Work Task G4: Science/Adaptive Management Strategy

FY09 Estimates	FY09 Actual	Cumulative Accomplishment Through FY09	FY10 Approved Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate
$50,000	$33,419.32	$185,323.39	$50,000	$125,000	$125,000	$125,000

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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: The entire LCR MSCP planning area.

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

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 three-year cycle. Adaptive management activities will be identified and implemented, including defining the habitat credit process and creating management plans for implemented conservation areas.

Five-year Monitoring and Research Priority: Every five 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 five-year cycle, the accumulated data from ongoing research and monitoring will be reviewed, along with existing species accounts. Highest priority for the next five-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 will be given to refining and updating life history data sets. Additional work may be generated from evaluations of various research projects 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.

Annual Work Plan Report: An annual work plan report, which summarizes prior year accomplishments, describes ongoing activities for the current year, 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 five-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). Fishery staff from the LCR MSCP participated in the 2006 and 2007 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.

FY09 Accomplishments: 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 Activities: Research activities are being reviewed in accordance with the priorities established in the current five-year plan. Annual CRITER and CRAB meetings will be hosted, as well as the Lake Mohave Native Fish Work Group. Presentations are being made to the Upper Colorado River Endangered Fish Recovery Program, the Arizona/New Mexico Chapter of the American Fisheries Society, and the San Juan River Basin Recovery Implementation Program.

A new staff position, Adaptive Management Specialist, will be filled to develop habitat credit procedures, track conservation measure accomplishment, and revise and update the science strategy. Management plans will be developed for existing conservation areas in cooperation with landowners. Habitat credit procedures are being developed to track conservation measure accomplishment.

Proposed FY11 Activities: Research activities are being reviewed in accordance with the priorities established in the current five-year plan. LCR MSCP staff will participate in the annual CRITER and CRAB meetings, as well as the various native fish work group meetings. Management plans will be developed for existing conservation areas in cooperation with landowners. Conservation measure accomplishment will be determined.

The LCR MSCP will begin Phase 2 in FY11. Funding increases for this work task will support the position of the Adaptive Management Specialist, who will assess accomplishments of Phase 1, formalize habitat credit procedures, update the science strategy, and track conservation measure accomplishments.

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