepares Project Completion Letter	6.25 days	Mon 10/27/14	Sat 11/1/14	610																			
614	Contractors Complete As-Builts	28.75 days	Mon 10/27/14	Sat 11/22/14	611	615																		



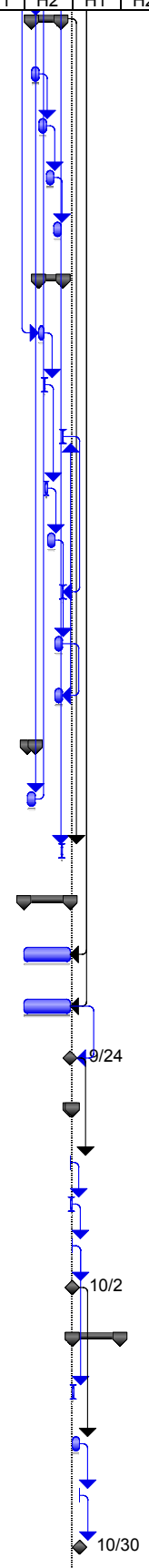
CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
615	Submit As-Builts	1.25 days	Sat 11/22/14	Mon 11/24/14	614	616																		
616	Notice of Completion/Assumption of OMR&R	0 days	Mon 11/24/14	Mon 11/24/14	615																			
617	Project Fiscally Complete	0 days	Wed 4/1/15	Wed 4/1/15																				
618	Construction Contract 7 - Reach G	978.75 days	Tue 10/1/13	Fri 4/1/16			Sta 237+00 to 426+30 - Elverta Road to NEMDC Pump Station - Work involves levee improvements																	
619	Design	390 days	Tue 10/1/13	Tue 9/30/14																				
620	Collect field explorations	90 days	Tue 10/1/13	Tue 12/24/13		621																		
621	Conduct geotechnical evaluation	90 days	Tue 12/24/13	Tue 3/18/14	620	622																		
622	Develop Basis of Design Report	30 days	Tue 3/18/14	Tue 4/15/14	621	623																		
623	Develop Plans & Specifications	180 days	Tue 4/15/14	Tue 9/30/14	622																			
624	Pre-Construction	96.25 days	Wed 10/1/14	Tue 12/30/14																				
625	Project Bid	41.25 days	Wed 10/1/14	Sat 11/8/14		626																		
626	Award Task Order	8.75 days	Sat 11/8/14	Mon 11/17/14	625	627																		
627	Construction Contract Awarded	0 days	Mon 11/17/14	Mon 11/17/14	626	628FS+6.25 days																		
628	Issue NTP	0 days	Sat 11/22/14	Sat 11/22/14	627FS+6.25 days	629FS+1.25 days																		
629	NTP Acknowledged	0 days	Mon 11/24/14	Mon 11/24/14	628FS+1.25 days	630																		
630	Pre-Con Meeting	1.25 days	Mon 11/24/14	Tue 11/25/14	629	631																		
631	Prepare Pre-Construction Submittals	28.75 days	Tue 11/25/14	Mon 12/22/14	630	632SS																		
632	Corps Approve Pre-Constructon Submittals	37.5 days	Tue 11/25/14	Tue 12/30/14	631SS																			
633	Construction	189.5 days	Wed 4/1/15	Thu 9/24/15																				
634	Levees & Floodwalls	189.5 days	Wed 4/1/15	Thu 9/24/15		695FF,696FF																		
635	Levees	189.5 days	Wed 4/1/15	Thu 9/24/15																				
636	Site Mobilization - Levees	15 days	Wed 4/1/15	Wed 4/15/15		637,639,673SS																		
637	Haul Roads & Drainage	3.75 days	Wed 4/15/15	Sat 4/18/15	636	638SS																		
638	Care & Diversion of Water - Erosion Control - SWPC	1.25 days	Thu 9/3/15	Fri 9/4/15	637SS,657FF		full duration of levee constr																	
639	Demo, Homes	40 days	Wed 4/15/15	Fri 5/22/15	636																			
640	Clearing & Grubbing, Levee Stripping (plus tree removal)	32 days	Fri 5/1/15	Sat 5/30/15		641SS+2.5 days																		
641	Levee Degrading	27 days	Mon 5/4/15	Thu 5/28/15	640SS+2.5 days	648SS+6.25 days																		
642	Site Mobilization - Borrow Areas	15 days	Tue 5/19/15	Tue 6/2/15	647SS+25 days	643,645																		
643	Haul Roads & Drainage - Borrow Areas	5 days	Tue 6/2/15	Sat 6/6/15	642	644SS																		
644	Care & Diversion of Water - Erosion Control - SWPC - Borrow Areas	1.25 days	Wed 9/23/15	Thu 9/24/15	643SS,656FF		full duration of borrow area use																	
645	Surface Layer Removal & Stockpile - Borrow Areas	60 days	Tue 6/2/15	Tue 7/28/15	642																			
646	Excavation & Hauling - Borrow Areas	107 days	Sat 5/9/15	Mon 8/17/15	648FF+38 days		double crew																	



ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018	
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
647	Site Mobilization - Slurry Wall	15 days	Sat 4/25/15	Sat 5/9/15	648SS-15 days	642SS+25 days																			
648	Slurry Wall Construction	69 days	Sat 5/9/15	Mon 7/13/15	641SS+6.25 days	646FF+38 days, 647SS-15 days, 649FF+38 days	double rigs/cres																		
649	Emankment Fill, from Borrow	107 days	Sat 5/9/15	Mon 8/17/15	648FF+38 days	653FF+25 days, 650FF, 652	double crew																		
650	Maintenance Road - ABC	12.5 days	Wed 8/5/15	Mon 8/17/15	649FF																				
651	Demob - Slurry Wall	15 days	Mon 7/13/15	Mon 7/27/15	648																				
652	Revegetation/Hydroseed	15 days	Mon 8/17/15	Mon 8/31/15	649	657																			
653	Surface Layer Restoration - Borrow Areas	60 days	Wed 7/15/15	Wed 9/9/15	649FF+25 days	654	double crews																		
654	Weather Delays	6.25 days	Wed 9/9/15	Tue 9/15/15	653	655																			
655	Demob - Borrow Areas	5 days	Tue 9/15/15	Sat 9/19/15	654	656																			
656	Site Cleanup/Finish Work - Borrow Areas	5 days	Sat 9/19/15	Thu 9/24/15	655	644FF																			
657	Demob - Levee Areas	5 days	Mon 8/31/15	Fri 9/4/15	652	638FF, 658																			
658	Site Cleanup/Finish Work - Levee Areas	5 days	Fri 9/4/15	Wed 9/9/15	657																				
659	Pumping Plants & Relocations	185 days	Wed 4/1/15	Mon 9/21/15																					
660	Roads, Construction Activities	185 days	Wed 4/1/15	Mon 9/21/15																					
661	Site Mobilization - for Rd Relocations	15 days	Wed 4/1/15	Wed 4/15/15		662																			
662	Private Driveways	115 days	Wed 4/15/15	Fri 7/31/15	661																				
663	Natomas Road	80 days	Fri 6/12/15	Wed 8/26/15	649FF	665																			
664	Access Road (at berm adjacent to canal relocation)	42 days	Fri 5/15/15	Tue 6/23/15	692																				
665	Site Demobilization - for Rd Relocations	15 days	Wed 8/26/15	Wed 9/9/15	663																				
666	Bridge Modifications	170 days	Wed 4/15/15	Mon 9/21/15																					
667	Site Work	170 days	Wed 4/15/15	Mon 9/21/15																					
668	Mob for Bridge Work	15 days	Wed 4/15/15	Wed 4/29/15		669																			
669	Bridge Modifications, Elkhorn Blvd	150 days	Wed 4/29/15	Wed 9/16/15	668	670																			
670	Demob for Bridge Work	5 days	Wed 9/16/15	Mon 9/21/15	669																				
671	Cemeteries, Utils, Structures	161.25 days	Wed 4/1/15	Sat 8/29/15																					
672	Utils	161.25 days	Wed 4/1/15	Sat 8/29/15																					
673	Site Mobilization - for Util Relocations	15 days	Wed 4/1/15	Wed 4/15/15	636SS	692, 675, 677																			
674	Electrical	51 days	Wed 4/15/15	Mon 6/1/15																					
675	Utility Poles	51 days	Wed 4/15/15	Mon 6/1/15	673	693	1/day																		
676	Utility Crossing Relocations	128.75 days	Fri 5/1/15	Sat 8/29/15																					



CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE												Fri 8/13/10										
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
677	Well Relocations	120 days	Fri 5/1/15	Fri 8/21/15	673	693																		
678	Avids	30 days	Fri 5/1/15	Fri 5/29/15		679																		
679	Cayocca	30 days	Fri 5/29/15	Fri 6/26/15	678	680																		
680	Driggs	30 days	Fri 6/26/15	Fri 7/24/15	679	681																		
681	Hendrix	30 days	Fri 7/24/15	Fri 8/21/15	680																			
682	PP - No 6	100 days	Thu 5/28/15	Sat 8/29/15			Sta ~362+50																	
683	Demo	21 days	Thu 5/28/15	Tue 6/16/15	648SS+20 days	684	expected to commence about 25 days before levee construction reaches this point																	
684	Earthwork	5 days	Tue 6/16/15	Sat 6/20/15	683	686																		
685	Roads	4 days	Tue 8/25/15	Sat 8/29/15	690	688FF																		
686	Pipes	10 days	Sat 6/20/15	Tue 6/30/15	684	687																		
687	Positive Closure Vault	30 days	Tue 6/30/15	Tue 7/28/15	686	689																		
688	Security Fence	3 days	Wed 8/26/15	Sat 8/29/15	685FF																			
689	Pumps & Motors	30 days	Tue 7/28/15	Tue 8/25/15	687	690FF																		
690	Power & Controls	30 days	Tue 7/28/15	Tue 8/25/15	689FF	685																		
691	Canal Relocations	32.5 days	Wed 4/15/15	Fri 5/15/15																				
692	Drainage Canal Relocations	32.5 days	Wed 4/15/15	Fri 5/15/15	673	664																		
693	Site Demob - for Util Relocations	5 days	Fri 8/21/15	Wed 8/26/15	675,677																			
694	Engineering during Construction, S&A and Construction Completion	189 days	Wed 4/1/15	Thu 9/24/15																				
695	Engineering During Construction	189 days	Wed 4/1/15	Thu 9/24/15	634FF																			
696	Supervision and Administration	189 days	Wed 4/1/15	Thu 9/24/15	634FF	697FF																		
697	Construction Completion	0 days	Thu 9/24/15	Thu 9/24/15	696FF	699																		
698	Inspection and Construction per Punch List	8.75 days	Thu 9/24/15	Fri 10/2/15																				
699	PreFinal Inspection	1.25 days	Thu 9/24/15	Fri 9/25/15	697	700																		
700	Contractor Implement Punch List Items	6.25 days	Fri 9/25/15	Thu 10/1/15	699	701																		
701	Final Inspection	1.25 days	Thu 10/1/15	Fri 10/2/15	700	702,704																		
702	Construction Physical Completion	0 days	Fri 10/2/15	Fri 10/2/15	701	705																		
703	Project Closeout	194.25 days	Fri 10/2/15	Fri 4/1/16																				
704	Construction Prepares Project Completion Letter	6.25 days	Fri 10/2/15	Thu 10/8/15	701																			
705	Contractors Complete As-Builts	28.75 days	Fri 10/2/15	Thu 10/29/15	702	706																		
706	Submit As-Builts	1.25 days	Thu 10/29/15	Fri 10/30/15	705	707																		
707	Notice of Completion/Assumption of OMRR&R	0 days	Fri 10/30/15	Fri 10/30/15	706																			



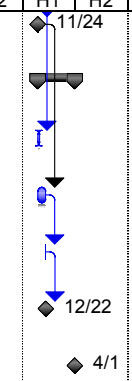
CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE											Fri 8/13/10											
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
708	Project Fiscally Complete	0 days	Fri 4/1/16	Fri 4/1/16																				
709	Construction Contract 8 - Reaches B, C, and D (utility relocations)	978.75 days	Wed 10/1/14	Sat 4/1/17			Work consists of required changes to Pumping Plants in Reaches B, C & D. Gaps were left in the cutoff																	
710	Design	390 days	Wed 10/1/14	Wed 9/30/15																				
711	Collect field explorations	90 days	Wed 10/1/14	Wed 12/24/14		712																		
712	Conduct geotechnical evaluation	90 days	Wed 12/24/14	Wed 3/18/15	711	713																		
713	Develop Basis of Design Report	30 days	Wed 3/18/15	Wed 4/15/15	712	714																		
714	Develop Plans & Specifications	180 days	Wed 4/15/15	Wed 9/30/15	713																			
715	Pre-Construction	96.25 days	Sat 10/3/15	Fri 1/1/16																				
716	Project Bid	41.25 days	Sat 10/3/15	Wed 11/11/15		717																		
717	Award Task Order	8.75 days	Wed 11/11/15	Thu 11/19/15	716	718																		
718	Construction Contract Awarded	0 days	Thu 11/19/15	Thu 11/19/15	717	719FS+6.25 days																		
719	Issue NTP	0 days	Wed 11/25/15	Wed 11/25/15	718FS+6.25 days	720FS+1.25 days																		
720	NTP Acknowledged	0 days	Thu 11/26/15	Thu 11/26/15	719FS+1.25 days	721																		
721	Pre-Con Meeting	1.25 days	Thu 11/26/15	Fri 11/27/15	720	722																		
722	Prepare Pre-Construction Submittals	28.75 days	Fri 11/27/15	Thu 12/24/15	721	723SS																		
723	Corps Approve Pre-Constructon Submittals	37.5 days	Fri 11/27/15	Fri 1/1/16	722SS																			
724	Construction	245.06 days	Fri 4/1/16	Wed 11/16/16																				
725	Levees, fill slurry wall gaps	199.56 days	Fri 4/1/16	Tue 10/4/16																				
726	Mobilization	18 days	Fri 4/1/16	Mon 4/18/16																				
727	Reach B	100.13 days	Mon 5/2/16	Wed 8/3/16																				
728	Elkhorn PP	78.81 days	Mon 5/2/16	Thu 7/14/16																				
729	Clearing & Grubbing	1 day	Mon 5/2/16	Mon 5/2/16		730																		
730	Stripping	1 day	Mon 5/2/16	Tue 5/3/16	729	731																		
731	Levee Degrading	2 days	Tue 5/3/16	Thu 5/5/16	730	733																		
732	Levee Fill	3 days	Thu 6/16/16	Sat 6/18/16	733FS+21 days	734																		
733	Cutoff Wall	10 days	Thu 5/5/16	Fri 5/27/16	731	732FS+21 days, 740FS+2																		
734	Revegetation	1 day	Mon 6/20/16	Thu 7/14/16	732																			
735	RD 1000, PP No 5	75.13 days	Wed 5/25/16	Wed 8/3/16																				
736	Clearing & Grubbing	1 day	Wed 5/25/16	Wed 5/25/16		737																		
737	Stripping	1 day	Wed 5/25/16	Thu 5/26/16	736	738																		
738	Levee Degrading	2 days	Thu 5/26/16	Sat 5/28/16	737																			

CESPK		AMERICAN RIVER COMMON FEATURES WRDA 1996 REMAINING SITES PROJECT SCHEDULE													Fri 8/13/10									
ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
739	Levee Fill	3 days	Wed 7/6/16	Sat 7/9/16	740FS+21 days	741																		
740	Cutoff Wall	5 days	Mon 5/30/16	Thu 6/16/16	733FS+2 days	739FS+21 days,748FS+2																		
741	Revegetation	1 day	Sat 7/9/16	Wed 8/3/16	739																			
742	Reach C	75.19 days	Tue 6/14/16	Tue 8/23/16																				
743	Prichard PP & RD 1000, PP No 2	75.19 days	Tue 6/14/16	Tue 8/23/16																				
744	Clearing & Grubbing	1 day	Tue 6/14/16	Tue 6/14/16		745																		
745	Stripping	1 day	Tue 6/14/16	Wed 6/15/16	744	746																		
746	Levee Degrading	2 days	Wed 6/15/16	Fri 6/17/16	745																			
747	Levee Fill	3 days	Tue 7/26/16	Fri 7/29/16	748FS+21 days	749																		
748	Cutoff Wall	5 days	Sat 6/18/16	Wed 7/6/16	740FS+2 days	747FS+21 days,810,817,7																		
749	Revegetation	1 day	Fri 7/29/16	Tue 8/23/16	747																			
750	Reach D	99.56 days	Mon 7/4/16	Tue 10/4/16																				
751	Bennett PP	75.25 days	Mon 7/4/16	Mon 9/12/16																				
752	Clearing & Grubbing	1 day	Mon 7/4/16	Mon 7/4/16		753																		
753	Stripping	1 day	Mon 7/4/16	Tue 7/5/16	752	754																		
754	Levee Degrading	2 days	Tue 7/5/16	Thu 7/7/16	753																			
755	Levee Fill	3 days	Mon 8/15/16	Thu 8/18/16	756FS+21 days	757																		
756	Cutoff Wall	5 days	Fri 7/8/16	Tue 7/26/16	748FS+2 days	755FS+21 days,763FS+2																		
757	Revegetation	1 day	Thu 8/18/16	Mon 9/12/16	755	765																		
758	Northern PP	77.06 days	Mon 7/25/16	Tue 10/4/16																				
759	Clearing & Grubbing	1 day	Mon 7/25/16	Mon 7/25/16		760																		
760	Stripping	1 day	Mon 7/25/16	Tue 7/26/16	759	761																		
761	Levee Degrading	2 days	Tue 7/26/16	Thu 7/28/16	760																			
762	Levee Fill	3 days	Wed 9/7/16	Fri 9/9/16	763FS+21 days	764																		
763	Cutoff Wall	8 days	Thu 7/28/16	Thu 8/18/16	756FS+2 days	762FS+21 days,847																		
764	Revegetation	1 day	Fri 9/9/16	Tue 10/4/16	762																			
765	Demobilization	12 days	Mon 9/12/16	Thu 9/22/16	757																			
766	Pumping Plants & Relocations	245.06 days	Fri 4/1/16	Wed 11/16/16		857FF,856FF																		
767	Mobilization	18 days	Fri 4/1/16	Mon 4/18/16																				
768	Reach B	138.63 days	Mon 5/2/16	Thu 9/8/16																				
769	W Drainage Canal (EOPC)	47.5 days	Mon 5/2/16	Wed 6/15/16																				

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
770	Demolition	12.5 days	Mon 5/2/16	Fri 5/13/16																				
771	Clearing & Grubbing	3.75 days	Mon 5/2/16	Thu 5/5/16		772																		
772	Stripping	11.25 days	Thu 5/5/16	Mon 5/16/16	771	773SS+2.5 days																		
773	Excavation	25 days	Sat 5/7/16	Tue 5/31/16	772SS+2.5 days	774																		
774	Fill	10 days	Tue 5/31/16	Thu 6/9/16	773	775																		
775	Demob	6.25 days	Thu 6/9/16	Wed 6/15/16	774																			
776	Elkhorn PP	100.56 days	Sat 5/14/16	Tue 8/16/16																				
777	Demo	5 days	Sat 5/14/16	Thu 5/19/16		778																		
778	Earthwork	8 days	Thu 5/19/16	Thu 5/26/16	777	780																		
779	Roads	4 days	Wed 8/10/16	Sat 8/13/16	784	782FF,785																		
780	Pipes	14 days	Fri 5/27/16	Thu 6/9/16	778,733	781SS	follows cutoff wall placement																	
781	Positive Closure & Flow Meter Vaults	40 days	Fri 5/27/16	Mon 7/4/16	780SS	783																		
782	Pump Platform Rehabilitation	15 days	Mon 8/1/16	Sat 8/13/16	779FF																			
783	Pumps & Motors	40 days	Mon 7/4/16	Wed 8/10/16	781	784FF																		
784	Power & Controls	30 days	Wed 7/13/16	Wed 8/10/16	783FF	779																		
785	Bank Stabilization	2 days	Mon 8/15/16	Tue 8/16/16	779																			
786	Riverside PP, Phase 2	108 days	Mon 5/2/16	Wed 8/10/16			assumption is this takes place after the Riverside Canal work																	
787	Demo	17 days	Mon 5/2/16	Tue 5/17/16		788																		
788	Earthwork	2 days	Tue 5/17/16	Thu 5/19/16	787	790																		
789	Roads	4 days	Tue 8/2/16	Fri 8/5/16	794	792FF,795																		
790	Pipes	10 days	Thu 5/19/16	Sat 5/28/16	788	791SS																		
791	Positive Closure & Flow Meter Vaults	40 days	Thu 5/19/16	Sat 6/25/16	790SS	793																		
792	Security Fence	2 days	Wed 8/3/16	Fri 8/5/16	789FF																			
793	Pumps & Motors	40 days	Sat 6/25/16	Tue 8/2/16	791	794FF																		
794	Power & Controls	30 days	Tue 7/5/16	Tue 8/2/16	793FF	789																		
795	Flow Meters	5 days	Fri 8/5/16	Wed 8/10/16	789																			
796	RD 1000, PP No 5	109.88 days	Sat 5/28/16	Thu 9/8/16																				
797	Demo	17 days	Sat 5/28/16	Mon 6/13/16		798																		
798	Earthwork	2 days	Mon 6/13/16	Wed 6/15/16	797	800																		
799	Roads	4 days	Tue 8/30/16	Sat 9/3/16	804	802FF,805																		
800	Pipes	10 days	Thu 6/16/16	Sat 6/25/16	798,740	801SS	follows cutoff wall placement																	

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
801	Positive Closure & Flow Meter Vaults	40 days	Thu 6/16/16	Sat 7/23/16	800SS	803																		
802	Security Fence	2 days	Thu 9/1/16	Sat 9/3/16	799FF																			
803	Pumps & Motors	40 days	Sat 7/23/16	Tue 8/30/16	801	804FF																		
804	Power & Controls	30 days	Tue 8/2/16	Tue 8/30/16	803FF	799																		
805	Flow Meters	5 days	Sat 9/3/16	Thu 9/8/16	799																			
806	Reach C	109.94 days	Fri 6/17/16	Wed 9/28/16																				
807	Prichard PP	40.94 days	Mon 6/27/16	Wed 8/3/16																				
808	Demo	2 days	Mon 6/27/16	Tue 6/28/16		809																		
809	Earthwork	7 days	Tue 6/28/16	Tue 7/5/16	808	810																		
810	Pipes	9 days	Wed 7/6/16	Fri 7/15/16	809,748	811SS	follows cutoff wall placement																	
811	Transition Structure	30 days	Wed 7/6/16	Wed 8/3/16	810SS	812SS																		
812	Concrete Outlet Structure	30 days	Wed 7/6/16	Wed 8/3/16	811SS																			
813	RD 1000, PP No 2	109.94 days	Fri 6/17/16	Wed 9/28/16																				
814	Demo	17 days	Fri 6/17/16	Sat 7/2/16		815																		
815	Earthwork	2 days	Sat 7/2/16	Tue 7/5/16	814	817																		
816	Roads	4 days	Mon 9/19/16	Fri 9/23/16	821	819FF,822																		
817	Pipes	10 days	Wed 7/6/16	Fri 7/15/16	815,748	818SS	follows cutoff wall placement																	
818	Positive Closure & Flow Meter Vaults	40 days	Wed 7/6/16	Fri 8/12/16	817SS	820																		
819	Security Fence	2 days	Wed 9/21/16	Fri 9/23/16	816FF																			
820	Pumps & Motors	40 days	Fri 8/12/16	Mon 9/19/16	818	821FF																		
821	Power & Controls	30 days	Mon 8/22/16	Mon 9/19/16	820FF	816																		
822	Flow Meters	5 days	Fri 9/23/16	Wed 9/28/16	816																			
823	Reach D	200.56 days	Mon 5/2/16	Fri 11/4/16																				
824	RD 1000, PP No 4	65 days	Mon 5/2/16	Fri 7/1/16																				
825	Demo	2 days	Mon 5/2/16	Tue 5/3/16		826																		
826	Earthwork	2 days	Tue 5/3/16	Thu 5/5/16	825	828																		
827	Roads	1 day	Thu 6/30/16	Fri 7/1/16	831																			
828	Concrete Footing	10 days	Thu 5/5/16	Sat 5/14/16	826	829SS																		
829	New Building	50 days	Thu 5/5/16	Tue 6/21/16	828SS	830																		
830	Pumps & Motors	10 days	Tue 6/21/16	Thu 6/30/16	829	831FF																		
831	Power & Controls	10 days	Tue 6/21/16	Thu 6/30/16	830FF	827																		

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes	2010		2011		2012		2013		2014		2015		2016		2017		2018
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
863	Construction Physical Completion	0 days	Thu 11/24/16	Thu 11/24/16	862	866																		
864	Project Closeout	137.44 days	Thu 11/24/16	Sat 4/1/17																				
865	Construction Prepares Project Completion Letter	6.25 days	Thu 11/24/16	Wed 11/30/16	862																			
866	Contractors Complete As-Builts	28.75 days	Thu 11/24/16	Wed 12/21/16	863	867																		
867	Submit As-Builts	1.25 days	Wed 12/21/16	Thu 12/22/16	866	868																		
868	Notice of Completion/Assumption of OMRR&R	0 days	Thu 12/22/16	Thu 12/22/16	867																			
869	Project Fiscally Complete	0 days	Sat 4/1/17	Sat 4/1/17																				



(B L A N K)



**US Army Corps
of Engineers®**

**American River Common Features Project
Natomas Post Authorization Change Report and
Interim General Reevaluation Report Design Level
Project Cost and Schedule Risk Analysis Report**

Prepared for:

U.S. Army Corps of Engineers,
Sacramento District

Prepared by:

U.S. Army Corps of Engineers
Cost Engineering Directory of Expertise, Walla Walla

September 21, 2010

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EXECUTIVE SUMMARY

Under the auspices of the US Army Corps of Engineers (USACE), Sacramento District, this report presents a recommendation for the project cost and schedule contingencies for the American River Common Features Project, Natomas Post Authorization Change Report National Economic Development Plan (Natomas Project). In compliance with Engineer Regulation (ER) 1110-2-1302 CIVIL WORKS COST ENGINEERING, dated September 15, 2008, a formal risk analysis study was conducted for the development of contingency on the total project cost. The purpose of this risk analysis study was to establish project contingencies by identifying and measuring the cost and schedule impact of project uncertainties with respect to the estimated total project cost.

The cost and schedule risk analysis relies upon information for both the National Economic Development (NED) Plan, and the Locally Preferred Plan (LPP). Due to the complexity of the estimates, and the nature of the work, the risk analysis was developed from the estimate supporting the LPP. However, the Cost and Schedule Risk Analysis Report, herein, refers to both the NED Plan and LPP costs with contingencies applied, as developed for the LPP cost estimates. For comparison purposes, the price level costs for both the NED Plan and the LPP are provided in Table ES-1 below.

Note that during the course of risk study, it became clear that risks varied between contracts and cost feature accounts. Those risk variances related to the understanding that there were construction contracts already completed, some underway, and various contracts in various stages of design and projected schedule. It was also understood that the technical construction elements varied per contracts and that the differing cost feature accounts also varied in risk. For this reason, and to better enable project management of costs per contract and feature, it was decided that the risk models should be developed at the contract and feature cost levels. Upon completion of the study, the average total contingency would then be presented, knowing that the subfeature levels carried the different studied risks and resulting contingency values.

Table ES-1. NED Plan vs. LPP Price Level Comparison

Estimate (\$1,000s)	NED Plan (\$1,000s)	LPP (\$1,000s)
Sunk Costs	\$312,433	\$326,561
Estimated Balance to Complete	\$608,054	\$637,019
Most Likely Project Cost	\$920,487	\$963,580
Balance to Complete Costs with Contingency (80% Confidence Level)	\$1,111,560	\$1,164,000

Specific to the Natomas Project (NED Plan), the most likely project cost (at price level) is estimated at approximately \$920 Million. Based on the results of the analysis, the recommended contingency is \$191 Million, or 31%, reflecting total price level project costs (including sunk costs and balance to finish) of \$1.1 Billion.

Specific to the Natomas Project (LPP), the most likely project cost (at price level) is estimated at approximately \$964 Million. Based on the results of the analysis, the recommended contingency is \$201 Million, or 31%, reflecting total price level project costs (including sunk costs and balance to finish) of \$1.2 Billion.

The PDT performed risk analysis using the *Monte Carlo* technique, producing the aforementioned contingencies and identifying key risk drivers.

The following tables portray the contingency results for both the NED and LPP based on an 80% confidence level that includes both cost and schedule risks related to dollars. This presentation is per USACE Civil Works guidance. The contingency percent is a weighted average of the contingencies determined at the contract and cost feature account level.

Table ES-2. Contingency Analysis Table (NED Plan)

Most Likely Cost Estimate	\$920,487,000	
Confidence Level	Value (\$1,000s)	Contingency (%)
50%	\$979,787	9.75%
80%	\$1,111,560	31.42%
100%	\$1,611,132	113.58%

Note: A P100 confidence level is an abstract concept for illustration only, as the nature of risk and uncertainty (specifically the presence of "unknown unknowns") makes 100% confidence a theoretical impossibility.

Table ES-3. Contingency Analysis Table (LPP)

Most Likely Cost Estimate	\$963,580,000	
Confidence Level	Value (\$1,000s)	Contingency (%)
50%	\$1,026,435	9.87%
80%	\$1,164,100	31.48%
100%	\$1,687,076	113.58%

Note: A P100 confidence level is an abstract concept for illustration only, as the nature of risk and uncertainty (specifically the presence of "unknown unknowns") makes 100% confidence a theoretical impossibility.

KEY FINDINGS/OBSERVATIONS RECOMMENDATIONS

The key cost risk driver identified through sensitivity analysis were Unexpected Escalation on Key Materials and Uncertainty with the Cutoff Wall for the Reach A Levees and Floodwalls, which together contribute over 31 percent of the statistical cost variance.

The key schedule risk drivers identified through sensitivity analysis were Easement Acquisition for the Reach A Relocations, Pumping Plant, and Levees and Floodwall Accounts, which contributes nearly 30 percent of the statistical schedule variance.

Recommendations, as detailed within the main report, include the implementation of cost and schedule contingencies, further iterative study of risks throughout the project life-cycle, potential mitigation throughout the PED phase, and proactive monitoring and control of risk identified in this study.

MAIN REPORT

1.0 PURPOSE

Under the auspices of the US Army Corps of Engineers (USACE), Sacramento District, this report presents a recommendation for the project cost and schedule contingencies for the American River Common Features Project, Natomas Post Authorization Change Report National Economic Development Plan.

2.0 BACKGROUND

This CSRA report is for the American River Common Features Project, Natomas Post Authorization Change Report National Economic Development Plan (Natomas Project). The project covers approximately 42 miles of levee repairs protecting the Natomas basin portion of the City of Sacramento; the levee repairs primarily focus on seepage and stability deficiency remediation. The Natomas Project is a feasibility study, that if acted upon by Congress, will lead to design and construction efforts. As discussed above, this CSRA will act as a tool for managing risks during the design and construction phases.

As a part of this effort, Sacramento District requested that the USACE Cost Engineering Directory of Expertise for Civil Works (Cost Engineering Dx) provide an agency technical review (ATR) of the cost estimate and schedule for Recommended Project Plan. That tasking also included providing a risk analysis report, substantiating the resulting contingencies.

3.0 REPORT SCOPE

The scope of the risk analysis report is to calculate and present the cost and schedule contingencies at the 80 percent confidence level using the risk analysis processes, as mandated by U.S. Army Corps of Engineers (USACE) Engineer Regulation (ER) 1110-2-1150, Engineering and Design for Civil Works, ER 1110-2-1302, Civil Works Cost Engineering, and Engineer Technical Letter 1110-2-573, Construction Cost Estimating Guide for Civil Works. The report presents the contingency results for cost risks for all project features. The study and presentation does not include consideration for life cycle costs.

3.1 Project Scope

The American River Watershed Investigation began shortly after the flood of 1986. The flood of 1986 nearly led to the inundation of the City of Sacramento. The Sacramento

District completed a feasibility study in 1991. The recommended plan from this study was a new flood control dam in the Auburn Canyon upstream of the existing Folsom Dam and Reservoir, along with levee improvements in the City of Sacramento. Congress chose not to act upon Auburn Dam and instead directed the Corps to address various aspects of this as part of a supplemental study. The Sacramento District completed this supplemental study in 1996, with essentially the same recommended plan. Again, Congress chose not to act on Auburn Dam, and instead authorized the American River Common Features Project as part of WRDA 1996, in order to start design and construction on elements that were common to all plans presented in the 1991 and 1996 studies. Common features for the most part included levee improvements on the American and Sacramento Rivers with regards to seepage and stability deficiency remediation. The authorization for the Common Features project was modified as part of WRDA 1999 to include additional levee improvements needed to work with the plan Congress choose, Folsom Dam improvements. Common Features was authorized once more in order to adjust a 902 limit, as part of the EWDA of 2004. For a more thorough discussion of the Common Features project background, refer to the main Natomas Project report.

The Natomas Project addresses levee deficiency remediation of the approximately 42 miles of levee completely surrounding the basin. The remediation includes construction of seepage cutoff walls, seepage berms, stability berms, and adjacent levees, depending on specific deficiencies in a given reach. In addition to the general remediation, there are also utilities requiring additional work, in order to remediate the seepage and stability deficiencies. Utility types are widespread but the major utility efforts involve pump station relocations and bridge improvements. Pump stations are being addressed by either completely replacing the pump station and taking outlet pipes up and over the levee, or simply replacing the pipes through the levee and including a positive closure device on the new pipes. The second option is much less expensive and preferable. However, the first option is required at various pump stations because the actual pumping plant is in the way of the necessary levee improvements.

For the Natomas Project, feasibility level geotechnical and civil designs have occurred for the seepage and stability deficiency remediation and for the utility relocations. Information from this design effort has been used in developing the cost estimate. The cost estimate has been developed using the software package MII, which is a cost estimating software package.

3.2 USACE Risk Analysis Process

The risk analysis process for this study follows the USACE Headquarters requirements as well as the guidance provided by the Cost Engineering Dx. The risk analysis process reflected within this report uses probabilistic cost and schedule risk analysis methods within the framework of the Crystal Ball software. Furthermore, the scope of the report includes the identification and communication of important steps, logic, key

assumptions, limitations, and decisions to help ensure that risk analysis results can be appropriately interpreted.

Risk analysis results are also intended to provide project leadership with contingency information for scheduling, budgeting, and project control purposes, as well as to provide tools to support decision making and risk management as the project progresses through planning and implementation. To fully recognize its benefits, cost and schedule risk analysis should be considered as an ongoing process conducted concurrent to, and iteratively with, other important project processes such as scope and execution plan development, resource planning, procurement planning, cost estimating, budgeting and scheduling.

In addition to broadly defined risk analysis standards and recommended practices, this risk analysis was performed to meet the requirements and recommendations of the following documents and sources:

- Cost and Schedule Risk Analysis Process guidance prepared by the USACE Cost Engineering Dx.
- Engineer Regulation (ER) 1110-2-1302 CIVIL WORKS COST ENGINEERING, dated September 15, 2008.
- Engineer Technical Letter (ETL) CONSTRUCTION COST ESTIMATING GUIDE FOR CIVIL WORKS, dated September 30, 2008.

4.0 METHODOLOGY / PROCESS

The risk analysis process for this study is intended to determine the probability of various cost outcomes and quantify the required contingency needed in the cost estimate to achieve any desired level of cost confidence.

In simple terms, contingency is an amount added to an estimate to allow for items, conditions or events for which the occurrence or impact is uncertain and that experience suggests will likely result in additional costs being incurred or additional time being required. The amount of contingency included in project control plans depends, at least in part, on the project leadership's willingness to accept risk of project overruns. The less risk that project leadership is willing to accept the more contingency should be applied in the project control plans. The risk of overrun is expressed, in a probabilistic context, using confidence levels.

The Cost Dx guidance for cost and schedule risk analysis generally focuses on the 80-percent level of confidence (P80) for cost contingency calculation. It should be noted

that use of P80 as a decision criteria is a risk averse approach (whereas the use of P50 would be a risk neutral approach, and use of levels less than 50 percent would be risk seeking). Thus, a P80 confidence level results in greater contingency as compared to a P50 confidence level. The selection of contingency at a particular confidence level is ultimately the decision and responsibility of the project's District and/or Division management.

The risk analysis process uses *Monte Carlo* techniques to determine probabilities and contingency. The *Monte Carlo* techniques are facilitated computationally by a commercially available risk analysis software package (Crystal Ball) that is an add-in to Microsoft Excel. Cost estimates are packaged into an Excel format and used directly for cost risk analysis purposes. The level of detail recreated in the Excel-format schedule is sufficient for risk analysis purposes that reflect the established risk register, but generally less than that of the native format.

The primary steps, in functional terms, of the risk analysis process are described in the following subsections. Risk analysis results are provided in Section 6.

4.1 Identify and Assess Risk Factors

Identifying the risk factors via the PDT is considered a qualitative process that results in establishing a risk register that serves as the document for the quantitative study using the Crystal Ball risk software. Risk factors are events and conditions that may influence or drive uncertainty in project performance. They may be inherent characteristics or conditions of the project or external influences, events, or conditions such as weather or economic conditions. Risk factors may have either favorable or unfavorable impacts on project cost and schedule.

Checklists or historical databases of common risk factors are sometimes used to facilitate risk factor identification. However, key risk factors are often unique to a project and not readily derivable from historical information. Therefore, input from the entire PDT was obtained using creative processes such as brainstorming or other facilitated risk assessment meetings.

The Sacramento District assembled a risk team comprised of key PDT members and a risk analysis representative from the Cost Engineering Dx to further augment labor, expertise and information gathering.

A meeting was held on May 11th and 12th, 2010, near the Sacramento District, USACE, with the PDT members, sponsors of the project, consultants to the district, and Sacramento and Walla Walla District facilitators. This meeting focused primarily on risk identification using brainstorming techniques, but also included some facilitated discussions based on risk factors common to projects of similar scope and geographic location. Those in attendance of this meeting can be found in Table 1 below.

Table 1. Initial Risk Register Development Meeting Attendees

Organization	Discipline
USACE	Cost Risk Facilitator
USACE	Project Manager
USACE	Civil Designer
USACE	Geotechnical Engineer
USACE	Cost Engineer
USACE	Hydraulic Engineer
USACE	GIS Specialist
USACE	Construction Engineer
USACE	Contracting Specialist
USACE	Planner
USACE	Environmental Scientist
USACE	Real Estate Specialist
Calif. DWR	Project Manager
SAFCA	Project Manager
SAFCA	Planner
URS	Administrative Support
MBK Engineers	Project Manager
MBK Engineers	Civil Designer
HDR	Civil Designer
Wood Rodgers	Civil Designer
Mead & Hunt	Civil Designer
Kleinfelder	Geotechnical Engineer

Subsequent meetings focused primarily on identifying project management and programmatic risks, risk factor assessment, and quantification; any new risk factors were also addressed during the follow-up discussions. Risk factors were identified and quantified through several face-to-face meetings, telephone calls, and email correspondence. Individuals who were involved with the follow-up discussions were the same as in the initial risk analysis work shop.

4.2 Quantify Risk Factor Impacts

During the course of risk study, it became clear that risks varied between contracts and cost feature accounts. Those risk variances related to the understanding that there were construction contracts already completed, some underway, and various contracts in various stages of design and projected schedule. It was also understood that the technical construction elements varied per contracts and that the differing cost feature accounts also varied in risk. For this reason, and to better enable project management of costs per contract and feature, it was decided that the risk models should be

developed at the contract and feature cost levels. Upon completion of the study, the average total contingency would then be presented, knowing that the subfeature levels carried the different studied risks and resulting contingency values.

The quantitative impacts of risk factors on project plans were analyzed using a combination of professional judgment, empirical data and analytical techniques. Risk factor impacts were quantified using probability distributions (density functions) because risk factors are entered into the Crystal Ball software in the form of probability density functions.

Similar to the identification and assessment process, risk factor quantification involved multiple project team disciplines and functions. However, the quantification process relied more extensively on collaboration between cost engineering and risk analysis team members with lesser inputs from other functions and disciplines. This process used an iterative approach to estimate the following elements of each risk factor:

- Maximum possible value for the risk factor
- Minimum possible value for the risk factor
- Most likely value (the statistical mode), if applicable
- Nature of the probability density function used to approximate risk factor uncertainty
- Mathematical correlations between risk factors
- Affected cost estimate and schedule elements

The resulting product from the PDT discussions is captured within a risk register as presented in section 6 for both cost and schedule risk concerns. Note that the risk register records the PDT's risk concerns, discussions related to those concerns, and potential impacts to the current cost and schedule estimates. The concerns and discussions support the team's decisions related to event likelihood, impact, and the resulting risk levels for each risk event.

4.3 Analyze Cost Estimate and Schedule Contingency

Contingency is analyzed using the Crystal Ball software, an add-in to the Microsoft Excel format of the cost estimate and schedule. *Monte Carlo* simulations are performed by applying the risk factors (quantified as probability density functions) to the appropriate estimated cost and schedule elements identified by the PDT.

Contingencies are calculated by applying only the moderate and high level risks identified for each option (i.e., low-level risks are typically not considered, but remain within the risk register to serve historical purposes as well as support follow-on risk studies as the project and risks evolve).

For the cost estimate, the contingency is calculated as the difference between the P80 cost forecast and the baseline cost estimate. Each option-specific contingency is then allocated on a civil works feature level based on the dollar-weighted relative risk of each feature as quantified by *Monte Carlo* simulation. Standard deviation is used as the feature-specific measure of risk for contingency allocation purposes. This approach results in a relatively larger portion of all the project feature cost contingency being allocated to features with relatively higher estimated cost uncertainty.

5.0 PROJECT ASSUMPTIONS

The following data sources and assumptions were used in quantifying the costs associated with the Natomas Project.

- a. The Excel file “Natomas Apr 5 2010wRISKv4” was the basis for the cost and schedule risk analyses.
- b. The cost comparisons and risk analyses performed and reflected within this report are based on design scope and estimates that are at the preconstruction engineering and design (PED) level.
- c. The schedule was analyzed for impact to the project cost in terms of uncaptured escalation (variance from OMB factors and the local market).
- d. Per the Sacramento District’s research on the comparative inflation rates between the Civil Works Construction Cost Index System (CWCCIS) rates and the local Sacramento area historical inflation rates, the typical inflation rate in the Sacramento Metro area is approximately 3%. The projected inflationary difference accounts for approximately 10% of the recommended contingency of 31%.
- e. The Cost Dx guidance generally focuses on the eighty-percent level of confidence (P80) for cost contingency calculation. For this risk analysis, the eighty-percent level of confidence (P80) was used. It should be noted that the use of P80 as a decision criteria is a moderately risk averse approach, generally resulting in higher cost contingencies. However, the P80 level of confidence also assumes a small degree of risk that the recommended contingencies may be inadequate to capture actual project costs.
- g. Low level risk impacts should be maintained in project management documentation, and reviewed at each project milestone to determine if they should be placed on the risk “watch list” for further monitoring and evaluation.

6.0 RESULTS

The cost and schedule risk analysis results are provided in the following sections. In addition to contingency calculation results, sensitivity analyses are presented to provide decision makers with an understanding of variability and the key contributors to the cause of this variability.

6.1 Risk Register

A risk register is a tool commonly used in project planning and risk analysis. The complete risk register includes low level risks, as well as additional information regarding the nature and impacts of each risk.

It is important to note that a risk register can be an effective tool for managing identified risks throughout the project life cycle. As such, it is generally recommended that risk registers be updated as the designs, cost estimates, and schedule are further refined, especially on large projects with extended schedules. Recommended uses of the risk register going forward include:

- Documenting risk mitigation strategies being pursued in response to the identified risks and their assessment in terms of probability and impact.
- Providing project sponsors, stakeholders, and leadership/management with a documented framework from which risk status can be reported in the context of project controls.
- Communicating risk management issues.
- Providing a mechanism for eliciting feedback and project control input.
- Identifying risk transfer, elimination, or mitigation actions required for implementation of risk management plans.

6.2 Cost Contingency and Sensitivity Analysis

Tables 2 and 3 provide the construction cost contingencies calculated for the P80 confidence level and rounded to the nearest thousand for both the NED Plan and LPP. The construction cost contingencies for the P50 and P100 confidence levels are also provided for illustrative purposes only. The contingency percents presented are a weighted average of the contingencies determined at the contract and cost feature account level.

At the P80 confidence level, contingency was quantified as approximately \$191 Million for the NED Plan and \$201 Million for the LPP (31% of the baseline cost estimate). For comparison, the cost contingency at the P50 and P100 confidence levels was quantified as 10% and 114% of the baseline cost estimate, respectively.

Table 2. Project Cost Contingency Summary (NED Plan)

Risk Analysis Forecast	Baseline Estimate	Total Contingency ^{1,2} (\$)	Total Contingency (%)
50% Confidence Level			
Project Cost (in 1,000s)	\$920,487	\$59,300	9.75%
80% Confidence Level			
Project Cost (in 1,000s)	\$920,487	\$191,073	31.42%
100% Confidence Level			
Project Cost (in 1,000s)	\$920,487	\$690,645	113.58%

Notes:

- 1) These figures combine uncertainty in the baseline cost estimates and schedule.
- 2) A P100 confidence level is an abstract concept for illustration only, as the nature of risk and uncertainty (specifically the presence of "unknown unknowns") makes 100% confidence a theoretical impossibility.

Table 3. Project Cost Contingency Summary (LPP)

Risk Analysis Forecast	Baseline Estimate	Total Contingency ^{1,2} (\$)	Total Contingency (%)
50% Confidence Level			
Project Cost (in 1,000s)	\$963,580	\$62,855	9.87%
80% Confidence Level			
Project Cost (in 1,000s)	\$963,580	\$200,520	31.48%
100% Confidence Level			
Project Cost (in 1,000s)	\$963,580	\$723,496	113.58%

Notes:

- 1) These figures combine uncertainty in the baseline cost estimates and schedule.
- 2) A P100 confidence level is an abstract concept for illustration only, as the nature of risk and uncertainty (specifically the presence of "unknown unknowns") makes 100% confidence a theoretical impossibility.

6.2.1 Sensitivity Analysis

Sensitivity analysis generally ranks the relative impact of each risk/opportunity as a percentage of total cost uncertainty. The Crystal Ball software uses a statistical measure (contribution to variance) that approximates the impact of each risk/opportunity contributing to variability of cost outcomes during *Monte Carlo* simulation.

Key cost drivers identified in the sensitivity analysis can be used to support development of a risk management plan that will facilitate control of risk factors and

their potential impacts throughout the project lifecycle. Together with the risk register, sensitivity analysis results can also be used to support development of strategies to eliminate, mitigate, accept or transfer key risks.

6.2.2 Sensitivity Analysis Results

The risks/opportunities considered as key or primary cost drivers are ranked in order of importance in contribution to variance bar charts. Opportunities that have a potential to reduce project cost and are shown with a negative sign; risks are shown with a positive sign to reflect the potential to increase project cost. A longer bar in the sensitivity analysis chart represents a greater potential impact to total project cost.

Figure 1 presents a sensitivity analysis for cost growth risk from the high level cost risks identified in the risk register. Likewise, Figure 2 presents a sensitivity analysis for schedule growth risk from the high level schedule risks identified in the risk register.

6.3 Schedule and Contingency Risk Analysis

Table 4 provides the schedule duration contingencies calculated for the P80 confidence level. The schedule duration contingencies for the P50 and P100 confidence levels are also provided for illustrative purposes.

Schedule duration contingency was quantified as 13 months based on the P80 level of confidence. The schedule contingencies were calculated by applying the high level schedule risks identified in the risk register for each option to the durations of critical path and near critical path tasks.

Table 4. Schedule Duration Contingency Summary (NED Plan and LPP)

Risk Analysis Forecast	Baseline Schedule Duration (months)	Contingency ¹ (months)
50% Confidence Level		
Project Duration	54.5	6.7
80% Confidence Level		
Project Duration	54.5	13.0
100% Confidence Level		
Project Duration	54.5	50.3

Notes:

1) The schedule was not resource loaded and contained open-ended tasks and non-zero lags (gaps in the logic between tasks) that limit the overall utility of the schedule risk analysis. These issues should be considered as limitations in the utility of the schedule contingency data presented in Table 4.

2) A P100 confidence level is an abstract concept for illustration only, as the nature of risk and uncertainty (specifically the presence of “unknown unknowns”) makes 100% confidence a theoretical impossibility.

Figure 1. Cost Sensitivity Analysis (NED Plan and LPP)

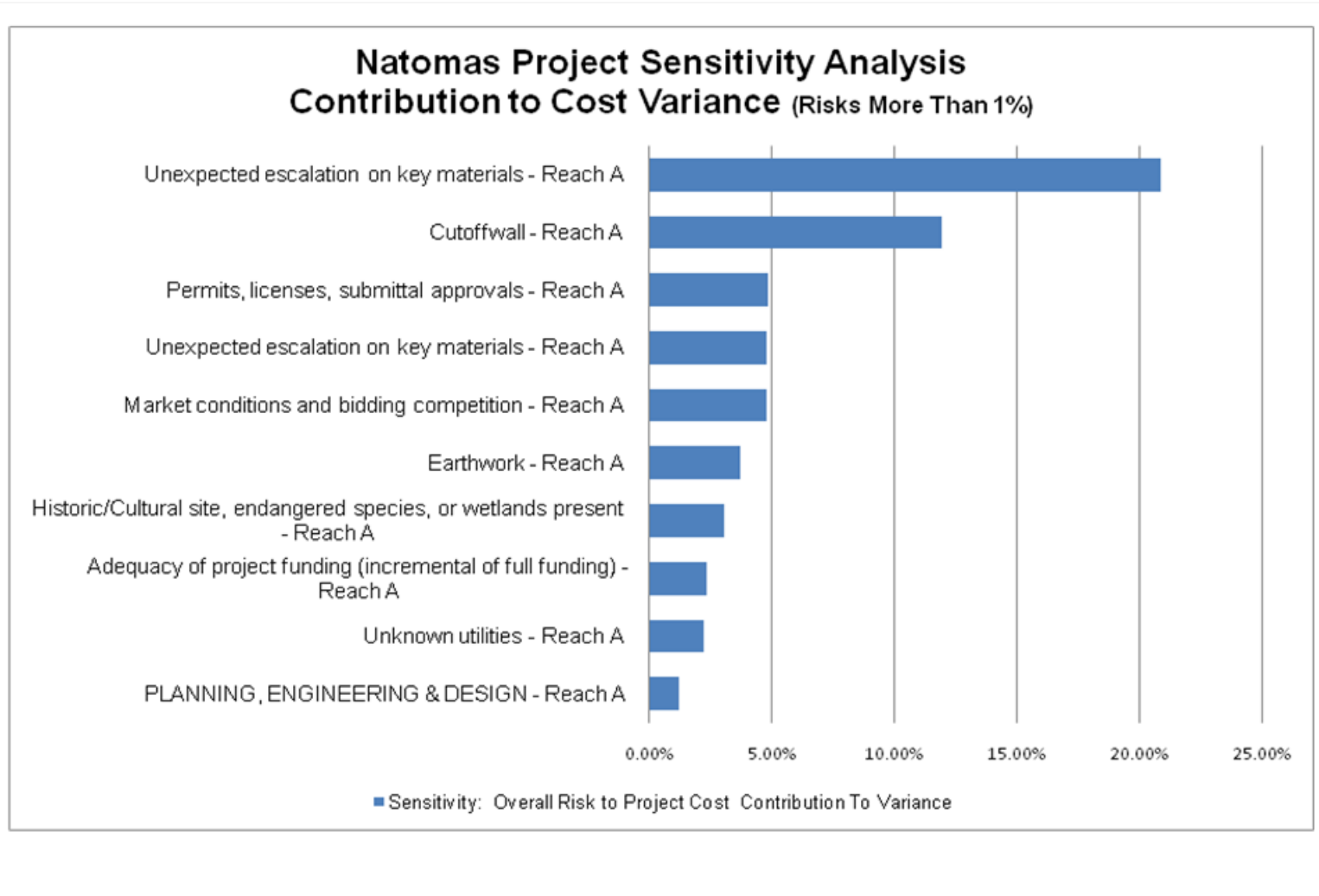
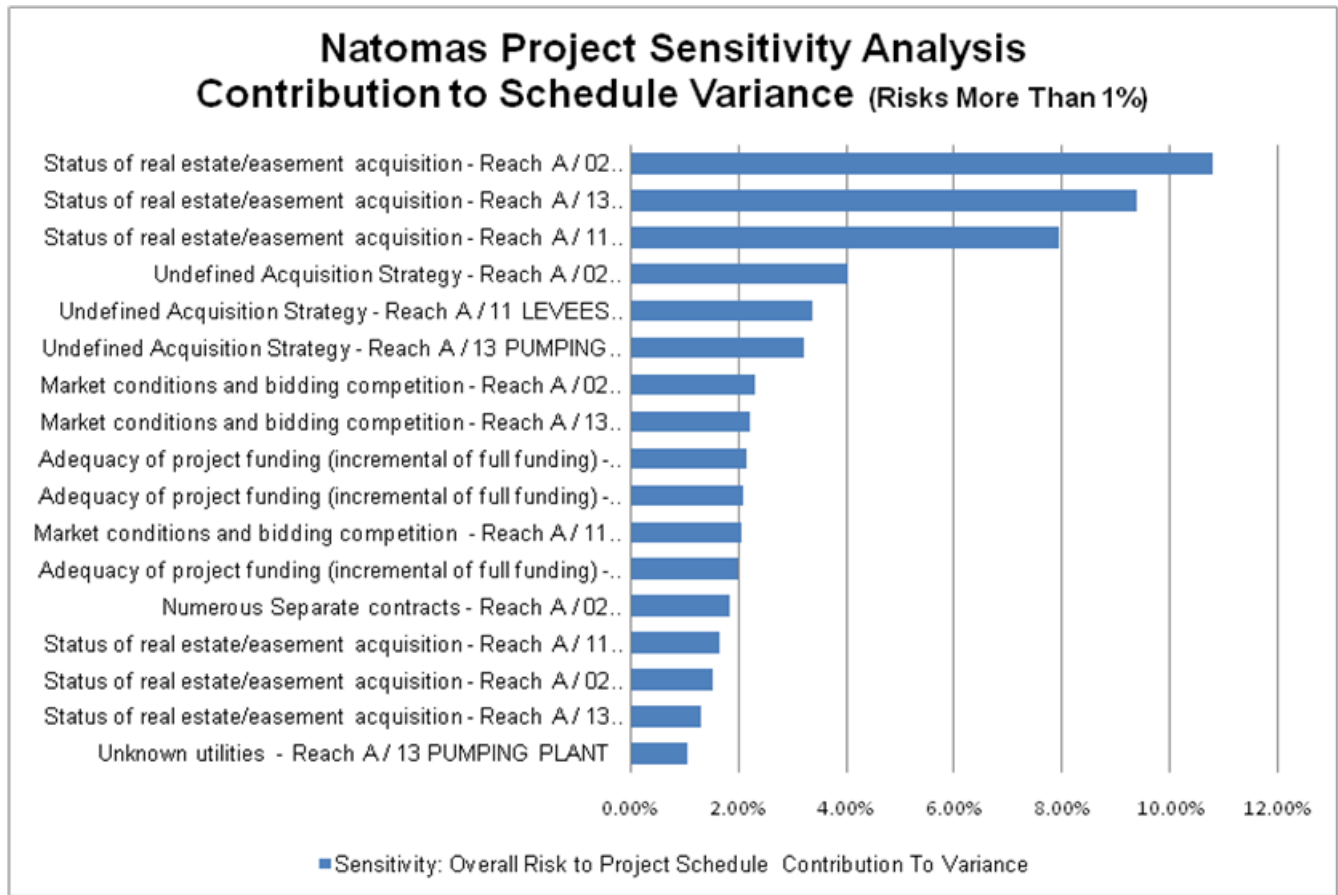


Figure 2. Schedule Sensitivity Analysis (NED Plan and LPP)



7.0 MAJOR FINDINGS/OBSERVATIONS/RECOMMENDATIONS

This section provides a summary of significant risk analysis results that are identified in the preceding sections of the report. Risk analysis results are intended to provide project leadership with contingency information for scheduling, budgeting, and project control purposes, as well as to provide tools to support decision making and risk management as projects progress through planning and implementation. Because of the potential for use of risk analysis results for such diverse purposes, this section also reiterates and highlights important steps, logic, key assumptions, limitations, and decisions to help ensure that the risk analysis results are appropriately interpreted.

7.1 Major Findings/Observations

Project cost comparison summaries are provided in Tables 5 and 6. Additional major findings and observations of the risk analysis are listed below.

1. The key cost risk driver identified through sensitivity analysis were Unexpected Escalation on Key Materials and Uncertainty with the Cutoff Wall for the Reach A Levees and Floodwalls, which together contribute over 31 percent of the statistical cost variance.
2. The key schedule risk driver identified through sensitivity analysis was Easement Acquisition for the Reach A Relocations, Pumping Plant, and Levees and Floodwall Accounts, which contributes nearly 30 percent of the statistical schedule variance.
3. The schedule was not resource loaded and contains open-ended tasks, and non-zero lags (gaps in the logic between tasks) that limit the overall utility of the schedule risk analysis. These issues should be considered as limitations in the utility of the schedule contingency data presented. Schedule contingency impacts presented in this analysis are based solely on projected "Hotel" costs. Resource impacts related to potential schedule delays could not be evaluated.
4. Operation and maintenance activities were not included in the cost estimate or schedules. Therefore, a full lifecycle risk analysis could not be performed. Risk analysis results or conclusions could be significantly different if the necessary operation and maintenance activities were included.

Table 5. Project Cost Comparison Summary – NED Plan (Federal and Non-Federal Costs)

Confidence Level	Project Cost (\$ in 1,000s)	Contingency (%)
P0	\$880,617	-6.56%
P10	\$933,081	2.07%
P20	\$945,958	4.19%
P30	\$958,360	6.23%
P40	\$970,064	8.15%
P50	\$979,787	9.75%
P60	\$994,738	12.21%
P70	\$1,039,707	19.61%
P80	\$1,111,560	31.42%
P90	\$1,179,336	42.57%
P100	\$1,611,132	113.58%

Table 6. Project Cost Comparison Summary – LPP (Federal and Non-Federal Costs)

Confidence Level	Project Cost (\$ in 1,000s)	Contingency (%)
P0	\$922,915	-6.38%
P10	\$977,503	2.19%
P20	\$991,367	4.36%
P30	\$1,004,154	6.37%
P40	\$1,015,142	8.09%
P50	\$1,026,435	9.87%
P60	\$1,041,524	12.24%
P70	\$1,088,930	19.68%
P80	\$1,164,100	31.48%
P90	\$1,235,817	42.74%
P100	\$1,687,076	113.58%

Figure 3. Project Cost Summary (NED Plan)

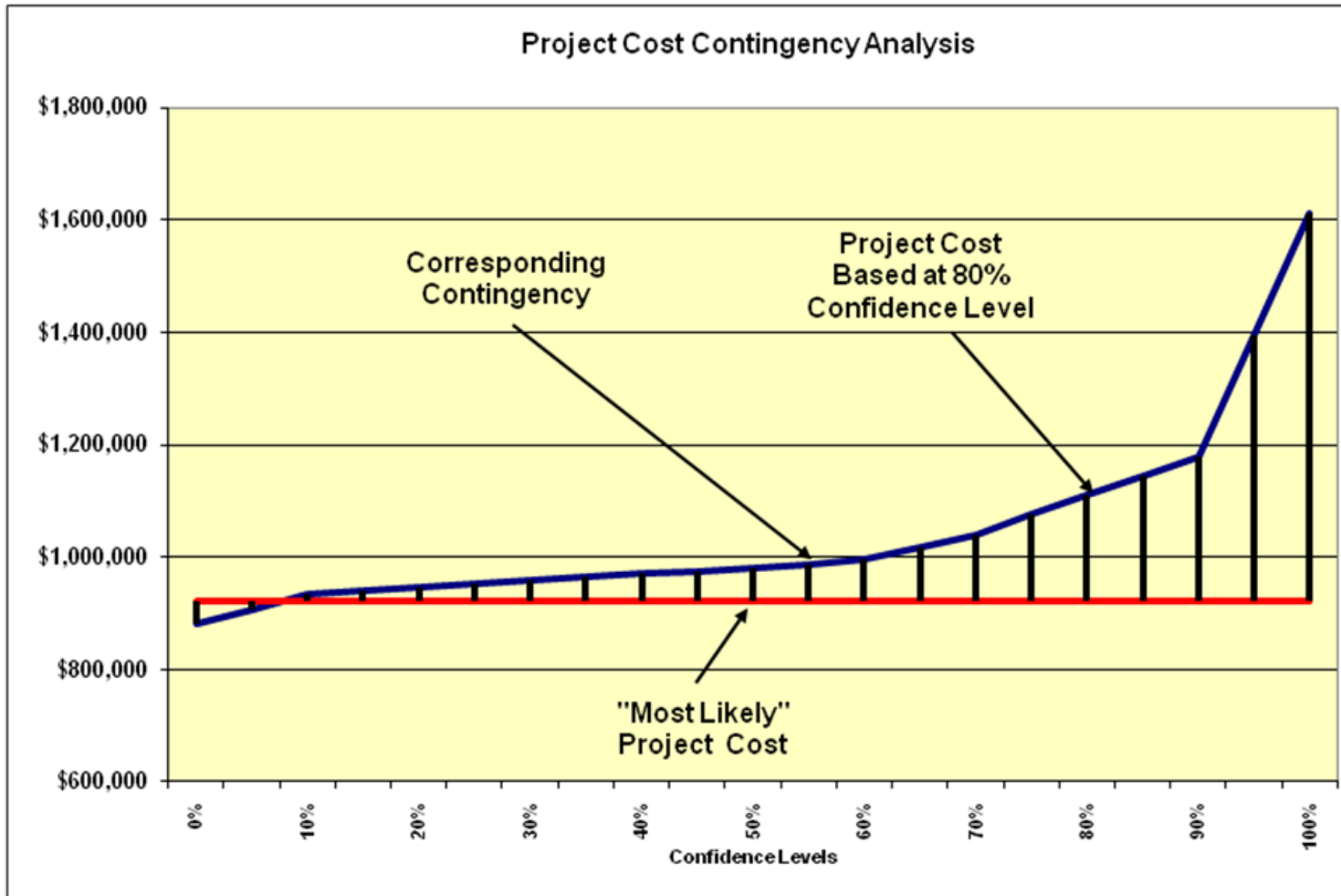
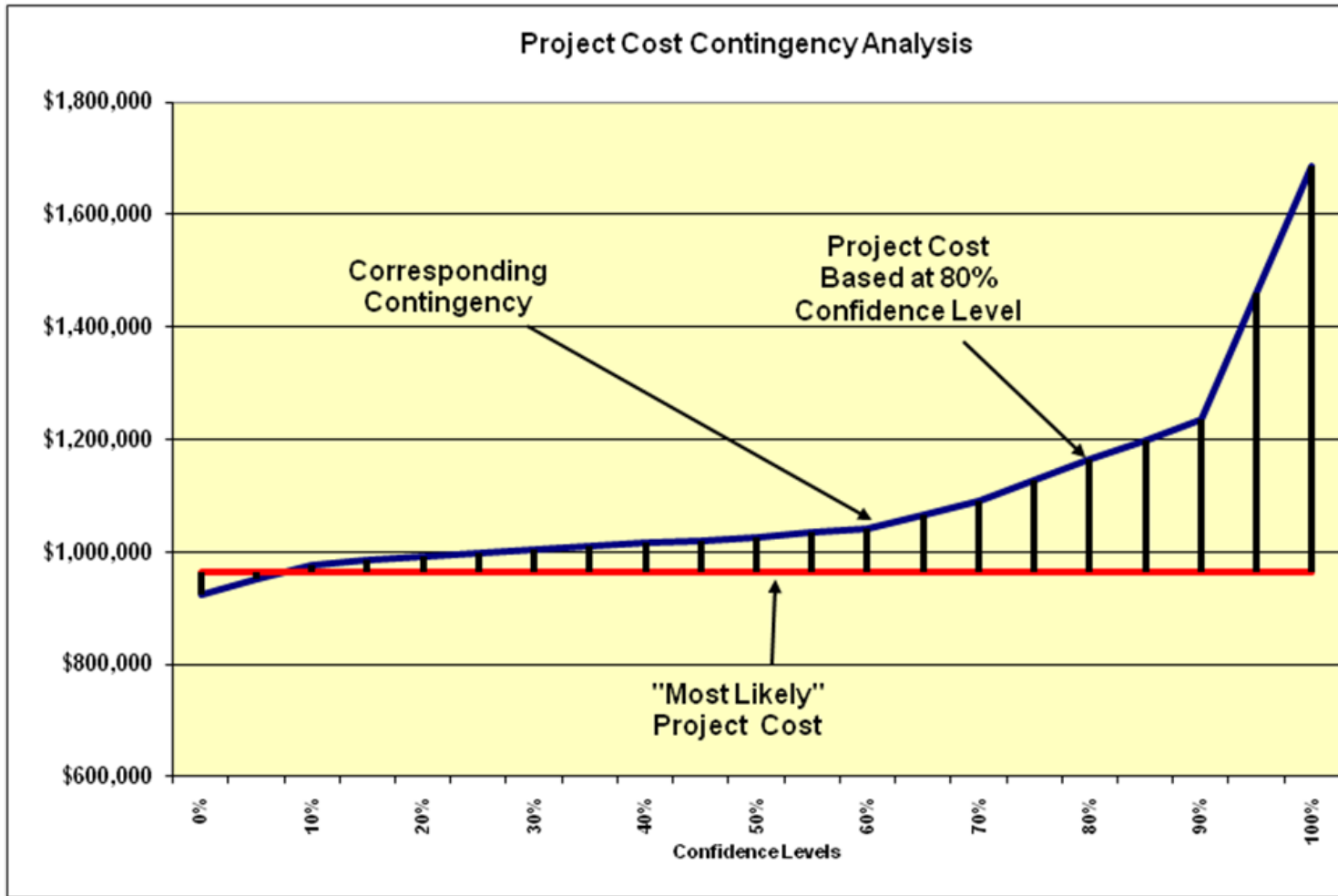


Figure 4. Project Cost Summary (LPP)



7.2 Recommendations

Risk Management is an all-encompassing, iterative, and life-cycle process of project management. The Project Management Institute's (PMI) *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, 4th edition, states that "project risk management includes the processes concerned with conducting risk management planning, identification, analysis, responses, and monitoring and control on a project." Risk identification and analysis are processes within the knowledge area of risk management. Its outputs pertinent to this effort include the risk register, risk quantification (risk analysis model), contingency report, and the sensitivity analysis.

The intended use of these outputs is implementation by the project leadership with respect to risk responses (such as mitigation) and risk monitoring and control. In short, the effectiveness of the project risk management effort requires that the proactive management of risks not conclude with the study completed in this report.

The Cost and Schedule Risk Analysis (CSRA) produced by the PDT identifies issues that require the development of subsequent risk response and mitigation plans. This section provides a list of recommendations for continued management of the risks identified and analyzed in this study. Note that this list is not all inclusive and should not substitute a formal risk management and response plan.

1. Risk Management: Project leadership should use of the outputs created during the risk analysis effort as tools in future risk management processes. The risk register should be updated at each major project milestone. The results of the sensitivity analysis may also be used for response planning strategy and development. These tools should be used in conjunction with regular risk review meetings.

2. Risk Analysis Updates: Project leadership should review risk items identified in the original risk register and add others, as required, throughout the project life-cycle. Risks should be reviewed for status and reevaluation (using qualitative measure, at a minimum) and placed on risk management watch lists if any risk's likelihood or impact significantly increases. Project leadership should also be mindful of the potential for secondary (new risks created specifically by the response to an original risk) and residual risks (risks that remain and have unintended impact following response).

**** SUMMARY OF TOTAL PROJECT ANNUAL COST****

August 25, 2010

PROJECT: NATOMAS PACR, NED
LOCATION: CALIFORNIA
INTEREST RATE: 4.375%

U. S. ARMY CORPS OF ENGINEER
SACRAMENTO DISTRICT

ITEM	COST (\$)
Effective Price Level (EPL): 1-Oct-2010	
A. INVESTMENT COST	
1. FEDERAL TOTAL	733,107,000
2. NON-FEDERAL TOTAL	<u>530,466,000</u>
TOTAL PROJECT INVESTMENT	\$1,263,573,000
B. ANNUAL COSTS	
1. FEDERAL TOTAL	36,345,000
2. NON-FEDERAL TOTAL	<u>31,479,000</u>
TOTAL ANNUAL COST	\$67,824,000

DETAILED ESTIMATE OF ANNUAL COST

ITEM	COST (\$)
Effective Price Level (EPL): 1-Oct-2010	
A. INVESTMENT COST	
1. FEDERAL	
a. First Cost	657,760,000
Less 18. Cultural Resources Preservation (-)	6,578,000
b. Interest During Construction (+)	81,925,000
TOTAL	\$733,107,000
2. NON-FEDERAL	
a. First Cost	453,800,000
b. Interest During Construction	76,666,000
TOTAL	\$530,466,000
TOTAL PROJECT INVESTMENT	\$1,263,573,000
B. ANNUAL COSTS	
1. FEDERAL	
a. Interest and Amortization:	
Interest @	4.375%
Amortization @	0.583%
Amortization Period	50
TOTAL	\$36,345,000
2. NON-FEDERAL	
a. Interest and Amortization:	
Interest @	4.375%
Amortization @	0.583%
Amortization Period	50
c. Maintenance And Operation:	
02--- Relocations	953,000
06--- Fish & Wildlife Facil.	160,000
11--- Levees	3,163,000
13--- Pumping Plants	904,000
TOTAL	\$31,479,000
TOTAL ANNUAL COST	\$67,824,000

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION

PROJECT: NATOMAS PACR, NED
LOCATION: CALIFORNIA
INTEREST RATE: 4.375%

ACCOUNT NUMBER	DESCRIPTION	AMOUNT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
Effective Price Level (EPL): 1-Oct-2010						
FEDERAL COSTS						
1	LANDS AND DAMAGES, Administration	4,127,000				169,402
	Reach A	765,000	Oct-11	Apr-12	Oct-13	59,552
	Reach B	945,000	Oct-12	Apr-13	Oct-13	30,870
	Reach C	295,000	Oct-15	Apr-16	Oct-16	9,655
	Reach D	98,000	Oct-15	Apr-16	Oct-16	3,207
	Reach E	397,000	Oct-14	Apr-15	Oct-15	12,969
	Reach F	321,000	Oct-13	Apr-14	Oct-14	10,486
	Reach G	241,000	Oct-14	Apr-15	Oct-15	7,873
	Reach H	902,000	Oct-13	Apr-14	Oct-14	29,465
	Reach I	163,000	Oct-12	Apr-13	Oct-13	5,325
1	LANDS AND DAMAGES, Real Estate	14,365,000				573,924
	Reach A	2,312,000	Oct-11	Apr-12	Oct-13	179,979
	Reach B	5,848,000	Oct-12	Apr-13	Oct-13	191,034
	Reach C	1,027,000	Oct-15	Apr-16	Oct-16	33,611
	Reach D	2,512,000	Oct-15	Apr-16	Oct-16	82,211
	Reach E	1,074,000	Oct-14	Apr-15	Oct-15	35,084
	Reach H	1,592,000	Oct-13	Apr-14	Oct-14	52,005
6	FISH & WILDLIFE FACILITIES	18,869,000				1,111,404
3--	WILDLIFE FACILITIES & SANCTUARIES					
	Reach B					
	FEDERAL	1,635,000	Apr-13	Apr-13	Oct-13	35,481
	NON-FEDERAL - Section 104					
		14,000	Oct-08	Oct-09	Oct-13	2,977
		150,000	Oct-09	Oct-10	Oct-13	24,273
		78,000	Apr-11	Oct-11	Oct-13	7,901
	Reach C					
	FEDERAL	225,000	Oct-07	Oct-08	Oct-16	98,877
	NON-FEDERAL - Section 104					
		1,139,000	Oct-06	Oct-07	Oct-16	572,367
		498,000	Oct-07	Oct-08	Oct-16	218,848
		64,000	Oct-09	Oct-10	Oct-16	20,559
	Reach E	6,717,000	Apr-15	Nov-15	Oct-15	61,416
	Reach H	8,349,000	Apr-14	Nov-14	Oct-14	68,705
11	LEVEES AND FLOODWALLS	388,083,000				31,854,047
	Reach A	72,593,000	Apr-12	Oct-13	Oct-13	2,270,341
	Reach B					
	FEDERAL	25,077,000	Apr-13	Oct-13	Oct-13	259,298
	NON-FEDERAL - Section 104					
		199,000	Oct-08	Oct-09	Oct-13	42,317
		5,176,000	Oct-09	Oct-10	Oct-13	837,578
		17,788,000	Oct-08	Oct-09	Oct-13	3,782,602
		25,044,000	Apr-11	Oct-11	Oct-13	2,536,967
	Reach C					
	FEDERAL	908,000	Apr-16	Oct-16	Oct-16	9,011
	NON-FEDERAL - Section 104					
		1,189,000	Oct-08	Oct-09	Oct-16	450,674
		63,000	Oct-08	Oct-09	Oct-16	23,879
		2,568,000	Oct-08	Oct-09	Oct-16	973,364
		2,568,000	Oct-09	Oct-10	Oct-16	824,924
		1,407,000	Oct-09	Oct-10	Oct-16	451,973
		3,537,000	Oct-09	Oct-10	Oct-16	1,136,198
		3,537,000	Oct-09	Oct-10	Oct-16	1,136,198
		2,488,000	Oct-09	Oct-10	Oct-16	799,225
		3,964,000	Oct-09	Oct-10	Oct-16	1,273,364
	Reach D					
	FEDERAL	3,254,000	Apr-16	Nov-16	Oct-16	27,231
	NON-FEDERAL - Section 104					
		3,111,000	Oct-08	Oct-09	Oct-16	1,179,181
		13,835,000	Oct-08	Oct-09	Oct-16	5,243,962
		12,876,000	Oct-08	Oct-09	Oct-16	4,880,466
		3,289,000	Oct-08	Oct-09	Oct-16	1,246,649
		1,856,000	Oct-08	Oct-09	Oct-16	703,491
	Reach E	42,307,000	Apr-15	Nov-15	Oct-15	386,828
	Reach F	46,506,000	Apr-14	Oct-14	Oct-14	480,876
	Reach G	35,015,000	Apr-15	Oct-15	Oct-15	375,833
	Reach H	40,401,000	Apr-14	Nov-14	Oct-14	332,463
	Reach I	17,527,000	Apr-13	Oct-13	Oct-13	189,154

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
			Effective Price Level (EPL): 1-Oct-2010			
13	PUMPING PLANT	56,135,000				684,592
	Reach A	6,003,000	Apr-12	Oct-13	Oct-13	187,743
	Reach B	17,215,000	Apr-13	Oct-13	Oct-13	178,004
	Reach C	21,496,000	Apr-16	Oct-16	Oct-16	213,334
	Reach D	4,207,000	Apr-16	Nov-16	Oct-16	35,206
	Reach G	2,823,000	Apr-15	Oct-15	Oct-15	30,301
	Reach H	2,881,000	Apr-14	Nov-14	Oct-14	23,708
	Reach I	1,510,000	Apr-13	Oct-13	Oct-13	16,296
18	CULTURAL RESOURCE PRES. (NO IDC)	6,578,000				
30	PLANNING, ENGR. & DESIGN	129,097,000				27,408,098
	Reach A FEDERAL					
		124,000	Oct-08	Oct-09	Oct-13	26,368
		488,000	Oct-09	Oct-10	Oct-13	78,968
		10,202,000	Oct-11	Oct-13	Oct-13	434,551
	NON-FEDERAL - Section 104					
		43,000	Oct-06	Oct-07	Oct-13	13,813
		56,000	Oct-07	Oct-08	Oct-13	14,884
		764,000	Oct-08	Oct-09	Oct-13	162,464
		2,486,000	Oct-09	Oct-10	Oct-13	402,283
	Reach B FEDERAL					
		310,000	Oct-08	Oct-09	Oct-13	65,921
		1,220,000	Oct-09	Oct-10	Oct-13	197,420
		7,464,000	Oct-11	Oct-13	Oct-13	325,240
	NON-FEDERAL - Section 104					
		53,000	Oct-05	Oct-06	Oct-13	20,089
		507,000	Oct-06	Oct-07	Oct-13	162,865
		5,620,000	Oct-07	Oct-08	Oct-13	1,493,668
		12,757,000	Oct-08	Oct-09	Oct-13	2,712,765
		13,816,000	Oct-09	Oct-10	Oct-13	2,235,698
		2,256,000	Oct-10	Oct-11	Oct-13	255,200
	Reach C FEDERAL					
		163,000	Oct-08	Oct-09	Oct-16	61,783
		642,000	Oct-09	Oct-10	Oct-16	206,231
		2,685,000	Oct-14	Oct-16	Oct-16	115,744
	NON-FEDERAL - Section 104					
		613,000	Oct-05	Oct-06	Oct-16	348,339
		4,083,000	Oct-06	Oct-07	Oct-16	2,051,778
		9,647,000	Oct-07	Oct-08	Oct-16	4,239,410
		7,137,000	Oct-08	Oct-09	Oct-16	2,705,179
		1,397,000	Oct-09	Oct-10	Oct-16	448,761
	Reach D FEDERAL					
		179,000	Oct-08	Oct-09	Oct-16	67,847
		707,000	Oct-09	Oct-10	Oct-16	227,111
		1,158,000	Oct-14	Nov-16	Oct-16	47,563
	NON-FEDERAL - Section 104					
		839,000	Oct-05	Oct-06	Oct-16	476,764
		1,604,000	Oct-06	Oct-07	Oct-16	806,038
		2,457,000	Oct-07	Oct-09	Oct-16	1,005,616
		3,361,000	Oct-08	Oct-09	Oct-16	1,273,940
		541,000	Oct-09	Oct-10	Oct-16	173,787
	Reach E FEDERAL					
		108,000	Oct-08	Oct-09	Oct-15	34,676
		424,000	Oct-09	Oct-10	Oct-15	112,658
		5,067,000	Oct-13	Nov-15	Oct-15	213,253
	NON-FEDERAL - Section 104					
		193,000	Oct-06	Oct-07	Oct-15	84,798
		1,470,000	Oct-07	Oct-08	Oct-15	557,065
		1,294,000	Oct-08	Oct-09	Oct-15	415,474
		493,000	Oct-09	Oct-10	Oct-15	130,991
	Reach F FEDERAL					
		4,806,000	Oct-12	Oct-14	Oct-14	209,120
	NON-FEDERAL - Section 104					
		98,000	Oct-06	Oct-07	Oct-14	37,146
		829,000	Oct-07	Oct-08	Oct-14	266,238
		1,116,000	Oct-08	Oct-09	Oct-14	296,524
		697,000	Oct-09	Oct-10	Oct-14	148,216
	Reach G FEDERAL					
		3,493,000	Oct-13	Oct-15	Oct-15	153,444
	Reach H FEDERAL					

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
			Effective Price Level (EPL): 1-Oct-2010			
		147,000	Oct-08	Oct-09	Oct-14	39,058
		578,000	Oct-09	Oct-10	Oct-14	122,911
		5,334,000	Oct-12	Nov-14	Oct-14	217,645
	NON-FEDERAL - Section 104					
		3,000	Oct-05	Oct-06	Oct-14	1,318
		101,000	Oct-06	Oct-07	Oct-14	38,283
		1,567,000	Oct-07	Oct-08	Oct-14	503,250
		1,263,000	Oct-08	Oct-09	Oct-14	335,582
		489,000	Oct-09	Oct-10	Oct-14	103,985
	Reach I					
	FEDERAL	2,044,000	Oct-11	Oct-13	Oct-13	90,041
	NON-FEDERAL - Section 104					
		29,000	Oct-05	Oct-06	Oct-13	10,992
		128,000	Oct-06	Oct-07	Oct-13	41,118
		354,000	Oct-07	Oct-08	Oct-13	94,085
		676,000	Oct-08	Oct-09	Oct-13	143,751
		917,000	Oct-09	Oct-10	Oct-13	148,388
31	CONSTRUCTION MANAGEMENT	151,033,000				39,012,376
	Reach A					
	FEDERAL	6,288,000	Apr-12	Oct-13	Oct-13	196,657
	Reach B					
	FEDERAL	3,383,000	Apr-13	Oct-13	Oct-13	34,980
	NON-FEDERAL - Section 104					
		4,000	Oct-06	Oct-07	Oct-13	1,285
		2,000	Oct-07	Oct-08	Oct-13	532
		2,642,000	Oct-08	Oct-09	Oct-13	561,819
		34,125,000	Oct-09	Oct-10	Oct-13	5,522,091
		2,026,000	Apr-11	Oct-11	Oct-13	205,235
	Reach C					
	FEDERAL	1,792,000	Apr-16	Oct-16	Oct-16	17,784
	NON-FEDERAL - Section 104					
		779,000	Oct-06	Oct-07	Oct-16	391,461
		2,675,000	Oct-07	Oct-08	Oct-16	1,175,539
		5,588,000	Oct-08	Oct-09	Oct-16	2,118,053
		27,519,000	Oct-09	Oct-10	Oct-16	8,839,983
	Reach D					
	FEDERAL	597,000	Apr-16	Nov-16	Oct-16	4,996
	NON-FEDERAL - Section 104					
		13,395,000	Oct-06	Oct-07	Oct-16	6,731,220
		9,061,000	Oct-07	Oct-08	Oct-16	3,981,891
		18,143,000	Oct-08	Oct-09	Oct-16	6,876,848
		6,918,000	Oct-09	Oct-10	Oct-16	2,222,283
	Reach E	3,922,000	Apr-15	Nov-15	Oct-15	35,860
	Reach F	3,721,000	Apr-14	Oct-15	Oct-14	13,386
	Reach G	2,799,000	Apr-15	Oct-15	Oct-15	30,043
	Reach H	4,131,000	Apr-14	Nov-14	Oct-14	33,994
	Reach I	1,523,000	Apr-13	Oct-13	Oct-13	16,436
	CASH CONTRIBUTION (-)	55,278,000	Apr-12		Oct-16	5,682,155
	SECTION 104 (-)	<u>55,249,000</u>	Oct-11	Oct-11	Oct-16	<u>13,206,567</u>
	TOTAL FEDERAL COST	\$657,760,000				\$81,925,121
	NON-FEDERAL COSTS					
1	LANDS AND DAMAGES	205,338,000				9,538,509
	Reach A					
		369,000	Oct-09	Oct-10	Oct-13	59,711
		19,000	Oct-09	Oct-10	Oct-13	3,075
		6,000	Oct-09	Oct-10	Oct-13	971
		23,000	Oct-09	Oct-10	Oct-13	3,722
		28,542,000	Oct-11	Apr-12	Oct-13	2,221,872
	Reach B					
		1,869,000	Oct-09	Oct-10	Oct-13	302,441
		849,000	Oct-09	Oct-10	Oct-13	137,385
		283,000	Oct-09	Oct-10	Oct-13	45,795
		12,000	Oct-09	Oct-10	Oct-13	1,942
		490,000	Oct-09	Oct-10	Oct-13	79,292
		51,574,000	Oct-12	Apr-13	Oct-13	1,684,744
	Reach C					
		1,014,000	Oct-09	Oct-10	Oct-16	325,729
		578,000	Oct-09	Oct-10	Oct-16	185,672
		193,000	Oct-09	Oct-10	Oct-16	61,998
		213,000	Oct-09	Oct-10	Oct-16	68,422
		13,183,000	Oct-15	Apr-16	Oct-16	431,442

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
	Effective Price Level (EPL): 1-Oct-2010					
	Reach D	515,000	Oct-09	Oct-10	Oct-16	165,434
		306,000	Oct-09	Oct-10	Oct-16	98,297
		102,000	Oct-09	Oct-10	Oct-16	32,766
		7,000	Oct-09	Oct-10	Oct-16	2,249
		91,000	Oct-09	Oct-10	Oct-16	29,232
		4,144,000	Oct-15	Apr-16	Oct-16	135,621
	Reach E	195,000	Oct-09	Oct-10	Oct-15	51,812
		61,000	Oct-09	Oct-10	Oct-15	16,208
		20,000	Oct-09	Oct-10	Oct-15	5,314
		102,000	Oct-09	Oct-10	Oct-15	27,102
		32,873,000	Oct-14	Apr-15	Oct-15	1,073,847
	Reach F	82,000	Oct-09	Oct-10	Oct-14	17,437
		7,000	Oct-09	Oct-10	Oct-14	1,489
		2,000	Oct-09	Oct-10	Oct-14	425
		1,000	Oct-09	Oct-10	Oct-14	213
		7,000	Oct-09	Oct-10	Oct-14	1,489
		13,668,000	Oct-13	Apr-14	Oct-14	446,486
	Reach G	18,340,000	Oct-14	Apr-15	Oct-15	599,104
	Reach H					
		140,000	Oct-09	Oct-10	Oct-14	29,771
		21,000	Oct-09	Oct-10	Oct-14	4,466
		7,000	Oct-09	Oct-10	Oct-14	1,489
		47,000	Oct-09	Oct-10	Oct-14	9,995
		31,790,000	Oct-13	Apr-14	Oct-14	1,038,469
	Reach I	70,000	Oct-09	Oct-10	Oct-13	11,327
		15,000	Oct-09	Oct-10	Oct-13	2,427
		5,000	Oct-09	Oct-10	Oct-13	809
		51,000	Oct-09	Oct-10	Oct-13	8,253
		3,452,000	Oct-12	Apr-13	Oct-13	112,765
2	RELOCATIONS	110,766,000				3,720,395
	Constr. Activities	110,766,000				3,720,395
3--	CEMETERIES, UTILITIES, & STRUCTURES					
	Reach A	13,608,000	Apr-12	Oct-13	Oct-13	425,589
	Reach B					
		280,000	Oct-09	Oct-10	Oct-13	45,309
		1,766,000	Oct-09	Oct-10	Oct-13	285,773
		1,206,000	Oct-09	Oct-10	Oct-13	195,154
		318,000	Oct-09	Oct-10	Oct-13	51,459
		2,000	Oct-09	Oct-10	Oct-13	324
		5,000	Oct-09	Oct-10	Oct-13	809
		19,332,000	Apr-13	Oct-13	Oct-13	199,894
	Reach C	296,000	Oct-08	Oct-09	Oct-16	112,195
		16,000	Oct-09	Oct-10	Oct-16	5,140
		87,000	Oct-08	Oct-09	Oct-16	32,976
		348,000	Oct-09	Oct-10	Oct-16	111,789
		360,000	Oct-09	Oct-10	Oct-16	115,644
		262,000	Oct-09	Oct-10	Oct-16	84,163
		14,000	Oct-08	Oct-09	Oct-16	5,307
		832,000	Oct-09	Oct-10	Oct-16	267,265
		6,000	Oct-08	Oct-09	Oct-16	2,274
		1,911,000	Oct-09	Oct-10	Oct-16	613,874
		8,058,000	Apr-16	Oct-16	Oct-16	79,970
	Reach D	778,000	Oct-08	Oct-09	Oct-16	294,890
		562,000	Oct-08	Oct-09	Oct-16	213,018
		17,000	Oct-08	Oct-09	Oct-16	6,444
		10,966,000	Apr-16	Nov-16	Oct-16	91,768
	Reach E	10,951,000	Apr-15	Nov-15	Oct-15	100,129
	Reach F	11,945,000	Apr-14	Oct-14	Oct-14	123,512
	Reach G	10,676,000	Apr-15	Oct-15	Oct-15	114,591
	Reach H	12,996,000	Apr-14	Nov-14	Oct-14	106,945
	Reach I	3,168,000	Apr-13	Oct-13	Oct-13	34,190
	SECTION 215	311,069,000				66,126,418
		311,069,000	Apr-12	Apr-12	Oct-16	66,126,418
30	PLANNING, ENGR. & DESIGN	19,614,000				3,045,817
		3,000	Oct-09	Oct-10	Oct-13	485
		2,042,000	Oct-11	Oct-13	Oct-13	86,978
		406,000	Oct-07	Oct-08	Oct-13	107,906
		1,444,000	Oct-08	Oct-09	Oct-13	307,065

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
			Effective Price Level (EPL): 1-Oct-2010			
		2,240,000	Oct-09	Oct-10	Oct-13	362,476
		535,000	Oct-11	Oct-13	Oct-13	23,312
		211,000	Oct-05	Oct-06	Oct-16	119,901
		697,000	Oct-06	Oct-07	Oct-16	350,255
		1,073,000	Oct-07	Oct-08	Oct-16	471,534
		1,214,000	Oct-08	Oct-09	Oct-16	460,150
		701,000	Oct-09	Oct-10	Oct-16	225,184
		967,000	Oct-14	Oct-16	Oct-16	41,685
		170,000	Oct-08	Oct-09	Oct-16	64,436
		102,000	Oct-09	Oct-10	Oct-16	32,766
		1,174,000	Oct-13	Oct-15	Oct-16	105,341
	Reach E	1,643,000	Oct-13	Nov-15	Oct-15	69,148
	Reach F	1,433,000	Oct-12	Oct-14	Oct-14	62,353
		8,000	Oct-09	Oct-10	Oct-15	2,126
		1,601,000	Oct-13	Oct-15	Oct-15	70,330
		5,000	Oct-09	Oct-10	Oct-14	1,063
		1,559,000	Oct-12	Nov-14	Oct-14	63,612
		6,000	Oct-09	Oct-10	Oct-13	971
		380,000	Oct-11	Oct-13	Oct-13	16,740
31	CONSTRUCTION MANAGEMENT	7,555,000				297,795
	Reach A	1,089,000	Apr-12	Oct-13	Oct-13	34,058
		74,000	Oct-08	Oct-09	Oct-13	15,736
		456,000	Oct-09	Oct-10	Oct-13	73,790
		286,000	Apr-11	Oct-11	Oct-13	28,972
		22,000	Oct-08	Oct-09	Oct-16	8,339
		8,000	Oct-09	Oct-10	Oct-16	2,570
		645,000	Apr-16	Oct-16	Oct-16	6,401
		782,000	Apr-16	Nov-16	Oct-16	6,544
	Reach E	876,000	Apr-15	Nov-15	Oct-16	46,514
	Reach F	956,000	Apr-14	Oct-14	Oct-15	52,120
	Reach G	1,068,000	Apr-15	Oct-15	Oct-15	11,463
	Reach H	1,040,000	Apr-14	Nov-14	Oct-14	8,558
	Reach I	253,000	Apr-13	Oct-13	Oct-13	2,730
	CASH CONTRIBUTION (+)	55,278,000	Apr-12		Oct-16	5,682,155
	SECTION 104 (-)	255,820,000	Apr-12	Apr-12	Oct-16	54,381,697
	TOTAL NON-FEDERAL	\$453,800,000				\$76,666,368
	TOTAL	\$1,111,560,000				\$158,591,489

DETAILED ESTIMATE OF M & O COSTS & REPLACEMENT COSTS

Price level %Increase	1.00	1.5063	Factor
Price Level of M&O costs	Oct-10	2620	
Effective Price Date (EPD)	Oct-10	2620	

ACCOUNT NUMBER	ITEM	ANNUAL COST (\$)	FACTOR (%)	M&O COST (\$)	PROJECT LIFE YRS	ITEM LIFE YRS	FACTOR (%)	REPLACEMENT COST (\$)
Effective Price Level (EPL): 1-Oct-2010								
02---	Relocations							
	Reach A, Pumps	100000	1.5	150625				
	Reach B, Pumps	150000	1.5	225938				
	Reach C, Pumps	75000	1.5	112969				
	Reach D, Pumps	100000	1.5	150625				
	Reach E, Pumps	35000	1.5	52719				
	Reach G, Pumps	35000	1.5	52719				
	Reach H, Pumps	70000	1.5	105438				
	Reach I, Pumps	35000	1.5	52719				
	Reach A, Drainage Swale and Storm Drainage I	7500	1.5	11297				
	Reach B, Drainage Swale and Storm Drainage I	12500	1.5	18828				
	Reach C, Drainage Swale and Storm Drainage I	12500	1.5	18828				
	Relocations			952703				0
06---	Fish & Wildlife Facil.							
	Reach A	13137	1.5	19788				
	Reach B	39370	1.5	59301				
	Reach C	26683	1.5	40191				
	Reach D	6808	1.5	10255				
	Reach E	11852	1.5	17852				
	Reach F	1773	1.5	2671				
	Reach G	1346	1.5	2027				
	Reach H	2362	1.5	3558				
	Reach I	2698	1.5	4064				
	Fish & Wildlife Facil.			159706				0
11---	Levees							
	Reach A	265000	1.5	399156				
	Reach B	610000	1.5	918813				
	Reach C	325000	1.5	489531				
	Reach D	300000	1.5	451875				
	Reach E	100000	1.5	150625				
	Reach F	150000	1.5	225938				
	Reach G	100000	1.5	150625				
	Reach H	150000	1.5	225938				
	Reach I	100000	1.5	150625				
	Levees			3163125				0
13---	Pumping Plants							
	Reach A, Pumps	100000	1.5	150625				
	Reach B, Pumps	150000	1.5	225938				
	Reach C, Pumps	75000	1.5	112969				
	Reach D, Pumps	100000	1.5	150625				
	Reach E, Pumps	35000	1.5	52719				
	Reach G, Pumps	35000	1.5	52719				
	Reach H, Pumps	70000	1.5	105438				
	Reach I, Pumps	35000	1.5	52719				
	Pumping Plants			903750				0
SUMMARY								
02---	Relocations			952703				0
06---	Fish & Wildlife Facil.			159706				0
11---	Levees			3163125				0
13---	Pumping Plants			903750				0
	TOTAL			\$5,179,284				\$0

**** SUMMARY OF TOTAL PROJECT ANNUAL COST****

August 25, 2010

PROJECT: NATOMAS PACR, LPP
LOCATION: CALIFORNIA
INTEREST RATE: 4.375%

U. S. ARMY CORPS OF ENGINEER
SACRAMENTO DISTRICT

ITEM	COST (\$)
Effective Price Level (EPL): 1-Oct-2010	
A. INVESTMENT COST	
1. FEDERAL TOTAL	734,698,000
2. NON-FEDERAL TOTAL	<u>587,901,000</u>
TOTAL PROJECT INVESTMENT	\$1,322,599,000
B. ANNUAL COSTS	
1. FEDERAL TOTAL	36,424,000
2. NON-FEDERAL TOTAL	<u>34,327,000</u>
TOTAL ANNUAL COST	\$70,751,000

DETAILED ESTIMATE OF ANNUAL COST

ITEM		COST (\$)
Effective Price Level (EPL): 1-Oct-2010		
A.	INVESTMENT COST	
1.	FEDERAL	
a.	First Cost	657,760,000
	Less 18. Cultural Resources Preservation (-)	6,578,000
b.	Interest During Construction (+)	<u>83,516,000</u>
	TOTAL	\$734,698,000
2.	NON-FEDERAL	
a.	First Cost	506,340,000
b.	Interest During Construction	<u>81,561,000</u>
	TOTAL	<u><u>\$587,901,000</u></u>
	TOTAL PROJECT INVESTMENT	\$1,322,599,000
B.	ANNUAL COSTS	
1.	FEDERAL	
a.	Interest and Amortization:	
	Interest @ 4.375%	32,143,000
	Amortization @ 0.583%	4,281,000
	Amortization Period 50	
	TOTAL	<u>\$36,424,000</u>
2.	NON-FEDERAL	
a.	Interest and Amortization:	
	Interest @ 4.375%	25,721,000
	Amortization @ 0.583%	3,426,000
	Amortization Period 50	
c.	Maintenance And Operation:	5,180,000
02---	Relocations	953,000
06---	Fish & Wildlife Facil.	160,000
11---	Levees	3,163,000
13---	Pumping Plants	904,000
	TOTAL	<u><u>\$34,327,000</u></u>
	TOTAL ANNUAL COST	\$70,751,000

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION

PROJECT: NATOMAS PACR, LPP
LOCATION: CALIFORNIA
INTEREST RATE: 4.375%

ACCOUNT NUMBER	DESCRIPTION	AMOUNT CONTRACT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
Effective Price Level (EPL): 1-Oct-2010						
FEDERAL COSTS						
1	LANDS AND DAMAGES, Administration	4,127,000				169,402
	Reach A	765,000	Oct-11	Apr-12	Oct-13	59,552
	Reach B	945,000	Oct-12	Apr-13	Oct-13	30,870
	Reach C	295,000	Oct-15	Apr-16	Oct-16	9,655
	Reach D	98,000	Oct-15	Apr-16	Oct-16	3,207
	Reach E	397,000	Oct-14	Apr-15	Oct-15	12,969
	Reach F	321,000	Oct-13	Apr-14	Oct-14	10,486
	Reach G	241,000	Oct-14	Apr-15	Oct-15	7,873
	Reach H	902,000	Oct-13	Apr-14	Oct-14	29,465
	Reach I	163,000	Oct-12	Apr-13	Oct-13	5,325
1	LANDS AND DAMAGES, Real Estate	14,365,000				573,924
	Reach A	2,312,000	Oct-11	Apr-12	Oct-13	179,979
	Reach B	5,848,000	Oct-12	Apr-13	Oct-13	191,034
	Reach C	1,027,000	Oct-15	Apr-16	Oct-16	33,611
	Reach D	2,512,000	Oct-15	Apr-16	Oct-16	82,211
	Reach E	1,074,000	Oct-14	Apr-15	Oct-15	35,084
	Reach H	1,592,000	Oct-13	Apr-14	Oct-14	52,005
6	FISH & WILDLIFE FACILITIES	18,869,000				1,111,404
3--	WILDLIFE FACILITIES & SANCTUARIES					
	Reach B					
	FEDERAL	1,635,000	Apr-13	Apr-13	Oct-13	35,481
	NON-FEDERAL - Section 104					
		14,000	Oct-08	Oct-09	Oct-13	2,977
		150,000	Oct-09	Oct-10	Oct-13	24,273
		78,000	Apr-11	Oct-11	Oct-13	7,901
	Reach C					
	FEDERAL	225,000	Oct-07	Oct-08	Oct-16	98,877
	NON-FEDERAL - Section 104					
		1,139,000	Oct-06	Oct-07	Oct-16	572,367
		498,000	Oct-07	Oct-08	Oct-16	218,848
		64,000	Oct-09	Oct-10	Oct-16	20,559
	Reach E	6,717,000	Apr-15	Nov-15	Oct-15	61,416
	Reach H	8,349,000	Apr-14	Nov-14	Oct-14	68,705
11	LEVEES AND FLOODWALLS	417,350,000				36,556,947
	Reach A	72,593,000	Apr-12	Oct-13	Oct-13	2,270,341
	Reach B					
	FEDERAL	25,077,000	Apr-13	Oct-13	Oct-13	259,298
	NON-FEDERAL - Section 104					
		199,000	Oct-08	Oct-09	Oct-13	42,317
		5,176,000	Oct-09	Oct-10	Oct-13	837,578
		20,913,000	Oct-08	Oct-09	Oct-13	4,447,131
		34,737,000	Apr-11	Oct-11	Oct-13	3,518,872
	Reach C					
	FEDERAL	908,000	Apr-16	Oct-16	Oct-16	9,011
	NON-FEDERAL - Section 104					
		1,611,000	Oct-08	Oct-09	Oct-16	610,627
		85,000	Oct-08	Oct-09	Oct-16	32,218
		2,882,000	Oct-08	Oct-09	Oct-16	1,092,381
		2,881,000	Oct-09	Oct-10	Oct-16	925,469
		1,564,000	Oct-09	Oct-10	Oct-16	502,407
		4,499,000	Oct-09	Oct-10	Oct-16	1,445,223
		4,498,000	Oct-09	Oct-10	Oct-16	1,444,902
		3,308,000	Oct-09	Oct-10	Oct-16	1,062,635
		3,964,000	Oct-09	Oct-10	Oct-16	1,273,364
	Reach D					
	FEDERAL	3,553,000	Apr-16	Nov-16	Oct-16	29,733
	NON-FEDERAL - Section 104					
		3,679,000	Oct-08	Oct-09	Oct-16	1,394,473
		14,272,000	Oct-08	Oct-09	Oct-16	5,409,600
		13,317,000	Oct-08	Oct-09	Oct-16	5,047,621
		5,919,000	Oct-08	Oct-09	Oct-16	2,243,513
		2,154,000	Oct-08	Oct-09	Oct-16	816,443
	Reach E	46,281,000	Apr-15	Nov-15	Oct-15	423,164
	Reach F	48,589,000	Apr-14	Oct-14	Oct-14	502,414
	Reach G	36,763,000	Apr-15	Oct-15	Oct-15	394,595
	Reach H	40,401,000	Apr-14	Nov-14	Oct-14	332,463
	Reach I	17,527,000	Apr-13	Oct-13	Oct-13	189,154

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT CONTRACT (\$)	CONTRACT		PLANT DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
			DATE	DATE		
Effective Price Level (EPL): 1-Oct-2010						
13	PUMPING PLANT	56,135,000				684,592
	Reach A	6,003,000	Apr-12	Oct-13	Oct-13	187,743
	Reach B	17,215,000	Apr-13	Oct-13	Oct-13	178,004
	Reach C	21,496,000	Apr-16	Oct-16	Oct-16	213,334
	Reach D	4,207,000	Apr-16	Nov-16	Oct-16	35,206
	Reach G	2,823,000	Apr-15	Oct-15	Oct-15	30,301
	Reach H	2,881,000	Apr-14	Nov-14	Oct-14	23,708
	Reach I	1,510,000	Apr-13	Oct-13	Oct-13	16,296
18	CULTURAL RESOURCE PRES. (NO IDC)	6,578,000				
30	PLANNING, ENGR. & DESIGN	130,834,000				27,545,634
	Reach A FEDERAL					
		124,000	Oct-08	Oct-09	Oct-13	26,368
		488,000	Oct-09	Oct-10	Oct-13	78,968
		10,202,000	Oct-11	Oct-13	Oct-13	434,551
	NON-FEDERAL - Section 104					
		43,000	Oct-06	Oct-07	Oct-13	13,813
		56,000	Oct-07	Oct-08	Oct-13	14,884
		764,000	Oct-08	Oct-09	Oct-13	162,464
		2,486,000	Oct-09	Oct-10	Oct-13	402,283
	Reach B FEDERAL					
		310,000	Oct-08	Oct-09	Oct-13	65,921
		1,220,000	Oct-09	Oct-10	Oct-13	197,420
		7,464,000	Oct-11	Oct-13	Oct-13	325,240
	NON-FEDERAL - Section 104					
		53,000	Oct-05	Oct-06	Oct-13	20,089
		507,000	Oct-06	Oct-07	Oct-13	162,865
		5,620,000	Oct-07	Oct-08	Oct-13	1,493,668
		12,757,000	Oct-08	Oct-09	Oct-13	2,712,765
		13,816,000	Oct-09	Oct-10	Oct-13	2,235,698
		3,155,000	Oct-10	Oct-11	Oct-13	356,895
	Reach C FEDERAL					
		163,000	Oct-08	Oct-09	Oct-16	61,783
		642,000	Oct-09	Oct-10	Oct-16	206,231
		2,685,000	Oct-14	Oct-16	Oct-16	115,744
	NON-FEDERAL - Section 104					
		613,000	Oct-05	Oct-06	Oct-16	348,339
		4,083,000	Oct-06	Oct-07	Oct-16	2,051,778
		9,647,000	Oct-07	Oct-08	Oct-16	4,239,410
		7,137,000	Oct-08	Oct-09	Oct-16	2,705,179
		1,397,000	Oct-09	Oct-10	Oct-16	448,761
	Reach D FEDERAL					
		179,000	Oct-08	Oct-09	Oct-16	67,847
		707,000	Oct-09	Oct-10	Oct-16	227,111
		1,206,000	Oct-14	Nov-16	Oct-16	49,534
	NON-FEDERAL - Section 104					
		839,000	Oct-05	Oct-06	Oct-16	476,764
		1,604,000	Oct-06	Oct-07	Oct-16	806,038
		2,457,000	Oct-07	Oct-09	Oct-16	1,005,616
		3,361,000	Oct-08	Oct-09	Oct-16	1,273,940
		541,000	Oct-09	Oct-10	Oct-16	173,787
	Reach E FEDERAL					
		108,000	Oct-08	Oct-09	Oct-15	34,676
		424,000	Oct-09	Oct-10	Oct-15	112,658
		5,471,000	Oct-13	Nov-15	Oct-15	230,256
	NON-FEDERAL - Section 104					
		193,000	Oct-06	Oct-07	Oct-15	84,798
		1,470,000	Oct-07	Oct-08	Oct-15	557,065
		1,294,000	Oct-08	Oct-09	Oct-15	415,474
		493,000	Oct-09	Oct-10	Oct-15	130,991
	Reach F FEDERAL					
		5,021,000	Oct-12	Oct-14	Oct-14	218,475
	NON-FEDERAL - Section 104					
		98,000	Oct-06	Oct-07	Oct-14	37,146
		829,000	Oct-07	Oct-08	Oct-14	266,238
		1,116,000	Oct-08	Oct-09	Oct-14	296,524
		697,000	Oct-09	Oct-10	Oct-14	148,216
	Reach G FEDERAL					
		3,664,000	Oct-13	Oct-15	Oct-15	160,956
	Reach H FEDERAL					

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT CONTRACT (\$)	CONTRACT		PLANT USAGE DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
Effective Price Level (EPL): 1-Oct-2010						
		147,000	Oct-08	Oct-09	Oct-14	39,058
		578,000	Oct-09	Oct-10	Oct-14	122,911
		5,334,000	Oct-12	Nov-14	Oct-14	217,645
	NON-FEDERAL - Section 104					
		3,000	Oct-05	Oct-06	Oct-14	1,318
		101,000	Oct-06	Oct-07	Oct-14	38,283
		1,567,000	Oct-07	Oct-08	Oct-14	503,250
		1,263,000	Oct-08	Oct-09	Oct-14	335,582
		489,000	Oct-09	Oct-10	Oct-14	103,985
	Reach I					
	FEDERAL	2,044,000	Oct-11	Oct-13	Oct-13	90,041
	NON-FEDERAL - Section 104					
		29,000	Oct-05	Oct-06	Oct-13	10,992
		128,000	Oct-06	Oct-07	Oct-13	41,118
		354,000	Oct-07	Oct-08	Oct-13	94,085
		676,000	Oct-08	Oct-09	Oct-13	143,751
		917,000	Oct-09	Oct-10	Oct-13	148,388
31	CONSTRUCTION MANAGEMENT	152,434,000				39,093,807
	Reach A					
	FEDERAL	6,288,000	Apr-12	Oct-13	Oct-13	196,657
	Reach B					
	FEDERAL	3,383,000	Apr-13	Oct-13	Oct-13	34,980
	NON-FEDERAL - Section 104					
		4,000	Oct-06	Oct-07	Oct-13	1,285
		2,000	Oct-07	Oct-08	Oct-13	532
		2,642,000	Oct-08	Oct-09	Oct-13	561,819
		34,125,000	Oct-09	Oct-10	Oct-13	5,522,091
		2,779,000	Apr-11	Oct-11	Oct-13	281,514
	Reach C					
	FEDERAL	1,792,000	Apr-16	Oct-16	Oct-16	17,784
	NON-FEDERAL - Section 104					
		779,000	Oct-06	Oct-07	Oct-16	391,461
		2,675,000	Oct-07	Oct-08	Oct-16	1,175,539
		5,587,000	Oct-08	Oct-09	Oct-16	2,117,674
		27,520,000	Oct-09	Oct-10	Oct-16	8,840,305
	Reach D					
	FEDERAL	621,000	Apr-16	Nov-16	Oct-16	5,197
	NON-FEDERAL - Section 104					
		13,395,000	Oct-06	Oct-07	Oct-16	6,731,220
		9,061,000	Oct-07	Oct-08	Oct-16	3,981,891
		18,143,000	Oct-08	Oct-09	Oct-16	6,876,848
		6,918,000	Oct-09	Oct-10	Oct-16	2,222,283
	Reach E	4,240,000	Apr-15	Nov-15	Oct-15	38,768
	Reach F	3,887,000	Apr-14	Oct-15	Oct-14	13,983
	Reach G	2,939,000	Apr-15	Oct-15	Oct-15	31,546
	Reach H	4,131,000	Apr-14	Nov-14	Oct-14	33,994
	Reach I	1,523,000	Apr-13	Oct-13	Oct-13	16,436
	CASH CONTRIBUTION (-)	87,683,000	Apr-12		Oct-16	9,013,140
	SECTION 104 (-)	55,249,000	Oct-11	Oct-11	Oct-16	13,206,567
	TOTAL FEDERAL COST	\$657,760,000				\$83,516,003
	NON-FEDERAL COSTS					
1	LANDS AND DAMAGES	205,338,000				9,538,509
	Reach A					
		369,000	Oct-09	Oct-10	Oct-13	59,711
		19,000	Oct-09	Oct-10	Oct-13	3,075
		6,000	Oct-09	Oct-10	Oct-13	971
		23,000	Oct-09	Oct-10	Oct-13	3,722
		28,542,000	Oct-11	Apr-12	Oct-13	2,221,872
	Reach B					
		1,869,000	Oct-09	Oct-10	Oct-13	302,441
		849,000	Oct-09	Oct-10	Oct-13	137,385
		283,000	Oct-09	Oct-10	Oct-13	45,795
		12,000	Oct-09	Oct-10	Oct-13	1,942
		490,000	Oct-09	Oct-10	Oct-13	79,292
		51,574,000	Oct-12	Apr-13	Oct-13	1,684,744
	Reach C					
		1,014,000	Oct-09	Oct-10	Oct-16	325,729
		578,000	Oct-09	Oct-10	Oct-16	185,672
		193,000	Oct-09	Oct-10	Oct-16	61,998
		213,000	Oct-09	Oct-10	Oct-16	68,422
		13,183,000	Oct-15	Apr-16	Oct-16	431,442

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT CONTRACT (\$)	CONTRACT		PLANT DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
			DATE	DATE		
Effective Price Level (EPL): 1-Oct-2010						
	Reach D	515,000	Oct-09	Oct-10	Oct-16	165,434
		306,000	Oct-09	Oct-10	Oct-16	98,297
		102,000	Oct-09	Oct-10	Oct-16	32,766
		7,000	Oct-09	Oct-10	Oct-16	2,249
		91,000	Oct-09	Oct-10	Oct-16	29,232
		4,144,000	Oct-15	Apr-16	Oct-16	135,621
	Reach E	195,000	Oct-09	Oct-10	Oct-15	51,812
		61,000	Oct-09	Oct-10	Oct-15	16,208
		20,000	Oct-09	Oct-10	Oct-15	5,314
		102,000	Oct-09	Oct-10	Oct-15	27,102
		32,873,000	Oct-14	Apr-15	Oct-15	1,073,847
	Reach F	82,000	Oct-09	Oct-10	Oct-14	17,437
		7,000	Oct-09	Oct-10	Oct-14	1,489
		2,000	Oct-09	Oct-10	Oct-14	425
		1,000	Oct-09	Oct-10	Oct-14	213
		7,000	Oct-09	Oct-10	Oct-14	1,489
		13,668,000	Oct-13	Apr-14	Oct-14	446,486
	Reach G	18,340,000	Oct-14	Apr-15	Oct-15	599,104
	Reach H	140,000	Oct-09	Oct-10	Oct-14	29,771
		21,000	Oct-09	Oct-10	Oct-14	4,466
		7,000	Oct-09	Oct-10	Oct-14	1,489
		47,000	Oct-09	Oct-10	Oct-14	9,995
		31,790,000	Oct-13	Apr-14	Oct-14	1,038,469
	Reach I	70,000	Oct-09	Oct-10	Oct-13	11,327
		15,000	Oct-09	Oct-10	Oct-13	2,427
		5,000	Oct-09	Oct-10	Oct-13	809
		51,000	Oct-09	Oct-10	Oct-13	8,253
		3,452,000	Oct-12	Apr-13	Oct-13	112,765
2	RELOCATIONS	127,700,000				5,133,696
	Constr. Activities	127,700,000				5,133,696
3--	CEMETERIES, UTILITIES, & STRUCTURES					
	Reach A	13,608,000	Apr-12	Oct-13	Oct-13	425,589
	Reach B	512,000	Oct-09	Oct-09	Oct-13	95,725
		1,766,000	Oct-09	Oct-09	Oct-13	330,175
		1,206,000	Oct-09	Oct-09	Oct-13	225,476
		318,000	Oct-09	Oct-09	Oct-13	59,454
		2,000	Oct-09	Oct-09	Oct-13	374
		5,000	Oct-09	Oct-09	Oct-13	935
		22,309,000	Apr-13	Apr-13	Oct-13	484,123
	Reach C	603,000	Oct-08	Oct-09	Oct-16	228,559
		32,000	Oct-09	Oct-10	Oct-16	10,279
		129,000	Oct-08	Oct-09	Oct-16	48,896
		514,000	Oct-09	Oct-10	Oct-16	165,113
		789,000	Oct-09	Oct-10	Oct-16	253,452
		262,000	Oct-09	Oct-10	Oct-16	84,163
		14,000	Oct-08	Oct-09	Oct-16	5,307
		833,000	Oct-09	Oct-10	Oct-16	267,586
		6,000	Oct-08	Oct-09	Oct-16	2,274
		1,910,000	Oct-09	Oct-10	Oct-16	613,553
		8,059,000	Apr-16	Oct-16	Oct-16	79,980
	Reach D	220,000	Oct-08	Oct-09	Oct-16	83,388
		778,000	Oct-08	Oct-09	Oct-16	294,890
		562,000	Oct-08	Oct-09	Oct-16	213,018
		1,263,000	Oct-08	Oct-09	Oct-16	478,722
		11,077,000	Apr-16	Nov-16	Oct-16	92,697
	Reach E	16,050,000	Apr-15	Nov-15	Oct-15	146,751
	Reach F	15,419,000	Apr-14	Oct-14	Oct-14	159,434
	Reach G	13,290,000	Apr-15	Oct-15	Oct-15	142,648
	Reach H	12,996,000	Apr-14	Nov-14	Oct-14	106,945
	Reach I	3,168,000	Apr-13	Oct-13	Oct-13	34,190
	SECTION 215	311,069,000				66,126,418
		311,069,000	Apr-12	Apr-12	Oct-16	66,126,418
30	PLANNING, ENGR. & DESIGN	21,630,000				3,133,148
		3,000	Oct-09	Oct-10	Oct-13	485
		2,042,000	Oct-11	Oct-13	Oct-13	86,978
		406,000	Oct-07	Oct-08	Oct-13	107,906

DETAILED ESTIMATE OF INTEREST DURING CONSTRUCTION(CONT'ED)

ACCOUNT NUMBER	DESCRIPTION	AMOUNT CONTRACT (\$)	CONTRACT		PLANT DATE	INTEREST DURING CONSTRUCTION
			START DATE	END DATE		
			DATE	DATE		
	Effective Price Level (EPL): 1-Oct-2010					
		1,444,000	Oct-08	Oct-09	Oct-13	307,065
		2,240,000	Oct-09	Oct-10	Oct-13	362,476
		966,000	Oct-11	Oct-13	Oct-13	42,093
		211,000	Oct-05	Oct-06	Oct-16	119,901
		697,000	Oct-06	Oct-07	Oct-16	350,255
		1,073,000	Oct-07	Oct-08	Oct-16	471,534
		1,214,000	Oct-08	Oct-09	Oct-16	460,150
		701,000	Oct-09	Oct-10	Oct-16	225,184
		967,000	Oct-14	Oct-16	Oct-16	41,685
		170,000	Oct-08	Oct-09	Oct-16	64,436
		102,000	Oct-09	Oct-10	Oct-16	32,766
		1,185,000	Oct-13	Oct-15	Oct-16	106,328
	Reach E	2,408,000	Oct-13	Nov-15	Oct-15	101,345
	Reach F	1,850,000	Oct-12	Oct-14	Oct-14	80,498
		8,000	Oct-09	Oct-10	Oct-15	2,126
		1,993,000	Oct-13	Oct-15	Oct-15	87,551
		5,000	Oct-09	Oct-10	Oct-14	1,063
		1,559,000	Oct-12	Nov-14	Oct-14	63,612
		6,000	Oct-09	Oct-10	Oct-13	971
		380,000	Oct-11	Oct-13	Oct-13	16,740
31	CONSTRUCTION MANAGEMENT	8,740,000				360,783
	Reach A	1,089,000	Apr-12	Oct-13	Oct-13	34,058
		74,000	Oct-08	Oct-09	Oct-13	15,736
		456,000	Oct-09	Oct-10	Oct-13	73,790
		516,000	Apr-11	Oct-11	Oct-13	52,271
		22,000	Oct-08	Oct-09	Oct-16	8,339
		8,000	Oct-09	Oct-10	Oct-16	2,570
		645,000	Apr-16	Oct-16	Oct-16	6,401
		790,000	Apr-16	Nov-16	Oct-16	6,611
	Reach E	1,284,000	Apr-15	Nov-15	Oct-16	68,177
	Reach F	1,234,000	Apr-14	Oct-14	Oct-15	67,277
	Reach G	1,329,000	Apr-15	Oct-15	Oct-15	14,265
	Reach H	1,040,000	Apr-14	Nov-14	Oct-14	8,558
	Reach I	253,000	Apr-13	Oct-13	Oct-13	2,730
	CASH CONTRIBUTION (+)	87,683,000	Apr-12		Oct-16	9,013,140
	SECTION 104 (-)	<u>255,820,000</u>	Apr-12	Apr-12	Oct-16	<u>54,381,697</u>
	TOTAL NON-FEDERAL	\$506,340,000				\$81,560,973
	TOTAL	\$1,164,100,000				\$165,076,976

DETAILED ESTIMATE OF M & O COSTS & REPLACEMENT COSTS

Price level %Increase	1.00	1.5063	Factor
Price Level of M&O costs	Oct-10	2620	
Effective Price Date (EPD)	Oct-10	2620	

ACCOUNT NUMBER	ITEM	ANNUAL COST (\$)	FACTOR (%)	M&O COST (\$)	PROJECT LIFE YRS	ITEM LIFE YRS	FACTOR (%)	REPLACEMENT COST (\$)
Effective Price Level (EPL): 1-Oct-2010								
02---	Relocations							
	Reach A, Pumps	100000	1.5	150625				
	Reach B, Pumps	150000	1.5	225938				
	Reach C, Pumps	75000	1.5	112969				
	Reach D, Pumps	100000	1.5	150625				
	Reach E, Pumps	35000	1.5	52719				
	Reach G, Pumps	35000	1.5	52719				
	Reach H, Pumps	70000	1.5	105438				
	Reach I, Pumps	35000	1.5	52719				
	Reach A, Drainage Swale and Storm Drainage I	7500	1.5	11297				
	Reach B, Drainage Swale and Storm Drainage I	12500	1.5	18828				
	Reach C, Drainage Swale and Storm Drainage I	12500	1.5	18828				
	Relocations			952703				0
06---	Fish & Wildlife Facil.							
	Reach A	13137	1.5	19788				
	Reach B	39370	1.5	59301				
	Reach C	26683	1.5	40191				
	Reach D	6808	1.5	10255				
	Reach E	11852	1.5	17852				
	Reach F	1773	1.5	2671				
	Reach G	1346	1.5	2027				
	Reach H	2362	1.5	3558				
	Reach I	2698	1.5	4064				
	Fish & Wildlife Facil.			159706				0
11---	Levees							
	Reach A	265000	1.5	399156				
	Reach B	610000	1.5	918813				
	Reach C	325000	1.5	489531				
	Reach D	300000	1.5	451875				
	Reach E	100000	1.5	150625				
	Reach F	150000	1.5	225938				
	Reach G	100000	1.5	150625				
	Reach H	150000	1.5	225938				
	Reach I	100000	1.5	150625				
	Levees			3163125				0
13---	Pumping Plants							
	Reach A, Pumps	100000	1.5	150625				
	Reach B, Pumps	150000	1.5	225938				
	Reach C, Pumps	75000	1.5	112969				
	Reach D, Pumps	100000	1.5	150625				
	Reach E, Pumps	35000	1.5	52719				
	Reach G, Pumps	35000	1.5	52719				
	Reach H, Pumps	70000	1.5	105438				
	Reach I, Pumps	35000	1.5	52719				
	Pumping Plants			903750				0
SUMMARY								
02---	Relocations			952703				0
06---	Fish & Wildlife Facil.			159706				0
11---	Levees			3163125				0
13---	Pumping Plants			903750				0
	TOTAL			\$5,179,284				\$0

PROJECT: NATOMAS PACR, NED PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE) SUMMARY

DATE PREPARED: 25-Aug-2010
PRICE LEVEL: 1-Oct-2010

CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	SUNK COST THRU 30-Sep-2010 AMOUNT (4)(\$K)	FIRST COST							FULLY FUNDED (3)					
			PREVIOUS 1-Oct-2009 COST EST (5)(\$K)	COST CHANGES		CURRENT				PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
				PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)			DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)	
(1)	(2)	(3)	(4)(\$K)	(5)(\$K)	(6)(\$K)	(7)(\$K)	(8)(\$K)	(9)(%)	(10)(\$K)	(11)(\$K)	(12)(\$K)	(13)(\$K)	(14)(\$K)	(15)(\$K)	(16)(\$K)
	FEDERAL														
1	LANDS AND DAMAGES, Admin	0	0	0	4127	3590			537	4127	0	463	3993	597	4590
1	LANDS AND DAMAGES, Real Estate	0	0	0	14365	10301			4064	14365	0	671	10769	4267	15036
6	FISH AND WILDLIFE FACILITIES	1865	0	0	18869	15175			3694	18869	0	1072	15996	3945	19941
11	LEVEES AND FLOODWALLS	79451	0	0	388083	313225			74858	388083	0	15739	325017	78805	403822
13	PUMPING PLANT	0	0	0	56135	42044			14091	56135	0	3775	44793	15117	59910
18	CULTURAL RESOURCES PRESERV.	0	0	0	6578	5660			918	6578	0	261	5885	954	6839
30	PLANNING/ENGINEERING/DESIGN	84588	0	0	129097	123807			5290	129097	0	4640	127870	5867	133737
31	CONSTRUCTION MANAGEMENT	120851	0	0	151033	143678			7355	151033	0	4113	146740	8406	155146
	TOTAL COST (FEDERAL FUNDS & NON-FEDERAL CASH CONTRIBUTION)	286755	0	0	768287	657480			110807	768287	0	30734	681063	117958	799021
	NON-FEDERAL CASH CONTRIBUTION (-)	3077	0	29	55249	45741			9537	55278	0	2340	47521	10097	57618
	SECTION 104 (-)	253974	0	0	55249	45741			9508	55249	0	2354	47521	10082	57603
	TOTAL FEDERAL COST	29704	0	-29	657789	565998			91762	657760	0	26040	586021	97779	683800
	NON-FEDERAL COST														
1	LANDS AND DAMAGES	7772	0	0	205338	155431			49907	205338	0	9304	162311	52331	214642
2	RELOCATIONS	9066	0	0	110766	85183			25583	110766	0	6280	89786	27260	117046
	SECTION 104	281665	0	0	311069	305202			5867	311069	0	236	305391	5914	311305
30	PLANNING/ENGINEERING/DESIGN	8280	0	0	19614	16670			2944	19614	0	573	17088	3099	20187
31	CONSTRUCTION MANAGEMENT	560	0	0	7555	5723			1832	7555	0	449	6050	1954	8004
	TOTAL NON-FEDERAL LERRD	307343	0	0	654342	568209			86133	654342	0	16842	580626	90558	671184
	NON-FEDERAL CASH CONTRIBUTION (+)	3077	0	29	55249	45741			9537	55278	0	2340	47521	10097	57618
	SECTION 104 (-), Remaining Allowable	27691	0	0	255820	259461			-3641	255820	0	-2118	257870	-4168	253702
	TOTAL NON-FEDERAL COST	282729	0	29	453771	354489			99311	453800	0	21300	370277	104823	475100
	TOTAL NED COST	312433	0	0	1111560	920487			191073	1111560	0	47340	956298	202602	1158900
	SUMMARY OF ESTIMATED COSTS														
	FEDERAL COST (CORPS OF ENGINEERS)	29704	0	-29	657789	565998			91762	657760	0	26040	586021	97779	683800
	REQUIRED NON-FEDERAL COST (+)	282729	0	29	453771	354489			99311	453800	0	21300	370277	104823	475100
	CASH CONTRIBUTION	3077	0	29	55249	45741			9537	55278	0	2340	47521	10097	57618

PROJECT: NATOMAS PACR, NED PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE) SUMMARY

DATE PREPARED: 25-Aug-2010
 PRICE LEVEL: 1-Oct-2010

CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	SUNK COST THRU 30-Sep-2010 AMOUNT (4)(\$K)	PREVIOUS 1-Oct-2009 COST EST (5)(\$K)	FIRST COST						FULLY FUNDED (3)					
				COST CHANGES		CURRENT				PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
				PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)			DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	OTHER COSTS	279652	0	0	398522	308748			89774	398522	0	18960	322756	94726	417482
	TOTAL FEDERAL AND REQUIRED NON-FEDERAL COSTS	312433	0	0	1111560	920487			191073	1111560	0	47340	956298	202602	1158900
	PROJECT EXECUTIVE SUMMARY														
1	LANDS AND DAMAGES	7772	0	0	223830	169322			54508	223830	0	10438	177073	57195	234268
2	RELOCATIONS	9066	0	0	110766	85183			25583	110766	0	6280	89786	27260	117046
6	FISH AND WILDLIFE FACILITIES	1865	0	0	18869	15175			3694	18869	0	1072	15996	3945	19941
11	LEVEES AND FLOODWALLS	79451	0	0	388083	313225			74858	388083	0	15739	325017	78805	403822
13	PUMPING PLANT	0	0	0	56135	42044			14091	56135	0	3775	44793	15117	59910
18	CULTURAL RESOURCES PRESERV.	0	0	0	6578	5660			918	6578	0	261	5885	954	6839
30	PLANNING, ENGINEERING AND DESIGN	92868	0	0	148711	140477			8234	148711	0	5213	144958	8966	153924
31	CONSTRUCTION MANAGEMENT	121411	0	0	158588	149401			9187	158588	0	4562	152790	10360	163150
	TOTAL NED COST	312433	0	0	1111560	920487			191073	1111560	0	47340	956298	202602	1158900
	FEDERAL COST	29704	0	-29	657789	565998			91762	657760	0	26040	586021	97779	683800
	NON-FEDERAL COST	282729	0	29	453771	354489			99311	453800	0	21300	370277	104823	475100

PROJECT: NATOMAS PACR, NED PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE)

DATE PREPARED: 25-Aug-2010
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						COST CHANGES		CURRENT					DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)	
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)						COST EST 5+6+7 (11)(\$K)
1	FEDERAL			0	0	0	4127	3590	0	537	4127	0	463	3993	597	4590
	LANDS AND DAMAGES, Admin. Reach A	(2)	A	0	0	0	765	666	14.95	99	765	0	30	692	103	795
			A	Expenditure Allocations FY2012		Start 1-Oct-2011	End 2-Apr-2012	Midpoint 1-Jan-2012	Period(YRS) 1.25	Expend. 765				Inflation Amt 30	Fully Funded 795	
	Reach B		A	0	0	0	945	821	15.1	124	945	0	72	884	133	1017
			A	Expenditure Allocations FY2013		Start 1-Oct-2012	End 1-Apr-2013	Midpoint 31-Dec-2012	Period(YRS) 2.25	Expend. 945				Inflation Amt 72	Fully Funded 1017	
	Reach C		A	0	0	0	295	256	15.1	39	295	0	66	314	47	361
			A	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 295				Inflation Amt 66	Fully Funded 361	
	Reach D		A	0	0	0	98	85	15	13	98	0	22	104	16	120
			A	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 98				Inflation Amt 22	Fully Funded 120	
	Reach E		A	0	0	0	397	346	14.9	51	397	0	68	405	60	465
			A	Expenditure Allocations FY2015		Start 1-Oct-2014	End 1-Apr-2015	Midpoint 31-Dec-2014	Period(YRS) 4.25	Expend. 397				Inflation Amt 68	Fully Funded 465	
	Reach F		A	0	0	0	321	279	14.9	42	321	0	40	314	47	361
			A	Expenditure Allocations FY2014		Start 1-Oct-2013	End 1-Apr-2014	Midpoint 31-Dec-2013	Period(YRS) 3.25	Expend. 321				Inflation Amt 40	Fully Funded 361	
	Reach G		A	0	0	0	241	210	14.9	31	241	0	42	246	37	283
			A	Expenditure Allocations FY2015		Start 1-Oct-2014	End 1-Apr-2015	Midpoint 31-Dec-2014	Period(YRS) 4.25	Expend. 241				Inflation Amt 42	Fully Funded 283	
	Reach H		A	0	0	0	902	785	14.9	117	902	0	111	882	131	1013
			A	Expenditure Allocations FY2014		Start 1-Oct-2013	End 1-Apr-2014	Midpoint 31-Dec-2013	Period(YRS) 3.25	Expend. 902				Inflation Amt 111	Fully Funded 1013	
	Reach I		A	0	0	0	163	142	14.9	21	163	0	12	152	23	175
			A	Expenditure Allocations FY2013		Start 1-Oct-2012	End 1-Apr-2013	Midpoint 31-Dec-2012	Period(YRS) 2.25	Expend. 163				Inflation Amt 12	Fully Funded 175	

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						COST CHANGES		CURRENT				DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)			
1	LANDS AND DAMAGES, Real Estate Reach A		C	0	0	0	14365	10301	0	4064	14365	0	671	10769	4267	15036		
			C	0	0	0	2,312	1792	29	520	2312	0	35	1819	528	2347		
			C	Expenditure Allocations FY2012		Start 1-Oct-2011	End 2-Apr-2012	Midpoint 1-Jan-2012	Period(YRS) 1.25	Expend. 2312				Inflation Amt 35	Fully Funded 2347			
	Reach B		C	0	0	0	5,848	4147	41.01	1701	5848	0	185	4278	1755	6033		
			C	Expenditure Allocations FY2013		Start 1-Oct-2012	End 1-Apr-2013	Midpoint 31-Dec-2012	Period(YRS) 2.25	Expend. 5848				Inflation Amt 185	Fully Funded 6033			
	Reach C		C	0	0	0	1,027	709	44.9	318	1027	0	87	769	345	1114		
			C	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 1027				Inflation Amt 87	Fully Funded 1114			
	Reach D		C	0	0	0	2,512	1580	59	932	2512	0	214	1714	1012	2726		
			C	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 2512				Inflation Amt 214	Fully Funded 2726			
	Reach E		C	0	0	0	1,074	790	36	284	1074	0	72	843	303	1146		
			C	Expenditure Allocations FY2015		Start 1-Oct-2014	End 1-Apr-2015	Midpoint 31-Dec-2014	Period(YRS) 4.25	Expend. 1074				Inflation Amt 72	Fully Funded 1146			
	Reach H		C	0	0	0	1,592	1283	24.1	309	1592	0	78	1346	324	1670		
			C	Expenditure Allocations FY2014		Start 1-Oct-2013	End 1-Apr-2014	Midpoint 31-Dec-2013	Period(YRS) 3.25	Expend. 1592				Inflation Amt 78	Fully Funded 1670			
6	FISH & WILDLIFE FACILITIES Reach B FEDERAL		6	1865	0	0	18869	15175		3694	18869	0	1072	15996	3945	19941		
			6	164	0	0	1877	1862		15	1877	0	60	1922	15	1937		
			6	0	0	0	1,635	1635	0	0	1635	0	59	1694	0	1694		
			6	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Apr-2013	Midpoint 1-Apr-2013	Period(YRS) 2.50	Expend. 1635				Inflation Amt 59	Fully Funded 1694			
	NON-FEDERAL - Section 104		6	164	0	0	242	227	24	15	242	0	1	228	15	243		
			6	Expenditure Allocations FY2009		Start 1-Oct-2008	End 1-Oct-2009	Midpoint 1-Apr-2009	Period(YRS) 0.00	Expend. 14				Inflation Amt 0	Fully Funded 14			
			6	FY2010 Projected Sunk Cost		Start 1-Oct-2009	End 1-Oct-2010	Midpoint 1-Apr-2010	Period(YRS) 0.00	Expend. 150				Inflation Amt 0	Fully Funded 150			
			6	FY2011		Start 1-Apr-2011	End 1-Oct-2011	Midpoint 1-Jul-2011	Period(YRS) 0.75	Expend. 78				Inflation Amt 1	Fully Funded 79			
	Reach C FEDERAL		6	1701	0	0	1926	1926		0	1926	0	0	1926	0	1926		
			O	0	0	0	225	225	0	0	225	0	0	225	0	225		
			O	Expenditure Allocations FY2016		Start 1-Apr-2016	End 1-Apr-2016	Midpoint 1-Apr-2016	Period(YRS) 5.50	Expend. 225				Inflation Amt 0	Fully Funded 225			

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						COST CHANGES		CURRENT				DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN-GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN-GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)									
	NON-FEDERAL - Section 104		6	1701	0	0	1,701	1701	0	0	1701	0	1701	0	1701			
			6	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			6	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	1139			0	1139				
			6	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	498			0	498				
			6	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	64			0	64				
	Reach E		6	0	0	0	6,717	4907	36.9	1810	6717	0	516	5283	1950	7233		
			6	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			6	FY2015		1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	6717			516	7233				
	Reach H		6	0	0	0	8,349	6480	28.84	1869	8349	0	496	6865	1980	8845		
			6	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			6	FY2014		1-Apr-2014	27-Nov-2014	30-Jul-2014	3.83	8349			496	8845				
11	LEVEES & FLOODWALLS		11	79451	0	0	388083	313225		74858	388083	0	15739	325017	78805	403822		
	Reach A		11	0	0	0	72,593	55084	31.785	17509	72593	0	2337	56858	18072	74930		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2013		2-Apr-2012	26-Oct-2013	13-Jan-2013	2.29	72593			2337	74930				
	Reach B		11	23163	0	0	73284	63286		9998	73284	0	1284	64320	10248	74568		
	FEDERAL		11	0	0	0	25,077	20245	23.87	4832	25077	0	1078	21115	5040	26155		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2013		1-Apr-2013	9-Oct-2013	5-Jul-2013	2.76	25077			1078	26155				
	NON-FEDERAL - Section 104		11	23163	0	0	48,207	43041	25.988	5166	48207	0	206	43205	5208	48413		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	199			0	199				
			11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	5176			0	5176				
			11	Levees, Contract 4046 May 2010 Sep 31 2010 FY10 Complete		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	17788			0	17788				
			11	FY2011		1-Apr-2011	1-Oct-2011	1-Jul-2011	0.75	25044			206	25250				
	Reach C		11	21321	0	0	22229	21972		257	22229	0	86	22034	281	22315		
	FEDERAL		11	0	0	0	908	651	39.5	257	908	0	86	713	281	994		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2016		1-Apr-2016	17-Oct-2016	9-Jul-2016	5.78	908			86	994				

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						COST CHANGES		CURRENT		PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT				
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)			CONTIN - GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN - GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
	NON-FEDERAL - Section 104		11	21321	0	0	21321	0	0	21321	0	0	21321	0	21321	
	Levees, Contract 3980 5/09 - 7/10 95% in FY09		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
	Levees, Contract 4032 8/15/09 - 9/30/10		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1189			0	1189		
	Levees, Borrow Sites, Contract 4032 8/15/09 - 9/30/10		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	63			0	63		
	Levees, Contract 3980 5% in FY10		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	2568			0	2568		
	Levees, Contract 4032 8/15/09 - 9/30/10		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1407			0	1407		
	Levees_2, Contract 4032 5/1/10 - 9/30/10		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	3537			0	3537		
	Levees, Borrow Sites, Contract 4032 8/15/09 - 9/30/10		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	3537			0	3537		
	Levees, Contract 4046 (portion within Reach C) May 2010 Sep 31 2010 FY10 Complete		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	2488			0	2488		
	Levees, Borrow Sites, Contract 4046 (for portion supplying borrow to Reach C) May 2010 Sep 31 2010 FY10 Complete		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	3964			0	3964		
	Reach D		11	34967	0	0	38221	37232		989	38221	0	311	37449	1083	38532
	FEDERAL		11	0	0	0	3,254	2265	43.65	989	3254	0	311	2482	1083	3565
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			11	FY2016		1-Apr-2016	23-Nov-2016	28-Jul-2016	5.83	3254			311	3565		
	NON-FEDERAL - Section 104		11	34967	0	0	34,967	34967	0	0	34967	0	0	34967	0	34967
	Levees, C4006		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
	Levees, C3947		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	3111			0	3111		
	Levees, C3980		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	13835			0	13835		
	Levees, Borrow Sites, C3980		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	12876			0	12876		
	Levees, C4046		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	3289			0	3289		
			11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1856			0	1856		
	Reach E		11	0	0	0	42,307	30569	38.4	11738	42307	0	3249	32916	12640	45556
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			11	FY2015		1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	42307			3249	45556		
	Reach F		11	0	0	0	46,506	35245	31.95	11261	46506	0	2706	37296	11916	49212
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			11	FY2014		1-Apr-2014	9-Oct-2014	5-Jul-2014	3.76	46506			2706	49212		
	Reach G		11	0	0	0	35,015	25543	37.08	9472	35015	0	2661	27485	10191	37676
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			11	FY2015		1-Apr-2015	2-Oct-2015	2-Jul-2015	4.75	35015			2661	37676		
	Reach H		11	0	0	0	40,401	30435	32.745	9966	40401	0	2399	32242	10558	42800

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				SUNK COST THRU 30-Sep-2010 AMOUNT (4)(\$K)	PREVIOUS 1-Oct-2009 COST EST (5)(\$K)	COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
			11	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 40401			Inflation Amt 2399	Fully Funded 42800		
	Reach I		11	0	0	0	17,527	13859	26.47	3668	17527	0	706	14417	3816	18233
			11	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 17527			Inflation Amt 706	Fully Funded 18233		
13	PUMPING PLANT		13	0	0	0	56135	42044		14091	56135	0	3775	44793	15117	59910
	Reach A		13	0	0	0	6,003	4818	24.59	1185	6003	0	193	4973	1223	6196
			13	Expenditure Allocations FY2013		Start 2-Apr-2012	End 26-Oct-2013	Midpoint 13-Jan-2013	Period(YRS) 2.29	Expend. 6003			Inflation Amt 193	Fully Funded 6196		
	Reach B		13	0	0	0	17,215	13840	24.39	3375	17215	0	697	14400	3512	17912
			13	Expenditure Allocations FY2013		Start 1-Apr-2013	End 9-Oct-2013	Midpoint 5-Jul-2013	Period(YRS) 2.76	Expend. 17215			Inflation Amt 697	Fully Funded 17912		
	Reach C		13	0	0	0	21,496	15066	42.68	6430	21496	0	2036	16493	7039	23532
			13	Expenditure Allocations FY2016		Start 1-Apr-2016	End 17-Oct-2016	Midpoint 9-Jul-2016	Period(YRS) 5.78	Expend. 21496			Inflation Amt 2036	Fully Funded 23532		
	Reach D		13	0	0	0	4,207	2820	49.2	1387	4207	0	402	3089	1520	4609
			13	Expenditure Allocations FY2016		Start 1-Apr-2016	End 23-Nov-2016	Midpoint 28-Jul-2016	Period(YRS) 5.83	Expend. 4207			Inflation Amt 402	Fully Funded 4609		
	Reach G		13	0	0	0	2,823	2078	35.85	745	2823	0	215	2236	802	3038
			13	Expenditure Allocations FY2015		Start 1-Apr-2015	End 2-Oct-2015	Midpoint 2-Jul-2015	Period(YRS) 4.75	Expend. 2823			Inflation Amt 215	Fully Funded 3038		
	Reach H		13	0	0	0	2,881	2227	29.35	654	2881	0	171	2359	693	3052
			13	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 2881			Inflation Amt 171	Fully Funded 3052		
	Reach I		13	0	0	0	1,510	1195	26.35	315	1510	0	61	1243	328	1571
			13	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 1510			Inflation Amt 61	Fully Funded 1571		
18	CULTURAL RESOURCES PRESERV.	(1		0	0	0	6578	5660	16.21	918	6578	0	261	5885	954	6839
30	PLANNING/ENGINEERING/DESIGN		A	84588	0	0	129097	123807	0	5290	129097	0	4640	127870	5867	133737
	Reach A			3961	0	0	14163	12946		1217	14163	0	670	13536	1297	14833

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					COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
					PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
FEDERAL		A	612	0	0	10,814	9597	13.55	1217	10814	0	670	10187	1297	11484
		A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	124				0	124	
		A	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	488				0	488	
		A	FY2012		1-Oct-2011	26-Oct-2013	13-Oct-2012	2.04	10202				670	10872	
NON-FEDERAL - Section 104		C	3349	0	0	3,349	3349	0	0	3349	0	0	3349	0	3349
		C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	43				0	43	
		C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	56				0	56	
		C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	764				0	764	
		C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	2486				0	2486	
Reach B FEDERAL		A	34283	0	0	44003	43088		915	44003	0	494	43538	959	44497
		A	1530	0	0	8,994	8347	9.49	647	8994	0	482	8787	689	9476
		A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	310				0	310	
		A	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1220				0	1220	
		A	FY2012		1-Oct-2011	9-Oct-2013	4-Oct-2012	2.01	7464				482	7946	
NON-FEDERAL - Section 104		C	32753	0	0	35,009	34741	13.5	268	35009	0	12	34751	270	35021
		C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		C	FY2006		1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	53				0	53	
		C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	507				0	507	
		C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	5620				0	5620	
		C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	12757				0	12757	
		C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	13816				0	13816	
		C	FY2011		1-Oct-2010	1-Oct-2011	1-Apr-2011	0.50	2256				12	2268	
Reach C FEDERAL		A	23682	0	0	26367	26040		327	26367	0	569	26540	396	26936
		A	805	0	0	3,490	3163	13.85	327	3490	0	569	3663	396	4059
		A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	163				0	163	
		A	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	642				0	642	
		A	FY2015		1-Oct-2014	17-Oct-2016	9-Oct-2015	5.03	2685				569	3254	
NON-FEDERAL - Section 104		C	22877	0	0	22,877	22877	0	0	22877	0	0	22877	0	22877
		C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		C	FY2006		1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	613				0	613	
		C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	4083				0	4083	
		C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	9647				0	9647	
		C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	7137				0	7137	
		C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1397				0	1397	
Reach D FEDERAL		A	9688	0	0	10846	10705		141	10846	0	249	10923	172	11095
		A	886	0	0	2,044	1903	13.9	141	2044	0	249	2121	172	2293

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				SUNK COST AMOUNT (4)(\$K)	PREVIOUS COST EST (5)(\$K)	COST CHANGES		CURRENT			PREVIOUS COST EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN-GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN-GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		A	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	179				0	179			
		A	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	707				0	707			
		A	FY2015	1-Oct-2014	23-Nov-2016	28-Oct-2015	5.08	1158				249	1407			
	NON-FEDERAL - Section 104	C		8802	0	0	8,802	8802	0	0	8802	0	8802			
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		C	FY2006	1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	839				0	839			
		C	FY2007	1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	1604				0	1604			
		C	FY2008	1-Oct-2007	1-Oct-2009	30-Sep-2008	0.00	2457				0	2457			
		C	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	3361				0	3361			
		C	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	541				0	541			
	Reach E FEDERAL	A		3982	0	0	9049	8239		810	9049	0	821	8928	942	9870
		A		532	0	0	5,599	4789	19.04	810	5599	0	821	5478	942	6420
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		A	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	108				0	108			
		A	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	424				0	424			
		A	FY2014	1-Oct-2013	3-Nov-2015	17-Oct-2014	4.05	5067				821	5888			
	NON-FEDERAL - Section 104	C		3450	0	0	3,450	3450	0	0	3450	0	3450	0	3450	
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		C	FY2007	1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	193				0	193			
		C	FY2008	1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	1470				0	1470			
		C	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1294				0	1294			
		C	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	493				0	493			
	Reach F FEDERAL	A		2740	0	0	7546	6969		577	7546	0	536	7440	642	8082
		A		0	0	0	4,806	4229	13.65	577	4806	0	536	4700	642	5342
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		A	FY2013	1-Oct-2012	9-Oct-2014	5-Oct-2013	3.01	4806				536	5342			
	NON-FEDERAL - Section 104	C		2740	0	0	2,740	2740	0	0	2740	0	2740	0	2740	
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		C	FY2007	1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	98				0	98			
		C	FY2008	1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	829				0	829			
		C	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1116				0	1116			
		C	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	697				0	697			
	Reach G FEDERAL	A		0	0	0	3493	3065		428	3493	0	558	3555	496	4051
		A		0	0	0	3,493	3065	13.95	428	3493	0	558	3555	496	4051
			Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
		A	FY2014	1-Oct-2013	2-Oct-2015	1-Oct-2014	4.00	3493				558	4051			

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					COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
					PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
	Reach H FEDERAL	A A	4148 725	0 0	0 0	9482 6,059	8845 5422		637 637	9482 6059	0 0	612 612	9384 5961	710 710	10094 6671
		A A A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	147				0	147	
		A	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	578				0	578	
		A	FY2013		1-Oct-2012	27-Nov-2014	29-Oct-2013	3.08	5334				612	5946	
	NON-FEDERAL - Section 104	C	3423	0	0	3,423	3423	0	0	3423	0	0	3423	0	3423
		C C C C C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		C	FY2006		1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	3				0	3	
		C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	101				0	101	
		C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	1567				0	1567	
		C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1263				0	1263	
		C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	489				0	489	
	Reach I FEDERAL	A A	2104 0	0 0	0 0	4148 2,044	3910 1806		238 238	4148 2044	0 0	131 131	4026 1922	253 253	4279 2175
		A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2012		1-Oct-2011	1-Oct-2013	30-Sep-2012	2.00	2044				131	2175	
	NON-FEDERAL - Section 104	C	2104	0	0	2,104	2104	0	0	2104	0	0	2104	0	2104
		C C C C C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		C	FY2006		1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	29				0	29	
		C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	128				0	128	
		C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	354				0	354	
		C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	676				0	676	
		C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	917				0	917	
31	CONSTRUCTION MANAGEMENT Reach A	A A	120851 0	0 0	0 0	151033 6,288	143678 4792	0 31.23	7355 1496	151033 6288	0 0	4113 487	146740 5163	8406 1612	155146 6775
		A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2013		2-Apr-2012	26-Oct-2013	13-Jan-2013	2.29	6288				487	6775	
	Reach B FEDERAL	A A	36773 0	0 0	0 0	42182 3,383	41108 2727		1074 656	42182 3383	0 0	354 337	41394 2999	1142 721	42536 3720
		A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		A	FY2013		1-Apr-2013	9-Oct-2013	5-Jul-2013	2.76	3383				337	3720	
	NON-FEDERAL - Section 104	C	36773	0	0	38,799	38381	25.98	418	38799	0	17	38395	421	38816
		C C C C C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	4				0	4	
		C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	2				0	2	
		C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	2642				0	2642	
		C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	34125				0	34125	
		C	FY2011		1-Apr-2011	1-Oct-2011	1-Jul-2011	0.75	2026				17	2043	

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						COST CHANGES		CURRENT				DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)									
	Reach C FEDERAL		A	36561	0	0	38353	37818		535	38353	0	452	38135	670	38805		
			A	0	0	0	1,792	1257	42.53	535	1792	0	452	1574	670	2244		
			A	Expenditure Allocations FY2016		Start 1-Apr-2016	End 17-Oct-2016	Midpoint 9-Jul-2016	Period(YRS) 5.78	Expend. 1792				Inflation Amt 452	Fully Funded 2244			
	NON-FEDERAL - Section 104		C	36561	0	0	36,561	36561	0	0	36561	0	0	36561	0	36561		
			C	Expenditure Allocations		Start 1-Oct-2006	End 1-Oct-2007	Midpoint 1-Apr-2007	Period(YRS) 0.00	Expend. 779				Inflation Amt 0	Fully Funded 779			
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	779				0	779			
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	2675				0	2675			
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	5588				0	5588			
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	27519				0	27519			
	Reach D FEDERAL		A	47517	0	0	48114	47924		190	48114	0	152	48028	238	48266		
			A	0	0	0	597	407	46.7	190	597	0	152	511	238	749		
			A	Expenditure Allocations FY2016		Start 1-Apr-2016	End 23-Nov-2016	Midpoint 28-Jul-2016	Period(YRS) 5.83	Expend. 597				Inflation Amt 152	Fully Funded 749			
	NON-FEDERAL - Section 104		C	47517	0	0	47,517	47517	0	0	47517	0	0	47517	0	47517		
			C	Expenditure Allocations		Start 1-Oct-2006	End 1-Oct-2007	Midpoint 1-Apr-2007	Period(YRS) 0.00	Expend. 13395				Inflation Amt 0	Fully Funded 13395			
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	13395				0	13395			
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	9061				0	9061			
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	18143				0	18143			
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	6918				0	6918			
	Reach E		A	0	0	0	3,922	2838	38.2	1084	3922	0	786	3407	1301	4708		
			A	Expenditure Allocations FY2015		Start 1-Apr-2015	End 3-Nov-2015	Midpoint 18-Jul-2015	Period(YRS) 4.80	Expend. 3922				Inflation Amt 786	Fully Funded 4708			
	Reach F		A	0	0	0	3,721	2820	31.95	901	3721	0	551	3238	1034	4272		
			A	Expenditure Allocations FY2014		Start 1-Apr-2014	End 9-Oct-2014	Midpoint 5-Jul-2014	Period(YRS) 3.76	Expend. 3721				Inflation Amt 551	Fully Funded 4272			
	Reach G		A	0	0	0	2,799	2043	37	756	2799	0	555	2448	906	3354		
			A	Expenditure Allocations FY2015		Start 1-Apr-2015	End 2-Oct-2015	Midpoint 2-Jul-2015	Period(YRS) 4.75	Expend. 2799				Inflation Amt 555	Fully Funded 3354			
	Reach H		A	0	0	0	4,131	3131	31.95	1000	4131	0	625	3604	1152	4756		
			A	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 4131				Inflation Amt 625	Fully Funded 4756			

PROJECT: NATOMAS PACR, NED PLAN
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CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	N O T E S	C O D E	SUNK COST THRU	FIRST COST						FULLY FUNDED (3)							
					PREVIOUS 1-Oct-2009	COST CHANGES		CURRENT				PREVIOUS 1-Oct-2009	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT				
						30-Sep-2010 AMOUNT (4)(\$K)	COST EST (5)(\$K)	PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)			CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	EST (12)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)
	Relocations, Roads, Contract 4046 May 2010 Sep 31 2010 FY10 Complete		2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.					Inflation Amt	Fully Funded		
	Elkhorn Irr Canal, Phase 2A, Contract 4047 May 2010 Sep 31 2010 FY10 Complete		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	280					0	280		
	Relocations, Private Irr Fac, Contract 4047 May 2010 Sep 31 2010 FY10 Complete		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1766					0	1766		
	Gas Line Relocation, Calpine Gas, at Garden Highway Contract 4046 May 2010 Sep 31 2010 FY10 Complete		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1206					0	1206		
	Underground Electrical Conduit for Street Light Contract 4046 May 2010 Sep 31 2010 FY10 Complete		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	318					0	318		
	Relocate Street Light Contract 4046 May 2010 Sep 31 2010 FY10 Complete		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	2					0	2		
	Relocate Street Light Contract 4046 May 2010 Sep 31 2010 FY10 Complete		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	5					0	5		
			2	FY2013		1-Apr-2013	9-Oct-2013	5-Jul-2013	2.76	19332					783	20115		
	Reach C		2			4132	0	0	12,190	9625	46.7	2565	12190	0	763	10145	2808	12953
	Relocations, Roadways, Contract 3980 5/09 - 7/10 95% in FY09		2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.					Inflation Amt	Fully Funded		
	Relocations, Roadways, Contract 4032 8/15/09 - 9/30/10 20% for FY09		2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	296					0	296		
	Relocations, Private Irr Fac, Contract 3980 95% in FY09		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	16					0	16		
	Relocations, Private Irr Fac, Contract 4032 8/15/09 - 9/30/10 20% for FY09		2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	87					0	87		
	Relocations, Roadways, Contract 3980 5/09 - 7/10 5% in FY10		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	348					0	348		
	Relocations, Roadways, Contract 4032 8/15/09 - 9/30/10 80% for FY10		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	360					0	360		
	Relocations, Roadways, Contract 4032 8/15/09 - 9/30/10 80% for FY10		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	262					0	262		
	Relocations, Roadways, Contract 4046 (portion within Reach C) May 2010 Sep 31 2010 FY10 Complete		2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	14					0	14		
	Relocations, Private Irr Fac, Contract 3980 5% in FY10		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	832					0	832		
	Relocations, Private Irr Fac, Contract 4032 8/15/09 - 9/30/10 80% for FY10		2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	6					0	6		
	Relocations, Private River Diversion Replacement, Contract 4053 5/1/10-9/30/10		2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1911					0	1911		
			2	FY2016		1-Apr-2016	17-Oct-2016	9-Jul-2016	5.78	8058					763	8821		
	Reach D		2			1357	0	0	12,323	8903	45.33	3420	12323	0	1049	9624	3748	13372
	Road Relocations, C3947		2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.					Inflation Amt	Fully Funded		
	Road Relocations, C3980		2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	778					0	778		
	Utility Relocations, C3980		2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	562					0	562		
			2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	17					0	17		
			2	FY2016		1-Apr-2016	23-Nov-2016	28-Jul-2016	5.83	10966					1049	12015		

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CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE) (2)	N O T E S (3)	SUNK COST THRU 30-Sep-2010 AMOUNT (4)(\$K)	PREVIOUS 1-Oct-2009 COST EST (5)(\$K)	FIRST COST					FULLY FUNDED (3)						
					COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT				
					PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)	
	Reach E	2	0	0	0	10,951	7801	40.38	3150	10951	0	841	8400	3392	11792	
		2	Expenditure Allocations FY2015		Start 1-Apr-2015	End 3-Nov-2015	Midpoint 18-Jul-2015	Period(YRS) 4.80	Expend. 10951				Inflation Amt 841	Fully Funded 11792		
	Reach F	2	0	0	0	11,945	9006	32.63	2939	11945	0	695	9530	3110	12640	
		2	Expenditure Allocations FY2014		Start 1-Apr-2014	End 9-Oct-2014	Midpoint 5-Jul-2014	Period(YRS) 3.76	Expend. 11945				Inflation Amt 695	Fully Funded 12640		
	Reach G	2	0	0	0	10,676	7795	36.96	2881	10676	0	811	8387	3100	11487	
		2	Expenditure Allocations FY2015		Start 1-Apr-2015	End 2-Oct-2015	Midpoint 2-Jul-2015	Period(YRS) 4.75	Expend. 10676				Inflation Amt 811	Fully Funded 11487		
	Reach H	2	0	0	0	12,996	9537	36.27	3459	12996	0	772	10103	3665	13768	
		2	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 12996				Inflation Amt 772	Fully Funded 13768		
	Reach I	2	0	0	0	3,168	2501	26.65	667	3168	0	128	2602	694	3296	
		2	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 3168				Inflation Amt 128	Fully Funded 3296		
	SECTION 104	0	281665	0	0	311069	305202		5867	311069	0	236	305391	5914	311305	
	Reach A	0	3349	0	0	3349	3349		0	3349	0	0	3349	0	3349	
	Reach B	0	92853	0	0	122257	116390		5867	122257	0	236	116579	5914	122493	
	Reach C	0	82460	0	0	82460	82460		0	82460	0	0	82460	0	82460	
	Reach D	0	91286	0	0	91286	91286		0	91286	0	0	91286	0	91286	
	Reach E	0	3450	0	0	3450	3450		0	3450	0	0	3450	0	3450	
	Reach F	0	2740	0	0	2740	2740		0	2740	0	0	2740	0	2740	
	Reach H	0	3423	0	0	3423	3423		0	3423	0	0	3423	0	3423	
	Reach I	0	2104	0	0	2104	2104		0	2104	0	0	2104	0	2104	
30	PLANNING/ENGINEERING/DESIGN	2	8280	0	0	19614	16670		2944	19614	0	573	17088	3099	20187	
	Reach A	2	3	0	0	2,045	1631	25.41	414	2045	0	57	1677	425	2102	
		2	Expenditure Allocations FY2010 Projected Sunk Cost FY2012		Start 1-Oct-2009 1-Oct-2011	End 1-Oct-2010 26-Oct-2013	Midpoint 1-Apr-2010 13-Oct-2012	Period(YRS) 0.00 2.04	Expend. 3 2042					Inflation Amt 0 57	Fully Funded 3 2099	
	Reach B	2	4090	0	0	4,625	4521	24	104	4625	0	15	4534	106	4640	
			Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded		

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CODE OF ACCT. NO. (1)	FEATURE/SUBFEATURE (NOTE) (2)	N O T E S (3)	C O S T T H R U 30-Sep-2010 (4)(\$K)	SUNK COST (5)(\$K)	FIRST COST					FULLY FUNDED (3)						
					PREVIOUS 1-Oct-2009 (6)(\$K)	COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
						PRICE LEVEL (7)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
			2 2 2 2	FY2008 FY2009 FY2010 Projected Sunk Cost FY2012	1-Oct-2007 1-Oct-2008 1-Oct-2009 1-Oct-2011	1-Oct-2008 1-Oct-2009 1-Oct-2010 9-Oct-2013	1-Apr-2008 1-Apr-2009 1-Apr-2010 4-Oct-2012	0.00 0.00 0.00 2.01	406 1444 2240 535					0 0 0 15	406 1444 2240 550	
Reach C			2	3896	0	0	4,863	4555	46.7	308	4863	0	78	4608	333	4941
			2 2 2 2 2 2	Expenditure Allocations FY2006 FY2007 FY2008 FY2009 FY2010 Projected Sunk Cost FY2015	Start 1-Oct-2005 1-Oct-2006 1-Oct-2007 1-Oct-2008 1-Oct-2009 1-Oct-2014	End 1-Oct-2006 1-Oct-2007 1-Oct-2008 1-Oct-2009 1-Oct-2010 17-Oct-2016	Midpoint 1-Apr-2006 1-Apr-2007 1-Apr-2008 1-Apr-2009 1-Apr-2010 9-Oct-2015	Period(YRS) 0.00 0.00 0.00 0.00 0.00 5.03	Expend. 211 697 1073 1214 701 967					Inflation Amt 0 0 0 0 0 78	Fully Funded 211 697 1073 1214 701 1045	
Reach D			2	272	0	0	1,446	1080	45.33	366	1446	0	73	1130	389	1519
			2 2 2	Expenditure Allocations FY2009 FY2010 Projected Sunk Cost FY2014	Start 1-Oct-2008 1-Oct-2009 1-Oct-2013	End 1-Oct-2009 1-Oct-2010 2-Oct-2015	Midpoint 1-Apr-2009 1-Apr-2010 1-Oct-2014	Period(YRS) 0.00 0.00 4.00	Expend. 170 102 1174					Inflation Amt 0 0 73	Fully Funded 170 102 1247	
Reach E			2	0	0	0	1,643	1170	40.38	473	1643	0	104	1244	503	1747
			2	Expenditure Allocations FY2014	Start 1-Oct-2013	End 3-Nov-2015	Midpoint 17-Oct-2014	Period(YRS) 4.05	Expend. 1643					Inflation Amt 104	Fully Funded 1747	
Reach F			2	0	0	0	1,433	1081	32.61	352	1433	0	64	1129	368	1497
			2	Expenditure Allocations FY2013	Start 1-Oct-2012	End 9-Oct-2014	Midpoint 5-Oct-2013	Period(YRS) 3.01	Expend. 1433					Inflation Amt 64	Fully Funded 1497	
Reach G			2	8	0	0	1,609	1177	37	432	1609	0	100	1250	459	1709
			2 2	Expenditure Allocations FY2010 Projected Sunk Cost FY2014	Start 1-Oct-2009 1-Oct-2013	End 1-Oct-2010 2-Oct-2015	Midpoint 1-Apr-2010 1-Oct-2014	Period(YRS) 0.00 4.00	Expend. 8 1601					Inflation Amt 0 100	Fully Funded 8 1701	
Reach H			2	5	0	0	1,564	1149	36.3	415	1564	0	72	1202	434	1636
			2 2	Expenditure Allocations FY2010 Projected Sunk Cost FY2013	Start 1-Oct-2009 1-Oct-2012	End 1-Oct-2010 27-Nov-2014	Midpoint 1-Apr-2010 29-Oct-2013	Period(YRS) 0.00 3.08	Expend. 5 1559					Inflation Amt 0 72	Fully Funded 5 1631	
Reach I			2	6	0	0	386	306	26.8	80	386	0	10	314	82	396
			2 2	Expenditure Allocations FY2010 Projected Sunk Cost FY2012	Start 1-Oct-2009 1-Oct-2011	End 1-Oct-2010 1-Oct-2013	Midpoint 1-Apr-2010 30-Sep-2012	Period(YRS) 0.00 2.00	Expend. 6 380					Inflation Amt 0 10	Fully Funded 6 390	

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					P R E V I O U S 1-Oct-2009		C O S T C H A N G E S		C U R R E N T			P R E V I O U S 1-Oct-2009 EST (12)(\$K)	C H A N G E I N I N F L A T - I O N (13)(\$K)	C U R R E N T		
					PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	D I R E C T C O S T (8)(\$K)	C O N T R A T E (9)(%)	C O N T I N - G E N C Y (10)(\$K)	C O S T E S T 5+6+7 (11)(\$K)	D I R E C T C O S T (14)(\$K)			C O N T I N - G E N C Y (15)(\$K)	C O S T E S T 12+6+7+13 (16)(\$K)	
31	CONSTRUCTION MANAGEMENT Reach A	2	560	0	0	7555	5723		1832	7555	0	449	6050	1954	8004	
		2	0	0	0	1,089	868	25.41	221	1089	0	35	896	228	1124	
		2	Expenditure Allocations FY2013		Start 2-Apr-2012	End 26-Oct-2013	Midpoint 13-Jan-2013	Period(YRS) 2.29	Expend. 1089				Inflation Amt 35	Fully Funded 1124		
	Reach B	2	530	0	0	816	760	24.1	56	816	0	2	762	56	818	
		2	Expenditure Allocations FY2009		Start 1-Oct-2008	End 1-Oct-2009	Midpoint 1-Apr-2009	Period(YRS) 0.00	Expend. 74				Inflation Amt 0	Fully Funded 74		
		2	FY2010 Projected Sunk Cost		Start 1-Oct-2009	End 1-Oct-2010	Midpoint 1-Apr-2010	Period(YRS) 0.00	Expend. 456				Inflation Amt 0	Fully Funded 456		
		2	FY2011		Start 1-Apr-2011	End 1-Oct-2011	Midpoint 1-Jul-2011	Period(YRS) 0.75	Expend. 286				Inflation Amt 2	Fully Funded 288		
	Reach C	2	30	0	0	675	470	46.6	205	675	0	61	512	224	736	
		2	Expenditure Allocations FY2009		Start 1-Oct-2008	End 1-Oct-2009	Midpoint 1-Apr-2009	Period(YRS) 0.00	Expend. 22				Inflation Amt 0	Fully Funded 22		
		2	FY2010 Projected Sunk Cost		Start 1-Oct-2009	End 1-Oct-2010	Midpoint 1-Apr-2010	Period(YRS) 0.00	Expend. 8				Inflation Amt 0	Fully Funded 8		
		2	FY2016		Start 1-Apr-2016	End 17-Oct-2016	Midpoint 9-Jul-2016	Period(YRS) 5.78	Expend. 645				Inflation Amt 61	Fully Funded 706		
	Reach D	2	0	0	0	782	538	45.33	244	782	0	75	590	267	857	
		2	Expenditure Allocations FY2016		Start 1-Apr-2016	End 23-Nov-2016	Midpoint 28-Jul-2016	Period(YRS) 5.83	Expend. 782				Inflation Amt 75	Fully Funded 857		
	Reach E	2	0	0	0	876	624	40.38	252	876	0	67	672	271	943	
		2	Expenditure Allocations FY2015		Start 1-Apr-2015	End 3-Nov-2015	Midpoint 18-Jul-2015	Period(YRS) 4.80	Expend. 876				Inflation Amt 67	Fully Funded 943		
	Reach F	2	0	0	0	956	721	32.51	235	956	0	56	764	248	1012	
		2	Expenditure Allocations FY2014		Start 1-Apr-2014	End 9-Oct-2014	Midpoint 5-Jul-2014	Period(YRS) 3.76	Expend. 956				Inflation Amt 56	Fully Funded 1012		
	Reach G	2	0	0	0	1,068	779	37.1	289	1068	0	81	838	311	1149	
		2	Expenditure Allocations FY2015		Start 1-Apr-2015	End 2-Oct-2015	Midpoint 2-Jul-2015	Period(YRS) 4.75	Expend. 1068				Inflation Amt 81	Fully Funded 1149		
	Reach H	2	0	0	0	1,040	763	36.3	277	1040	0	62	809	293	1102	
		2	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 1040				Inflation Amt 62	Fully Funded 1102		
	Reach I	2	0	0	0	253	200	26.8	53	253	0	10	207	56	263	
		2	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 253				Inflation Amt 10	Fully Funded 263		

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						COST CHANGES		CURRENT					CURRENT			
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
(1)	(2)	(3)	(4)(\$K)	(5)(\$K)	(6)(\$K)	(7)(\$K)	(8)(\$K)	(9)(%)	(10)(\$K)	(11)(\$K)	(12)(\$K)	(13)(\$K)	(14)(\$K)	(15)(\$K)	(16)(\$K)	
	TOTAL NON-FEDERAL LERRD			307343	0	0	654342	568209		86133	654342	0	16842	580626	90558	671184
	NON-FEDERAL CASH CONTRIBUTION (+)			3077	0	29	55249	45741		9537	55278	0	2340	47521	10097	57618
	SECTION 104 (-), Remaining Allowable			27691	0	0	255820	259461		-3641	255820	0	-2118	257870	-4168	253702
	TOTAL NON-FEDERAL COST			282729	0	29	453771	354489		99311	453800	0	21300	370277	104823	475100
	TOTAL NED COST			312433	0	0	1111560	920487		191073	1111560	0	47340	956298	202602	1158900
	BASIS OF ESTIMATE:															
	(1) Cultural Resources Preservation costs associated with mitigation and/or data recovery up to one percent of the total Federal cost are not subject to cost sharing.															
	(2) Federal administrative costs for Non-federal land acquisition															
	(3) The Fully Funded cost estimate was prepared in compliance with OMB INDEXES EC-11-2-199, published on MAR. 31, 2010..															
	(4) CWCCIS indexes from 10/01/2009 to 10/01/2010, are projected rates for Lands and Constructions. OMB escalation rates are actual for PED & CM and Real Estate Admin.															
	(5) The Project Cost Estimate was prepared based on the Natoms PCR report Dated Oct 1 2010.															

PROJECT: NATOMAS PACR, LPP PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE) SUMMARY OF COST

DATE PREPARED: 25-Aug-2010
 PRICE LEVEL: 1-Oct-2010

CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	SUNK COST THRU 30-Sep-2010 AMOUNT (4)(\$K)	PREVIOUS 1-Oct-2009 COST EST (5)(\$K)	FIRST COST						FULLY FUNDED (3)					
				COST CHANGES		CURRENT				PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
				PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)			DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	FEDERAL														
1	LANDS AND DAMAGES, Admin	0	0	0	4127	3590			537	4127	0	463	3993	597	4590
1	LANDS AND DAMAGES, Real Estate	0	0	0	14365	10301			4064	14365	0	671	10769	4267	15036
6	FISH AND WILDLIFE FACILITIES	1865	0	0	18869	15175			3694	18869	0	1072	15996	3945	19941
11	LEVEES AND FLOODWALLS	90921	0	0	417350	338254			79096	417350	0	16338	350477	83211	433688
13	PUMPING PLANT	0	0	0	56135	42044			14091	56135	0	3775	44793	15117	59910
18	CULTURAL RESOURCES PRESERV.	0	0	0	6578	5660			918	6578	0	261	5885	954	6839
30	PLANNING/ENGINEERING/DESIGN	84588	0	0	130834	125320			5514	130834	0	4773	129501	6106	135607
31	CONSTRUCTION MANAGEMENT	120851	0	0	152434	144745			7689	152434	0	4241	147897	8778	156675
	TOTAL COST (FEDERAL FUNDS & NON-FEDERAL CASH CONTRIBUTION)	298225	0	0	800692	685089			115603	800692	0	31594	709311	122975	832286
	NON-FEDERAL CASH CONTRIBUTION (-)	14547	0	29	87654	73350			14333	87683	0	3200	75769	15114	90883
	SECTION 104 (-)	253974	0	0	55249	45741			9508	55249	0	2354	47521	10082	57603
	TOTAL FEDERAL COST	29704	0	-29	657789	565998			91762	657760	0	26040	586021	97779	683800
	NON-FEDERAL COST														
1	LANDS AND DAMAGES	7772	0	0	205338	155431			49907	205338	0	9304	162311	52331	214642
2	RELOCATIONS	11724	0	0	127700	98315			29385	127700	0	7205	103589	31316	134905
	SECTION 104	281665	0	0	311069	305202			5867	311069	0	236	305391	5914	311305
30	PLANNING/ENGINEERING/DESIGN	8280	0	0	21630	18152			3478	21630	0	677	18645	3662	22307
31	CONSTRUCTION MANAGEMENT	560	0	0	8740	6593			2147	8740	0	520	6968	2292	9260
	TOTAL NON-FEDERAL LERRD	310001	0	0	674477	583693			90784	674477	0	17942	596904	95515	692419
	NON-FEDERAL CASH CONTRIBUTION (+)	14547	0	29	87654	73350			14333	87683	0	3200	75769	15114	90883
	Cost Above NED	11470	0	0	32405	27609			4796	32405	0	860	28248	5017	33265
	SECTION 104 (-)	27691	0	0	255820	259461			-3641	255820	0	-2118	257870	-4168	253702
	TOTAL NON-FEDERAL COST	296857	0	29	506311	397582			108758	506340	0	23260	414803	114797	529600
	TOTAL LPP COST	326561	0	0	1164100	963580			200520	1164100	0	49300	1000824	212576	1213400
	SUMMARY OF ESTIMATED COSTS														
	FEDERAL COST (CORPS OF ENGINEERS)	29704	0	-29	657789	565998			91762	657760	0	26040	586021	97779	683800

PROJECT: NATOMAS PACR, LPP PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE) SUMMARY OF COST

DATE PREPARED: 25-Aug-2010
 PRICE LEVEL: 1-Oct-2010

CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	SUNK COST THRU 30-Sep-2010 AMOUNT	FIRST COST							FULLY FUNDED (3)					
			PREVIOUS 1-Oct-2009 COST EST	COST CHANGES		CURRENT				PREVIOUS 1-Oct-2009 EST	CHANGE IN INFLAT - ION	CURRENT			
				PRICE LEVEL	OTHER (SEE NOTE)	DIRECT COST	CONT RATE	CONTIN-GENCY	COST EST 5+6+7			DIRECT COST	CONTIN-GENCY	COST EST 12+6+7+13	
(1)	(2)	(3)	(4)(\$K)	(5)(\$K)	(6)(\$K)	(7)(\$K)	(8)(\$K)	(9)(%)	(10)(\$K)	(11)(\$K)	(12)(\$K)	(13)(\$K)	(14)(\$K)	(15)(\$K)	(16)(\$K)
	REQUIRED NON-FEDERAL COST (+) CASH CONTRIBUTION OTHER COSTS	296857 14547 282310	0 0 0	29 29 0	506311 87654 418657	397582 73350 324232			108758 14333 94425	506340 87683 418657	0 0 0	23260 3200 20060	414803 75769 339034	114797 15114 99683	529600 90883 436717
	TOTAL FEDERAL AND REQUIRED NON-FEDERAL COSTS	326561	0	0	1164100	963580			200520	1164100	0	49300	1000824	212576	1213400
	PROJECT EXECUTIVE SUMMARY														
1	LANDS AND DAMAGES	7772	0	0	223830	169322			54508	223830	0	10438	177073	57195	234268
2	RELOCATIONS	11724	0	0	127700	98315			29385	127700	0	7205	103589	31316	134905
6	FISH AND WILDLIFE FACILITIES	1865	0	0	18869	15175			3694	18869	0	1072	15996	3945	19941
11	LEVEES AND FLOODWALLS	90921	0	0	417350	338254			79096	417350	0	16338	350477	83211	433688
13	PUMPING PLANT	0	0	0	56135	42044			14091	56135	0	3775	44793	15117	59910
18	CULTURAL RESOURCES PRESERV.	0	0	0	6578	5660			918	6578	0	261	5885	954	6839
30	PLANNING, ENGINEERING AND DESIGN	92868	0	0	152464	143472			8992	152464	0	5450	148146	9768	157914
31	CONSTRUCTION MANAGEMENT	121411	0	0	161174	151338			9836	161174	0	4761	154865	11070	165935
	TOTAL LPP COST	326561	0	0	1164100	963580			200520	1164100	0	49300	1000824	212576	1213400
	FEDERAL COST	29704	0	-29	657789	565998			91762	657760	0	26040	586021	97779	683800
	NON-FEDERAL COST	296857	0	29	506311	397582			108758	506340	0	23260	414803	114797	529600

PROJECT: NATOMAS PACR, LPP PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE)

DATE PREPARED: 25-Aug-2010
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CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	N O T E S	C O D E	SUNK COST THRU 30-Sep-2010	PREVIOUS 1-Oct-2009	FIRST COST					PREVIOUS 1-Oct-2009	CHANGE IN INFLAT - ION (13)(\$K)	FULLY FUNDED (3)						
						AMOUNT (4)(\$K)	COST EST (5)(\$K)	PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)			CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	EST (12)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
1	FEDERAL			0	0	0	4127	3590	0	537	4127	0	463	3993	597	4590			
	LANDS AND DAMAGES, Admin. Reach A	(2)	A	0	0	0	765	666	14.95	99	765	0	30	692	103	795			
			A	Expenditure Allocations FY2012		Start 1-Oct-2011	End 2-Apr-2012	Midpoint 1-Jan-2012	Period(YRS) 1.25	Expend. 765				Inflation Amt 30	Fully Funded 795				
	Reach B		A	0	0	0	945	821	15.1	124	945	0	72	884	133	1017			
			A	Expenditure Allocations FY2013		Start 1-Oct-2012	End 1-Apr-2013	Midpoint 31-Dec-2012	Period(YRS) 2.25	Expend. 945				Inflation Amt 72	Fully Funded 1017				
	Reach C		A	0	0	0	295	256	15.1	39	295	0	66	314	47	361			
			A	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 295				Inflation Amt 66	Fully Funded 361				
	Reach D		A	0	0	0	98	85	15	13	98	0	22	104	16	120			
			A	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 98				Inflation Amt 22	Fully Funded 120				
	Reach E		A	0	0	0	397	346	14.9	51	397	0	68	405	60	465			
			A	Expenditure Allocations FY2015		Start 1-Oct-2014	End 1-Apr-2015	Midpoint 31-Dec-2014	Period(YRS) 4.25	Expend. 397				Inflation Amt 68	Fully Funded 465				
	Reach F		A	0	0	0	321	279	14.9	42	321	0	40	314	47	361			
			A	Expenditure Allocations FY2014		Start 1-Oct-2013	End 1-Apr-2014	Midpoint 31-Dec-2013	Period(YRS) 3.25	Expend. 321				Inflation Amt 40	Fully Funded 361				
	Reach G		A	0	0	0	241	210	14.9	31	241	0	42	246	37	283			
			A	Expenditure Allocations FY2015		Start 1-Oct-2014	End 1-Apr-2015	Midpoint 31-Dec-2014	Period(YRS) 4.25	Expend. 241				Inflation Amt 42	Fully Funded 283				
	Reach H		A	0	0	0	902	785	14.9	117	902	0	111	882	131	1013			
			A	Expenditure Allocations FY2014		Start 1-Oct-2013	End 1-Apr-2014	Midpoint 31-Dec-2013	Period(YRS) 3.25	Expend. 902				Inflation Amt 111	Fully Funded 1013				
	Reach I		A	0	0	0	163	142	14.9	21	163	0	12	152	23	175			
			A	Expenditure Allocations FY2013		Start 1-Oct-2012	End 1-Apr-2013	Midpoint 31-Dec-2012	Period(YRS) 2.25	Expend. 163				Inflation Amt 12	Fully Funded 175				

PROJECT: NATOMAS PACR, LPP PLAN
LOCATION: CALIFORNIA
PROJECT COST ESTIMATE(PCE)

DATE PREPARED: 25-Aug-2010
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CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	N O T E S	C O S T T H R U	FIRST COST							FULLY FUNDED (3)					
				SUNK COST AMOUNT (4)(\$K)	PREVIOUS COST EST (5)(\$K)	COST CHANGES		CURRENT			PREVIOUS EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN - GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN - GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
(1)	(2)	(3)	(4)(\$K)	(5)(\$K)	(6)(\$K)	(7)(\$K)	(8)(\$K)	(9)(%)	(10)(\$K)	(11)(\$K)	(12)(\$K)	(13)(\$K)	(14)(\$K)	(15)(\$K)	(16)(\$K)	
1	LANDS AND DAMAGES, Real Estate Reach A		C	0 0	0 0	0 0	14365 2312	10301 1792	0 29	4064 520	14365 2312	0 0	671 35	10769 1819	4267 528	15036 2347
			C	Expenditure Allocations FY2012		Start 1-Oct-2011	End 2-Apr-2012	Midpoint 1-Jan-2012	Period(YRS) 1.25	Expend. 2312				Inflation Amt 35	Fully Funded 2347	
	Reach B		C	0	0	0	5848	4147	41.01	1701	5848	0	185	4278	1755	6033
			C	Expenditure Allocations FY2013		Start 1-Oct-2012	End 1-Apr-2013	Midpoint 31-Dec-2012	Period(YRS) 2.25	Expend. 5848				Inflation Amt 185	Fully Funded 6033	
	Reach C		C	0	0	0	1027	709	44.9	318	1027	0	87	769	345	1114
			C	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 1027				Inflation Amt 87	Fully Funded 1114	
	Reach D		C	0	0	0	2512	1580	59	932	2512	0	214	1714	1012	2726
			C	Expenditure Allocations FY2016		Start 1-Oct-2015	End 1-Apr-2016	Midpoint 31-Dec-2015	Period(YRS) 5.25	Expend. 2512				Inflation Amt 214	Fully Funded 2726	
	Reach E		C	0	0	0	1074	790	36	284	1074	0	72	843	303	1146
			C	Expenditure Allocations FY2015		Start 1-Oct-2014	End 1-Apr-2015	Midpoint 31-Dec-2014	Period(YRS) 4.25	Expend. 1074				Inflation Amt 72	Fully Funded 1146	
	Reach H		C	0	0	0	1592	1283	24.1	309	1592	0	78	1346	324	1670
			C	Expenditure Allocations FY2014		Start 1-Oct-2013	End 1-Apr-2014	Midpoint 31-Dec-2013	Period(YRS) 3.25	Expend. 1592				Inflation Amt 78	Fully Funded 1670	
6	FISH & WILDLIFE FACILITIES Reach B FEDERAL		6 6 6	1865 164 0	0 0 0	0 0 0	18869 1877 1635	15175 1862 1635		3694 15 0	18869 1877 1635	0 0 0	1072 60 59	15996 1922 1694	3945 15 0	19941 1937 1694
			6	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Apr-2013	Midpoint 1-Apr-2013	Period(YRS) 2.50	Expend. 1635				Inflation Amt 59	Fully Funded 1694	
	NON-FEDERAL - Section 104		6	164	0	0	242	227	24	15	242	0	1	228	15	243
			6 6 6	Expenditure Allocations FY2009 FY2010 Projected Sunk Cost FY2011		Start 1-Oct-2008 1-Oct-2009 1-Apr-2011	End 1-Oct-2009 1-Oct-2010 1-Oct-2011	Midpoint 1-Apr-2009 1-Apr-2010 1-Jul-2011	Period(YRS) 0.00 0.00 0.75	Expend. 14 150 78				Inflation Amt 0 0 1	Fully Funded 14 150 79	
	Reach C FEDERAL		6 O	1701 0	0 0	0 0	1926 225	1926 225		0 0	1926 225	0 0	0 0	1926 225	0 0	1926 225
			O	Expenditure Allocations FY2016		Start 1-Apr-2016	End 1-Apr-2016	Midpoint 1-Apr-2016	Period(YRS) 5.50	Expend. 225				Inflation Amt 0	Fully Funded 225	

PROJECT: NATOMAS PACR, LPP PLAN
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CODE OF ACCT. NO.	FEATURE/SUBFEATURE (NOTE)	N O T E S	C O S T	SUNK COST THRU 30-Sep-2010 AMOUNT (4)(\$K)	PREVIOUS 1-Oct-2009 COST EST (5)(\$K)	FIRST COST				PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	FULLY FUNDED (3)						
						COST CHANGES		CURRENT				DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)									
	NON-FEDERAL - Section 104		6	1701	0	0	1701	0	0	1701	0	0	1701	0	1701			
			6	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			6	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	1139			0	1139				
			6	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	498			0	498				
			6	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	64			0	64				
	Reach E		6	0	0	0	6717	4907	36.9	1810	6717	0	516	5283	1950	7233		
			6	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			6	FY2015		1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	6717			516	7233				
	Reach H		6	0	0	0	8349	6480	28.84	1869	8349	0	496	6865	1980	8845		
			6	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			6	FY2014		1-Apr-2014	27-Nov-2014	30-Jul-2014	3.83	8349			496	8845				
11	LEVEES & FLOODWALLS Reach A		11	90921	0	0	417350	338254		79096	417350	0	16338	350477	83211	433688		
			11	0	0	0	72593	55084	31.785	17509	72593	0	2337	56858	18072	74930		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2013		2-Apr-2012	26-Oct-2013	13-Jan-2013	2.29	72593			2337	74930				
	Reach B FEDERAL		11	26288	0	0	86102	74105		11997	86102	0	1295	75147	12250	87397		
			11	0	0	0	25077	20245	23.865	4832	25077	0	1009	21060	5026	26086		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2013		1-Apr-2013	9-Oct-2013	5-Jul-2013	2.76	25077			1009	26086				
	NON-FEDERAL - Section 104		11	26288	0	0	61025	53860	25.985	7165	61025	0	286	54087	7224	61311		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	199			0	199				
			11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	5176			0	5176				
			11	Levees, Contract 4046 May 2010 Sep 31 2010 FY10 Complete		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	20913			0	20913				
			11	FY2011		1-Apr-2011	1-Oct-2011	1-Jul-2011	0.75	34737			286	35023				
	Reach C FEDERAL		11	25292	0	0	26200	25943		257	26200	0	86	26005	281	26286		
			11	0	0	0	908	651	39.5	257	908	0	86	713	281	994		
			11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded				
			11	FY2016		1-Apr-2016	17-Oct-2016	9-Jul-2016	5.78	908			86	994				

PROJECT: NATOMAS PACR, LPP PLAN
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					COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT			
					PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
	NON-FEDERAL - Section 104	11	25292	0	0	25292	25292	0	0	25292	0	0	25292	0	25292
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1611				0	1611	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	85				0	85	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	2882				0	2882	
		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	2881				0	2881	
		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1564				0	1564	
		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	4499				0	4499	
		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	4498				0	4498	
		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	3308				0	3308	
		11	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	3964				0	3964	
	Reach D FEDERAL	11	39341	0	0	42894	41814		1080	42894	0	340	42050	1184	43234
		11	0	0	0	3553	2473	43.7	1080	3553	0	340	2709	1184	3893
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2016		1-Apr-2016	23-Nov-2016	28-Jul-2016	5.83	3553				340	3893	
	NON-FEDERAL - Section 104	11	39341	0	0	39341	39341	0	0	39341	0	0	39341	0	39341
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	3679				0	3679	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	14272				0	14272	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	13317				0	13317	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	5919				0	5919	
		11	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	2154				0	2154	
	Reach E	11	0	0	0	46281	33402	38.558	12879	46281	0	3554	35967	13868	49835
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2015		1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	46281				3554	49835	
	Reach F	11	0	0	0	48589	36823	31.952	11766	48589	0	2827	38966	12450	51416
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2014		1-Apr-2014	9-Oct-2014	5-Jul-2014	3.76	48589				2827	51416	
	Reach G	11	0	0	0	36763	26789	37.23	9974	36763	0	2794	28825	10732	39557
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2015		1-Apr-2015	2-Oct-2015	2-Jul-2015	4.75	36763				2794	39557	
	Reach H	11	0	0	0	40401	30435	32.745	9966	40401	0	2399	32242	10558	42800
		11	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	
		11	FY2014		1-Apr-2014	27-Nov-2014	30-Jul-2014	3.83	40401				2399	42800	
	Reach I	11	0	0	0	17527	13859	26.465	3668	17527	0	706	14417	3816	18233
			Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded	

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						COST CHANGES		CURRENT				DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)									
				11	FY2013		1-Apr-2013	1-Oct-2013	1-Jul-2013	2.75	17527			706	18233			
13	PUMPING PLANT Reach A			13	0	0	0	56135	42044		14091	56135	0	3775	44793	15117	59910	
				13	0	0	0	6003	4818	24.6	1185	6003	0	193	4973	1223	6196	
				13	Expenditure Allocations FY2013		Start 2-Apr-2012	End 26-Oct-2013	Midpoint 13-Jan-2013	Period(YRS) 2.29	Expend. 6003				Inflation Amt 193	Fully Funded 6196		
	Reach B			13	0	0	0	17215	13840	24.39	3375	17215	0	697	14400	3512	17912	
				13	Expenditure Allocations FY2013		Start 1-Apr-2013	End 9-Oct-2013	Midpoint 5-Jul-2013	Period(YRS) 2.76	Expend. 17215				Inflation Amt 697	Fully Funded 17912		
	Reach C			13	0	0	0	21496	15066	42.68	6430	21496	0	2036	16493	7039	23532	
				13	Expenditure Allocations FY2016		Start 1-Apr-2016	End 17-Oct-2016	Midpoint 9-Jul-2016	Period(YRS) 5.78	Expend. 21496				Inflation Amt 2036	Fully Funded 23532		
	Reach D			13	0	0	0	4207	2820	49.2	1387	4207	0	402	3089	1520	4609	
				13	Expenditure Allocations FY2016		Start 1-Apr-2016	End 23-Nov-2016	Midpoint 28-Jul-2016	Period(YRS) 5.83	Expend. 4207				Inflation Amt 402	Fully Funded 4609		
	Reach G			13	0	0	0	2823	2078	35.85	745	2823	0	215	2236	802	3038	
				13	Expenditure Allocations FY2015		Start 1-Apr-2015	End 2-Oct-2015	Midpoint 2-Jul-2015	Period(YRS) 4.75	Expend. 2823				Inflation Amt 215	Fully Funded 3038		
	Reach H			13	0	0	0	2881	2227	29.35	654	2881	0	171	2359	693	3052	
				13	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 2881				Inflation Amt 171	Fully Funded 3052		
	Reach I			13	0	0	0	1510	1195	26.4	315	1510	0	61	1243	328	1571	
				13	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 1510				Inflation Amt 61	Fully Funded 1571		
18	CULTURAL RESOURCES PRESERV.				0	0	0	6578	5660		918	6578	0	261	5885	954	6839	
30	PLANNING/ENGINEERING/DESIGN Reach A FEDERAL			A	84588	0	0	130834	125320	0	5514	130834	0	4773	129501	6106	135607	
				A	3961	0	0	14163	12946		1217	14163	0	670	13536	1297	14833	
				A	612	0	0	10814	9597	13.55	1217	10814	0	670	10187	1297	11484	
				A	Expenditure Allocations FY2009		Start 1-Oct-2008	End 1-Oct-2009	Midpoint 1-Apr-2009	Period(YRS) 0.00	Expend. 124				Inflation Amt 0	Fully Funded 124		
				A	FY2010 Projected Sunk Cost		Start 1-Oct-2009	End 1-Oct-2010	Midpoint 1-Apr-2010	Period(YRS) 0.00	Expend. 488				Inflation Amt 0	Fully Funded 488		
				A	FY2012		Start 1-Oct-2011	End 26-Oct-2013	Midpoint 13-Oct-2012	Period(YRS) 2.04	Expend. 10202				Inflation Amt 670	Fully Funded 10872		

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				SUNK COST AMOUNT (4)(\$K)	PREVIOUS COST EST (5)(\$K)	COST CHANGES		CURRENT				PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT		
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN-GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)			DIRECT COST (14)(\$K)	CONTIN-GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			C FY2006			1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	839			0	839		
			C FY2007			1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	1604			0	1604		
			C FY2008			1-Oct-2007	1-Oct-2009	30-Sep-2008	0.00	2457			0	2457		
			C FY2009			1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	3361			0	3361		
			C FY2010 Projected Sunk Cost			1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	541			0	541		
	Reach E FEDERAL		A 3982	0	0	9453	8579	874	9453	0	887	9325	1015	10340		
			A 532	0	0	6003	5129	19	6003	0	887	5875	1015	6890		
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A FY2009			1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	108			0	108		
			A FY2010 Projected Sunk Cost			1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	424			0	424		
			A FY2014			1-Oct-2013	3-Nov-2015	17-Oct-2014	4.05	5471			887	6358		
	NON-FEDERAL - Section 104		C 3450	0	0	3450	3450	0	3450	0	0	3450	0	3450		
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			C FY2007			1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	193			0	193		
			C FY2008			1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	1470			0	1470		
			C FY2009			1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1294			0	1294		
			C FY2010 Projected Sunk Cost			1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	493			0	493		
	Reach F FEDERAL		A 2740	0	0	7761	7159	602	7761	0	560	7652	669	8321		
			A 0	0	0	5021	4419	13.63	5021	0	560	4912	669	5581		
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A FY2013			1-Oct-2012	9-Oct-2014	5-Oct-2013	3.01	5021			560	5581		
	NON-FEDERAL - Section 104		C 2740	0	0	2740	2740	0	2740	0	0	2740	0	2740		
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			C FY2007			1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	98			0	98		
			C FY2008			1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	829			0	829		
			C FY2009			1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1116			0	1116		
			C FY2010 Projected Sunk Cost			1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	697			0	697		
	Reach G FEDERAL		A 0	0	0	3664	3215	449	3664	0	586	3730	520	4250		
			A 0	0	0	3664	3215	13.95	3664	0	586	3730	520	4250		
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A FY2014			1-Oct-2013	2-Oct-2015	1-Oct-2014	4.00	3664			586	4250		
	Reach H FEDERAL		A 4148	0	0	9482	8845	637	9482	0	612	9384	710	10094		
			A 725	0	0	6059	5422	13.55	6059	0	612	5961	710	6671		
			Expenditure Allocations			Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A FY2009			1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	147			0	147		
			A FY2010 Projected Sunk Cost			1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	578			0	578		
			A FY2013			1-Oct-2012	27-Nov-2014	29-Oct-2013	3.08	5334			612	5946		

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						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)			CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
	NON-FEDERAL - Section 104		C	3423	0	0	3423	3423	0	0	3423	0	0	3423		
			C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			C	FY2006		1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	3			0	3		
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	101			0	101		
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	1567			0	1567		
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1263			0	1263		
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	489			0	489		
	Reach I FEDERAL		A	2104	0	0	4148	3910		238	4148	0	131	4026	253	4279
			A	0	0	0	2044	1806	13.15	238	2044	0	131	1922	253	2175
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A	FY2012		1-Oct-2011	1-Oct-2013	30-Sep-2012	2.00	2044			131	2175		
	NON-FEDERAL - Section 104		C	2104	0	0	2104	2104	0	0	2104	0	0	2104	0	2104
			C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			C	FY2006		1-Oct-2005	1-Oct-2006	1-Apr-2006	0.00	29			0	29		
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	128			0	128		
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	354			0	354		
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	676			0	676		
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	917			0	917		
31	CONSTRUCTION MANAGEMENT Reach A		A	120851	0	0	152434	144745	0	7689	152434	0	4241	147897	8778	156675
			A	0	0	0	6288	4792	31.23	1496	6288	0	487	5163	1612	6775
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A	FY2013		2-Apr-2012	26-Oct-2013	13-Jan-2013	2.29	6288			487	6775		
	Reach B FEDERAL		A	36773	0	0	42935	41706		1229	42935	0	360	41996	1299	43295
			A	0	0	0	3383	2727	24.05	656	3383	0	337	2999	721	3720
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A	FY2013		1-Apr-2013	9-Oct-2013	5-Jul-2013	2.76	3383			337	3720		
	NON-FEDERAL - Section 104		C	36773	0	0	39552	38979	26	573	39552	0	23	38997	578	39575
			C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	4			0	4		
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	2			0	2		
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	2642			0	2642		
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	34125			0	34125		
			C	FY2011		1-Apr-2011	1-Oct-2011	1-Jul-2011	0.75	2779			23	2802		
	Reach C FEDERAL		A	36561	0	0	38353	37818		535	38353	0	452	38135	670	38805
			A	0	0	0	1792	1257	42.6	535	1792	0	452	1574	670	2244
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded		
			A	FY2016		1-Apr-2016	17-Oct-2016	9-Jul-2016	5.78	1792			452	2244		

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						AMOUNT (4)(\$K)	COST EST (5)(\$K)	COST CHANGES				CURRENT		EST (12)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
								PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)			DIRECT COST (8)(\$K)	CONT RATE (9)(%)				
	NON-FEDERAL - Section 104		C	36561	0	0	36561	36561	0	0	36561	0	36561	0	36561		
			C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	779			0	779			
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	2675			0	2675			
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	5587			0	5587			
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	27520			0	27520			
	Reach D FEDERAL		A	47517	0	0	48138	47940		198	48138	0	158	48047	249	48296	
			A	0	0	0	621	423	46.9	198	621	0	158	530	249	779	
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			A	FY2016		1-Apr-2016	23-Nov-2016	28-Jul-2016	5.83	621			158	779			
	NON-FEDERAL - Section 104		C	47517	0	0	47517	47517	0	0	47517	0	0	47517	0	47517	
			C	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			C	FY2007		1-Oct-2006	1-Oct-2007	1-Apr-2007	0.00	13395			0	13395			
			C	FY2008		1-Oct-2007	1-Oct-2008	1-Apr-2008	0.00	9061			0	9061			
			C	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	18143			0	18143			
			C	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	6918			0	6918			
	Reach E		A	0	0	0	4240	3065	38.32	1175	4240	0	850	3680	1410	5090	
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			A	FY2015		1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	4240			850	5090			
	Reach F		A	0	0	0	3887	2946	31.95	941	3887	0	576	3382	1081	4463	
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			A	FY2014		1-Apr-2014	9-Oct-2014	5-Jul-2014	3.76	3887			576	4463			
	Reach G		A	0	0	0	2939	2143	37.15	796	2939	0	582	2567	954	3521	
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			A	FY2015		1-Apr-2015	2-Oct-2015	2-Jul-2015	4.75	2939			582	3521			
	Reach H		A	0	0	0	4131	3131	31.95	1000	4131	0	625	3604	1152	4756	
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			A	FY2014		1-Apr-2014	27-Nov-2014	30-Jul-2014	3.83	4131			625	4756			
	Reach I		A	0	0	0	1523	1204	26.5	319	1523	0	151	1323	351	1674	
			A	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
			A	FY2013		1-Apr-2013	1-Oct-2013	1-Jul-2013	2.75	1523			151	1674			
	TOTAL COST (FEDERAL FUNDS & NON-FEDERAL CASH CONTRIBUTION)			298225	0	0	800692	685089		115603	800692	0	31594	709311	122975	832286	

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				SUNK COST AMOUNT (4)(\$K)	PREVIOUS COST EST (5)(\$K)	COST CHANGES		CURRENT			PREVIOUS 1-Oct-2009 EST (12)(\$K)	CHANGE IN INFLAT - ION (13)(\$K)	CURRENT				
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN-GENCY (10)(\$K)			COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN-GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)	
	Gas Line Relocation, Calpine Gas, at Garden Highway Contract 4046 May 2010 Sep 31 2010 FY10 Complete Underground Electrical Conduit for Street Light Contract 4046 May 2010 Sep 31 2010 FY10 Complete Relocate Street Light Contract 4046 May 2010 Sep 31 2010 FY10 Complete			2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	318			0	318			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	2			0	2			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	5			0	5			
				2	FY2013	1-Apr-2013	9-Oct-2013	5-Jul-2013	2.76	22309			904	23213			
	Reach C			2	5092	0	0	13151	10585	46.72	2566	13151	0	763	11105	2809	13914
				2	Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	603			0	603			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	32			0	32			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	129			0	129			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	514			0	514			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	789			0	789			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	262			0	262			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	14			0	14			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	833			0	833			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	6			0	6			
				2	FY2010 Projected Sunk Cost	1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	1910			0	1910			
				2	FY2016	1-Apr-2016	17-Oct-2016	9-Jul-2016	5.78	8059			763	8822			
	Reach D			2	2823	0	0	13900	10369	46.8	3531	13900	0	1060	11091	3869	14960
				2	Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	220			0	220			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	778			0	778			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	562			0	562			
				2	FY2009	1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	1263			0	1263			
				2	FY2016	1-Apr-2016	23-Nov-2016	28-Jul-2016	5.83	11077			1060	12137			
	Reach E			2	0	0	0	16050	11433	40.38	4617	16050	0	1233	12312	4971	17283
				2	Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
				2	FY2015	1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	16050			1233	17283			
	Reach F			2	0	0	0	15419	11584	33.11	3835	15419	0	897	12258	4058	16316
				2	Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
				2	FY2014	1-Apr-2014	9-Oct-2014	5-Jul-2014	3.76	15419			897	16316			
	Reach G			2	0	0	0	13290	9659	37.588	3631	13290	0	1010	10393	3907	14300
				2	Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			
				2	FY2015	1-Apr-2015	2-Oct-2015	2-Jul-2015	4.75	13290			1010	14300			
	Reach H			2	0	0	0	12996	9537	36.27	3459	12996	0	772	10103	3665	13768
					Expenditure Allocations	Start	End	Midpoint	Period(YRS)	Expend.			Inflation Amt	Fully Funded			

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						COST CHANGES		CURRENT				DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)		
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)						CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)
			2	FY2014		1-Apr-2014	27-Nov-2014	30-Jul-2014	3.83	12996			772	13768		
	Reach I		2	0	0	0	3,168	2501	26.68	667	3168	0	128	2602	694	3296
			2	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 3168			Inflation Amt 128	Fully Funded 3296		
	SECTION 104			281665	0	0	311069	305202		5867	311069	0	236	305391	5914	311305
30	PLANNING/ENGINEERING/DESIGN		2	8280	0	0	21630	18152		3478	21630	0	677	18645	3662	22307
	Reach A		2	3	0	0	2045	1631	25.41	414	2045	0	57	1677	425	2102
			2	Expenditure Allocations FY2010 Projected Sunk Cost FY2012		Start 1-Oct-2009 1-Oct-2011	End 1-Oct-2010 26-Oct-2013	Midpoint 1-Apr-2010 13-Oct-2012	Period(YRS) 0.00 2.04	Expend. 3 2042			Inflation Amt 0 57	Fully Funded 3 2099		
	Reach B		2	4090	0	0	5056	4869	24	187	5056	0	26	4890	192	5082
			2	Expenditure Allocations FY2008 FY2009 FY2010 Projected Sunk Cost FY2012		Start 1-Oct-2007 1-Oct-2008 1-Oct-2009 1-Oct-2011	End 1-Oct-2008 1-Oct-2009 1-Oct-2010 9-Oct-2013	Midpoint 1-Apr-2008 1-Apr-2009 1-Apr-2010 4-Oct-2012	Period(YRS) 0.00 0.00 0.00 2.01	Expend. 406 1444 2240 966			Inflation Amt 0 0 0 26	Fully Funded 406 1444 2240 992		
	Reach C		2	3896	0	0	4863	4555	46.8	308	4863	0	78	4608	333	4941
			2	Expenditure Allocations FY2006 FY2007 FY2008 FY2009 FY2010 Projected Sunk Cost FY2015		Start 1-Oct-2005 1-Oct-2006 1-Oct-2007 1-Oct-2008 1-Oct-2009 1-Oct-2014	End 1-Oct-2006 1-Oct-2007 1-Oct-2008 1-Oct-2009 1-Oct-2010 17-Oct-2016	Midpoint 1-Apr-2006 1-Apr-2007 1-Apr-2008 1-Apr-2009 1-Apr-2010 9-Oct-2015	Period(YRS) 0.00 0.00 0.00 0.00 0.00 5.03	Expend. 211 697 1073 1214 701 967			Inflation Amt 0 0 0 0 0 78	Fully Funded 211 697 1073 1214 701 1045		
	Reach D		2	272	0	0	1457	1080	46.7	377	1457	0	74	1130	401	1531
			2	Expenditure Allocations FY2009 FY2010 Projected Sunk Cost FY2014		Start 1-Oct-2008 1-Oct-2009 1-Oct-2013	End 1-Oct-2009 1-Oct-2010 2-Oct-2015	Midpoint 1-Apr-2009 1-Apr-2010 1-Oct-2014	Period(YRS) 0.00 0.00 4.00	Expend. 170 102 1185			Inflation Amt 0 0 74	Fully Funded 170 102 1259		
	Reach E		2	0	0	0	2408	1715	40.38	693	2408	0	152	1824	736	2560
			2	Expenditure Allocations FY2014		Start 1-Oct-2013	End 3-Nov-2015	Midpoint 17-Oct-2014	Period(YRS) 4.05	Expend. 2408			Inflation Amt 152	Fully Funded 2560		
	Reach F		2	0	0	0	1850	1390	33.1	460	1850	0	83	1452	481	1933
			2	Expenditure Allocations FY2013		Start 1-Oct-2012	End 9-Oct-2014	Midpoint 5-Oct-2013	Period(YRS) 3.01	Expend. 1850			Inflation Amt 83	Fully Funded 1933		

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						COST CHANGES		CURRENT				DIRECT COST (8)(\$K)	CONT RATE (9)(%)	CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)	DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)									
	Reach G		2	8	0	0	2001	1457	37.55	544	2001	0	125	1548	578	2126		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	8				0	8			
			2	FY2014		1-Oct-2013	2-Oct-2015	1-Oct-2014	4.00	1993				125	2118			
	Reach H		2	5	0	0	1564	1149	36.25	415	1564	0	72	1202	434	1636		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	5				0	5			
			2	FY2013		1-Oct-2012	27-Nov-2014	29-Oct-2013	3.08	1559				72	1631			
	Reach I		2	6	0	0	386	306	26.7	80	386	0	10	314	82	396		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	6				0	6			
			2	FY2012		1-Oct-2011	1-Oct-2013	30-Sep-2012	2.00	380				10	390			
31	CONSTRUCTION MANAGEMENT		2	560	0	0	8740	6593		2147	8740	0	520	6968	2292	9260		
	Reach A		2	0	0	0	1089	868	25.41	221	1089	0	35	896	228	1124		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2013		2-Apr-2012	26-Oct-2013	13-Jan-2013	2.29	1089				35	1124			
	Reach B		2	530	0	0	1046	946	24	100	1046	0	4	949	101	1050		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	74				0	74			
			2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	456				0	456			
			2	FY2011		1-Apr-2011	1-Oct-2011	1-Jul-2011	0.75	516				4	520			
	Reach C		2	30	0	0	675	470	46.7	205	675	0	61	511	225	736		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2009		1-Oct-2008	1-Oct-2009	1-Apr-2009	0.00	22				0	22			
			2	FY2010 Projected Sunk Cost		1-Oct-2009	1-Oct-2010	1-Apr-2010	0.00	8				0	8			
			2	FY2016		1-Apr-2016	17-Oct-2016	9-Jul-2016	5.78	645				61	706			
	Reach D		2	0	0	0	790	538	46.9	252	790	0	76	590	276	866		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2016		1-Apr-2016	23-Nov-2016	28-Jul-2016	5.83	790				76	866			
	Reach E		2	0	0	0	1284	915	40.3	369	1284	0	99	986	397	1383		
			2	Expenditure Allocations		Start	End	Midpoint	Period(YRS)	Expend.				Inflation Amt	Fully Funded			
			2	FY2015		1-Apr-2015	3-Nov-2015	18-Jul-2015	4.80	1284				99	1383			
	Reach F		2	0	0	0	1234	927	33.1	307	1234	0	72	981	325	1306		

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						COST CHANGES		CURRENT				DIRECT COST (14)(\$K)	CONTIN- GENCY (15)(\$K)	COST EST 12+6+7+13 (16)(\$K)		
						PRICE LEVEL (6)(\$K)	OTHER (SEE NOTE) (7)(\$K)	DIRECT COST (8)(\$K)	CONT RATE (9)(%)						CONTIN- GENCY (10)(\$K)	COST EST 5+6+7 (11)(\$K)
			2	Expenditure Allocations FY2014		Start 1-Apr-2014	End 9-Oct-2014	Midpoint 5-Jul-2014	Period(YRS) 3.76	Expend. 1234			Inflation Amt 72	Fully Funded 1306		
	Reach G		2	0	0	0	1329	966	37.6	363	1329	0	101	1039	391	1430
			2	Expenditure Allocations FY2015		Start 1-Apr-2015	End 2-Oct-2015	Midpoint 2-Jul-2015	Period(YRS) 4.75	Expend. 1329			Inflation Amt 101	Fully Funded 1430		
	Reach H		2	0	0	0	1040	763	36.3	277	1040	0	62	809	293	1102
			2	Expenditure Allocations FY2014		Start 1-Apr-2014	End 27-Nov-2014	Midpoint 30-Jul-2014	Period(YRS) 3.83	Expend. 1040			Inflation Amt 62	Fully Funded 1102		
	Reach I		2	0	0	0	253	200	26.8	53	253	0	10	207	56	263
			2	Expenditure Allocations FY2013		Start 1-Apr-2013	End 1-Oct-2013	Midpoint 1-Jul-2013	Period(YRS) 2.75	Expend. 253			Inflation Amt 10	Fully Funded 263		
	TOTAL NON-FEDERAL LERRD			310001	0	0	674477	583693		90784	674477	0	17942	596904	95515	692419
	NON-FEDERAL CASH CONTRIBUTION (+)			14547	0	29	87654	73350		14333	87683	0	3200	75769	15114	90883
	NED Construction Share			3077	0	29	55249	45741		9537	55278	0	2340	47521	10097	57618
	Cost Above NED			11470	0	0	32405	27609		4796	32405	0	860	28248	5017	33265
	SECTION 104 (-), Remaining Allowable			27691	0	0	255820	259461		-3641	255820	0	-2118	257870	-4168	253702
	TOTAL NON-FEDERAL COST			296857	0	29	506311	397582		108758	506340	0	23260	414803	114797	529600
	TOTAL LPP COST			326561	0	0	1164100	963580		200520	1164100	0	49300	1000824	212576	1213400

BASIS OF ESTIMATE:

- (1) Cultural Resources Preservation costs associated with mitigation and/or data recovery up to one percent of the total Federal cost are not subject to cost sharing.
- (2) Federal administrative costs for Non-federal land acquisition
- (3) The Fully Funded cost estimate was prepared in compliance with OMB INDEXES EC-11-2-199, published on MAR. 31, 2010..
- (4) CWCCIS indexes from 10/01/2009 to 10/01/2010, are projected rates for Lands and Constructions. OMB escalation rates are actual for PED & CM and Real Estate Admin.