

Work Task C12: Demographics and Post Stocking Survival of Repatriated Razorback Suckers in Lake Mohave

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved Estimate	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
\$0	\$0	\$0	\$185,000	\$185,000	\$185,000	\$ 60,000

Contact: Tom Burke, (702) 293-8711

Start Date: FY06 **Expected Duration:** FY09

Long-Term Goal: Species Research

Conservation Measures: RASU5

Location: Reach 2, Lake Mohave, AZ/NV

Purpose: Assess population structure for repatriated RASU and develop population demographic model to predict survival rate and replacement rate in order to maintain broodstock over life of LCR MSCP.

Connections with Other Work Tasks (past and future): None.

Project Description: This activity will support ongoing RASU conservation efforts at Lake Mohave to develop and maintain a population of 50,000 adult RASU as a genetic refuge. Over 100,000 fish have been reared and repatriated to date, yet brood stock population estimates remain below 5,000 fish. This Work Task initiates a three-year study to assess the cause of this low population survival. The study will determine whether this low population estimate is real or a result of monitoring techniques used. If the population estimate is real, the study will assess causes for such poor survival of stocked RASU and make recommendations for corrective actions.

Extensive radio and sonic tracking of fish will be used to assess distribution and survival. Demographic modeling will be used to assess population structure. The study is designed as a multi-year, iterative process. Observations and conclusions from first year activities will provide direction for work in subsequent years.

FY05 Activities: This is a new start in FY06.

FY06 Activities: This work is being conducted by ASU. Work this year includes: review of rearing, stocking and recapture data for RASU stocked into Lake Mohave since 1992; conducting field investigations during spawning and post-spawning seasons to assess distribution; conducting radio and sonic telemetry work on RASU; and to begin ecological modeling of population data to assess data inferences.

Proposed FY07 Activities: FY07 will be the second year of a three-year study. Field investigations from the previous year will continue, as will demographic modeling activities. Stocking of RASU from Willow Beach NFH (B2) that have attained 500 mm will be coordinated with ASU field staff to maximize observations of dispersal and survival.

Pertinent Report: Annual report to be posted to LCR MSCP website. Study plan is available upon request.