## Work Task G4: Science/Adaptive Management Strategy

FY08 Estimates	FY08 Actual	Cumulative Accomplishment Through FY08	FY09 Approved Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate
\$20,000	\$8,485.07	\$151,904.07	\$50,000	\$50,000	\$50,000	\$50,000

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## Start Date: FY06

## **Expected Duration:** FY55

**Long-term Goal:** Ensure successful and efficient implementation of the LCR MSCP conservation measures.

**Conservation Measures:** All conservation measures dealing with habitat creation, species research, system monitoring, and fish augmentation.

Location: LCR MSCP planning area.

**Purpose:** Define the process for implementing the LCR MSCP using the best available science and adaptive management processes.

Connections with Other Work Tasks (past and future): All science-based work tasks.

**Project Description:** The HCP conservation measures were designed to meet the biological needs for 26 covered species and to benefit 5 evaluation species. A science strategy, developed in FY06, defines processes for ensuring LCR MSCP implementation using the best available science. This strategy describes a two-tier planning process to ensure effective implementation of research and monitoring actions: first, a 5-year planning cycle, and second, annual work plans covering a 3-year cycle.

**Five-year Monitoring and Research Priority:** Every 5 years, a plan will be developed that describes the current knowledge for covered species; establishes the monitoring and research priorities for that five-year period; and describes potential challenges that may inhibit successful implementation of the conservation measures. During each 5-year cycle, the accumulated data from ongoing research and monitoring will be reviewed, along with existing "species accounts". Highest priority for the next 5-year period will go to completion of any "ongoing" research and monitoring activities. Second priority will be given to new research and monitoring needs identified by ongoing work, and third priority goes to refine and update life history data sets. Additional work may be generated from evaluations of various research through Work Task G3.

LCR MSCP staff will participate in interagency meetings and workshops held to discuss natural resource conservation along the LCR. These meetings bring together scientists, managers, and resource users intersted in the lower Colorado River ecosystem.

Additional special topic workshops will be held for covered species or their habitats as needed to revisit the status of one or more of these species within the LCR MSCP program area.

**Annual Work Plan Report:** An annual work plan report which summarizes prior year accomplishments, describes current year ongoing activities, and outlines the proposed activities for the coming fiscal year will be developed and presented to the Steering Committee each year. Recently completed, ongoing, and proposed research and monitoring activities will be reviewed as they relate to the current 5-year monitoring and research priority plan.

**Previous Activities:** The Science Strategy was developed in FY06/FY07. The first Colorado River Terrestrial and Riparian Ecosystem (CRITER) meeting was held in January 2006. (Staff also attended the 2007 CRITER meeting.) LCR MSCP fishery staff participated in the 2006 and 2007 annual Colorado River Aquatic Biologists (CRAB) meetings. The first "Five-year Monitoring and Research Priority" was drafted in FY07. A "Fish Culture Workshop" was held in Mesa, Arizona and hosted by LCR MSCP.

**FY08 Accomplishments:** The *Five-year Monitoring and Research Priorities for FY08-12* was finalized and placed on the website. CRITER and CRAB meetings were attended. Ongoing research and monitoring actions were reviewed through the annual work plan report. A bat monitoring workshop was held discussing the use of Anabats. The Lake Mohave Native Fish Work Group meeting was hosted by LCR MSCP fishery staff.

**FY09 Activities:** Research activities are being reviewed in accordance with the priorities established in the current 5-year plan. Annual CRITER and CRAB meetings will be hosted, as well as the Lake Mohave Native Fish Work Group. A new "LCR MSCP Fishery Coordination Team" will convene to discuss status of RASU and BONY and to identify focus areas for future research and monitoring for these fishes. A new "Lake Mead Native Fish Work Group is being formed to review ongoing research and monitoring of RASU in Lake Mead and provide guidance for future work.

**Proposed FY10 Activities:** Research activities are being reviewed in accordance with the priorities established in the current 5-year plan. LCR MSCP staff will participate in the annual CRITER and CRAB meetings, as well as the various native fish work group meetings. Fishery research proposals, ideas, and suggestions from the "LCR MSCP Fishery Coordination Team" will be developed into study plans to effect research on RASU and BONY to be released in FY11-15 under the accelerated phase of the Fish Augmentation Program. Species Accounts will be reviewed and updated as ongoing research is completed. Annual work plan reported will be developed.

**Pertinent Reports:** *Final Science Strategy,* and *Five YearResearch and Monitoring Priorities*—*FY08-12,* posted on the LCR MSCP Web site.