

## Work Plan for Fiscal Year 2004

I. Program Title. Comprehensive Assessment & Monitoring Program CVPIA Section 3406(b)(16)

II. Responsible Entities.

	Agency	Staff Name	Role
Lead	FWS	Andrew Hamilton	Program Manager
Co-Lead	USBR	Ken Lentz	Reclamation Coordinator

III. Program Objectives for FY 2004.

The Comprehensive Assessment and Monitoring Program (CAMP) is intended as the vehicle for comprehensively assessing the effects of all CVPIA fishery actions under Section 3406(b)(16). The program has two objectives:

A. Assess the overall effectiveness of actions implemented under CVPIA Section 3406(b)(16).

B. Assess the effectiveness of individual CVPIA Section 3406(b)(16) actions.

IV. Status of the Program.

In the past, the Comprehensive Assessment and Monitoring Program has funded a variety of California Department of Fish and Game (CDFG) monitoring efforts, including the summer Delta tow-net survey, elements of the adult striped bass monitoring program, and juvenile migration monitoring on the Yuba, Merced, and Tuolumne rivers. CAMP budget cuts eliminated this funding in Fiscal Year 2003.

In past years, CAMP partially funded the Interagency Ecological Program (IEP) database and a CAMP internet homepage on the California Department of Fish and Game (CDFG) server in Stockton. These two elements of CAMP were dropped because of budget limitations in Fiscal Year 2003.

CAMP has funded a Central Valley angler survey, which estimates inland catch of chinook salmon and steelhead. Along with spawning population surveys and ocean catch estimates, the survey is a necessary component of credible salmonid stock monitoring. CAMP has been the major source of funding for the angler survey in the past few years. Recent cuts in CAMP funds have reduced the survey area from the entire Central Valley to the upper main-stem of the Sacramento River.

Annual reports on anadromous salmonid adult production and salmon juvenile migration have been prepared after escapement data are approved by the CDFG, which usually occurs one or two years after data are collected. A report on 2001 and 2002 data is scheduled for completion in December, 2003.

V. FY 2003 Accomplishments.

Partial-season field data were collected by the Central Valley angler survey because CDFG could not hire seasonal workers after the early summer of 2003. Interior and CDFG are working together to summarize results from the truncated study.

As noted above, the 2003 CAMP annual report, covering 2001 and 2002 fishery data, is in preparation and scheduled for completion in December, 2003.

VI. Tasks, Costs, Schedules and Deliverables.

A. Narrative Explanation of Tasks.

1. Program Management: The Fish and Wildlife Service is responsible for arranging monitoring and assessment activities and contracts, overseeing contracts, and determining program direction. The Bureau of Reclamation participates in program planning and oversight.
2. Angler Survey: The Service will cooperate with the CDFG in finishing the report on 2003 data.
3. Assessment of 3406(b)(16) actions and Annual Report: In FY 2004, the Fish and Wildlife Service will continue evaluation of projects to accomplish Objective B. This will be primarily a data compilation and assessment effort, using ongoing project-specific and general monitoring to assess the progress of 3406(b)(16) actions. The annual report will continue to include adult production estimates and results of emigration monitoring.
4. Field evaluations and monitoring: Selected sites along the lower American River will be regularly sampled throughout the year to provide timely information on the effects of Folsom Dam operations, and to provide baseline and ongoing restoration monitoring. Additional restoration projects will be sampled on an ad-hoc basis.

Additional Funding Needs

To fully meet the requirements of Section 3406(b)(16) and comprehensively assess the biological results of 3406(b)(16) actions, CAMP needs higher funding than current levels, and a number of other programs need reliable funding.

To fulfill the basic requirement of assessing trends in adult fish production, California Department of Fish and Game escapement survey programs must be kept whole, a substantial proportion of hatchery production must be marked, and the inland catch must be monitored, as with a creel surveys. Creel surveys have been terminated by reductions in CAMP funding, and a current limitation on CDFG hiring has curtailed most 2003-2004 anadromous fish monitoring efforts. The creel survey and a long-term hatchery marking program are necessary for CAMP, and given additional funding, would be a high priority for this program.

Additional needs include pre-project and post-project monitoring of restoration actions; evaluation of fish screen effectiveness; on-site assessment of habitat manipulations, riparian land acquisitions, operations modifications, and other actions intended to increase production or reduce mortalities of juvenile fish. These studies should be carried out by persons other than project proponents, whether as project costs or CAMP costs. Such studies are necessary to determine the effectiveness of specific restoration efforts, and would thus be a high priority if additional funding were available.

CAMP requires working chinook salmon life-history models for streams throughout the Central Valley to analyze the effects of various restoration measures on population size and health.

Basic elements of the life-history of Central Valley salmonids are unknown. An example is the biology of the chinook salmon's rearing and migration in the Sacramento River. If additional funding were available, the reaches between the upper river and the Delta would be sampled, and the emigration sampling program in the upper river at Ball's Ferry would be reinstated. Absent such sampling, salmon biology in 150 miles of river will remain unknown.

In summary, additional funding would be used to assess our progress towards the sustainable doubling of anadromous fish populations. The current state of CAMP can only provide brief, periodic glimpses into fish populations within limited stretches of select rivers, and the relative progress of individual restoration projects can only be qualitatively assessed. Additional funding would be used to create a comprehensive monitoring program necessary for CAMP to adequately carry out its mandate under CVPIA.

**B. Schedule and Deliverables.**

#	Task	Dates		Deliverable
		Start	Complete	
1.1	Program Management (FWS)	10/01/03	09/30/04	Revised FY03 Annual Work Plan. Draft FY04 Annual Work Plan. All contracts/agreements in place for activities in the Annual Work Plan. All activities in FY03 Annual Work Plan completed.
1.2	Program Management (USBR)	10/01/03	09/30/04	All activities assigned to USBR staff in FY03 Annual Work Plan completed as scheduled. Perform as Program Manager when necessary
2	Angler Survey	10/01/03	09/30/04	Complete 2003 annual survey.
3	Reporting and Actions Assessment	10/10/03	9/30/04	Prepare 2004 report
4	American River Monitoring	10/1/03	9/30/04	Complete surveys and report

**C. Summary of Program Costs and Funding Sources.**

#	Task	Total Cost	Funding Sources			
			RF	W&RR	Prop 204	CDFG
1.1	Program Management (FWS)	\$37,875	\$37,875	\$0	\$0	\$0
1.2	Program Management (USBR)	5,000	5,000	\$0	\$0	\$0
2	Angler Survey (FWS)	5,000	5,000	\$0	\$0	\$0
3	Reporting and Actions Assessment	167,775	167,775	\$0	\$0	\$0
4	American River Monitoring	52,350	52,350	\$0	\$0	\$0
<b>Total Program Budget</b>		<b>\$268,000</b>	<b>\$268,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**D. CVPIA Program Budget.**

<b>#</b>	<b>Task</b>	<b>FTE</b>	<b>Direct Salary and Benefits Cost</b>	<b>Contract Costs</b>	<b>Misc Costs</b>	<b>Administrative Costs</b>	<b>Total Costs</b>
1.1	Program Management (FWS)	0.25	\$32,098	\$0	\$0	\$5,777	\$37,875
1.2	Program Management (BOR)	0.0	\$5,000	\$0	\$0		\$5,000
2	Angler Survey (FWS)	0.0	\$4,237	\$0	\$0	\$763	\$5,000
3	Reporting and Actions Assessment	0.8	\$100,000	\$47,631	\$0	\$20,144	\$167,775
4	American River Monitoring Surveying	0.0		\$50,095	\$0	\$2,255	\$52,350
Total by Category			<b>\$141,335</b>	<b>\$97,726</b>		<b>\$28,939</b>	<b>\$268,000</b>

VII. Future Years Commitments/Actions  
 CAMP reports will continue to be prepared.