Appendix C

Budget Summary

Final 2012 Monitoring and Analysis Plan

SAN JOAQUIN RIVER
RESTORATION PROGRAM

November 2011

San Joaquin River Restoration Program
2012 Monitoring and Analysis Plan
Budget Summary

2012				
MAP App. A Section	**Title**	**PI**	**Budget**	**Notes**
2	Historical and Water Year 2010-2011 Flow Gage Record Analysis	Katrina Harrison, Reclamation		Proposals 2-8 funded separately by contracts not yet awarded.
3	Flow Travel Time from Friant Dam and Tributaries to Gravelly Ford	Katrina Harrison, Reclamation		
4	Lateral Gradient of Water Table	Katrina Harrison, Reclamation		
5	Terrain Comparison Between Wells and Fields	Katrina Harrison, Reclamation		
6	Changes in Salinity Conditions Resulting from Interim Flows	Katrina Harrison, Reclamation		
7	Flow Restrictions Due to Seasonal Groundwater Conditions	Katrina Harrison, Reclamation		
8	Monitoring Well Network Optimization	Katrina Harrison, Reclamation		
9	Vegetation Monitoring	Greg Reed, Reclamation	$75,876	
10	Elderberry Mapping	Erin Rice, Reclamation	$130,000	includes funding for pilot veg mapping effort
11	Water quality and fish 2011	Marissa Bauer, USGS		Funded outside MAP process.
12	Adult Passage – Non-structural passage impediments	Marissa Bauer, USGS		
13	Benthic Macroinvertebrate Bioassessment Study	Abimael Leon, DWR		State contribution.
14	Refining Fall-run Collection Techniques	Zac Jackson, USFWS	$299,847.20	
15	Egg Survival (Year 2)	Michelle Workman, USFWS	$75,286.10	
16	Fish Assemblage Inventory and Monitoring	Michelle Workman, USFWS Don Portz, Reclamation	$458,465.00	
17	Juvenile Salmonid Migration and Survival (Year 2)	Michelle Workman, USFWS	$216,565.32	
18	Assessment of Predator Abundance and Distribution in Mine Pit Habitat in the San Joaquin River Restorat	Michelle Workman, USFWS	$254,153.10	
19	Captive Rearing Study	Paul Adelizi, DFG		State contribution.
20	Ecosystems Diagnosis and Treatment Model	Dave Mooney, Reclamation		Cost estimate cannot be released until contract is awarded.
21	Evaluation of Law Enforcement Needs and Regulatory Changes to Limit Harvest	Eric Guzman, DFG		Funding discussions between DFG and Reclamation ongoing.
22	Fisheries Models of Site Specific Projects	Carl Mesick, UFSWS		Cost estimate cannot be released until contract is awarded.
23	Temperature Monitoring of the Cold Water Pool in Millerton Lake	Tracy Vermeyen, Reclamation	$70,000	Based on 2011 budget.
24	Monitoring Spawning and Holding Quality and Quantity	Eric Guzman, DFG		State contribution.
25	Pilot Gravel Augmentation Study	Michelle Workman, USFWS		Cost estimate cannot be released until contract is awarded.
26	Temperature Monitoring for Adult Migration	Eric Guzman, DFG		State contribution.
27	Genetic Analyses of Source Stocks, Broodstock, and In-river Population	Margarita Gordus, DFG		State contribution through June 2012. Unfunded need after June 2012.Funding discussions between DFG and Reclamation ongoing.
28	DWR-01H: Water Surface Profile Surveys	Dave Encinas, DWR		State contribution.
29	DWR-02H: Water Level Recorder Data Collection and Relocation Needs	Dave Encinas, DWR		State contribution.
30	DWR-03C Monitoring Cross-Section Survey and Analysis	Dave Encinas, DWR		State contribution.
31	DWR-06C: Reach 1 Sand Storage Monitoring	Dave Encinas, DWR		State contribution.
32	DWR-07C: Reach 2A Channel Response	Dave Encinas, DWR		State contribution.

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33	DWR-08G: Reach 1A Spawning Area Gravel Mobility	Matthew Meyers, DWR		State contribution.
34	DWR-09G: Scour and Fine Sediment Effects on Incubation Habitat in Reach 1A	Matthew Meyers, DWR		State contribution.
35	DWR-10G: Effect of Altered Flow Regime on Channel Morphology in Reach 1A	Matthew Meyers, DWR		State contribution.
36	DWR-11G: Reach 1A Spawning Area Gravel Mobility Improvement	Matthew Meyers, DWR		State contribution.
37	DWR-12G: Reach 1A Spawning Habitat Quantity	Matthew Meyers, DWR		State contribution.
38	Monitor Intragravel Dissolved Oxygen Concentrations in the San Joaquin River (Egg Survival)	S. Mark Nelson, Reclamation	$34,028	
39	Hills Ferry Barrier Evaluation	Don Portz, Reclamation	$218,547	
40	San Joaquin River Basin-wide PIT Tag Monitoring Program Evaluation and Site-specific Technology Asses	Don Portz, Reclamation	$52,452	
41	Synthesis and Review of Predator Impacts at Fish Screening and Passage Structures	Norm Ponferrada, Reclamation	$20,848	
42	Central Valley Steelhead (Oncorhynchus mykiss) Monitoring Plan for the San Joaquin River Restoration P	Don Portz, Reclamation	$377,199	
43	Minimum Floodplain Requirements	Norm Ponferrada, Reclamation	$235,751	
44	2D Hydraulic Habitat Modeling	Elaina Gordon, Reclamation		May be funded through already allocated 2011 funding or require additional funding depending on level of effort for 2012.
45	Bed Material Data Collection	Elaina Gordon, Reclamation	$31,854	
46	San Joaquin River Tributary Sediment Transport and Geomorphology Study	Scott Wright, USGS	$87,571	
47	USGS Sediment Monitoring	Al Caldwell, USGS	$245,850	Based on FY11 total.
48	2D Temp Modeling of Gravel Pits in Reach 1A	Elaina Gordon, Reclamation	$30,612	
49	Fish Passage Evaluation	Amanda Peisch-Derby, DWR		State contribution.
50	Water Quality	Chris Eacock, Reclamation	$323,600	Based on FY11 total.
51	Monitor and Manage Invasive Plants	Magill Weber, The Nature Conservancy	$2,000,000	Funded outside MAP process through a grant between Reclamation and the San Joaquin River Parkway and Conservation Trust.
52	High-flow sediment monitoring	Erin Rice, Reclamation		Cost estimate cannot be released until contract is awarded.
53	High-flow Aerials	Erin Rice, Reclamation		Cost estimate cannot be released until contract is awarded.
		Total identified MAP funding needs:	**$3,238,505**	