## Work Task G4: Science/Adaptive Management Strategy

FY10 Estimates	FY10 Actual	Cumulative Accomplishment Through FY10	FY11 Approved Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate
\$50,000	\$33,414.42	\$218,737.81	\$125,000	\$125,000	\$150,000	\$200,000

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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.

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 needs identified by ongoing work, and third priority will be given to refining and updating life history data sets. Additional work may be generated from evaluations of various research through 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 interested 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.

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 and 2008 CRITER meetings). Fishery staff from the LCR MSCP participated in the 2006, 2007, and 2008 annual Colorado River Aquatic Biologists (CRAB) meetings. The first *Five-Year Monitoring and Research Priorities* report was drafted in FY07. A Fish Culture Workshop, hosted by the LCR MSCP, was held in Mesa, Arizona.

CRITER and CRAB meetings were attended. Ongoing research and monitoring actions were reviewed through the annual work plan report. The Lake Mohave Native Fish Work Group meeting was hosted by LCR MSCP fishery staff. A new Lake Mead Native Fish Work Group was established to gain support for RASU conservation in Reach 1. A new LCR MSCP Fishery Coordination meeting was convened to discuss status of RASU and BONY and identify focus areas for future research and monitoring for these fishes.

**FY10 Accomplishments:** Research activities were reviewed in accordance with the priorities established in the current 5-year plan. The annual CRITER meeting was hosted and the CRAB and Lake Mohave Native Fish Work Group meetings were attended. Presentations were made to Upper Colorado River Recovery Implementation Program, Arizona/New Mexico Chapter of American Fisheries Society, and the San Juan River Recovery and Implementation Program. A procedure for tracking conservation measure accomplishment pertaining to habitat creation was drafted.

**FY11 Activities:** Research activities are being reviewed in accordance with the priorities established in the current 5-year plan. The 2013-2017 Research and Monitoring Accomplishment and Priorities Report, and the Big Bend and Beal Lake Conservation Area Management Plans are being initiated.

**Proposed FY12 Activities:** Research activities are being reviewed and evaluated in accordance with the priorities established in the current 5-year plan. Management plans for existing Conservation Areas will be initiated.

**Pertinent Reports:** *Final Science Strategy,* and *MSCP Five-Year Monitoring & Research Priorities -- 2008-2012,* are posted on the LCR MSCP website.