

## Work Task B1: Lake Mohave Razorback Sucker Larvae Collections

FY10 Estimates	FY10 Actual	Cumulative Accomplishment Through FY10	FY11 Approved Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate
\$200,000	\$234,965.09	\$1,251,286.54	\$200,000	\$200,000	\$200,000	\$200,000

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**Start Date:** FY04

**Expected Duration:** FY55

**Long-term Goal:** Fish augmentation.

**Conservation Measures:** RASU3, RASU5, and RASU8.

**Location:** Reach 2, Lake Mohave, Arizona/Nevada.

**Purpose:** Develop the RASU broodstock in Lake Mohave, maintain the broodstock, and harvest offspring for rearing as needed to accomplish the LCR MSCP Fish Augmentation Program.

**Connections with Other Work Tasks (past and future):** Work tasks B2, B4, B5, B6, and B7 are related to this work task, as the RASU to be reared under these work tasks originate from Lake Mohave.

**Project Description:** The RASU broodstock in Lake Mohave provide a level of genetic diversity found nowhere else in the world. This project captures wild-born RASU larvae from Lake Mohave, and delivers them to Willow Beach NFH for initial rearing. Work includes helicopter surveys every two weeks to locate spawning groups, night-time larvae collection, and maintaining the boat fleet and field station at Cottonwood Cove. These larvae are captured one at a time, making this a labor-intensive program. Hence, most expenditures are for salary, travel, and fuel.

**Previous Activities:** This work is part of a program started by the Native fish Work Group (NFWG) in 1989 to rebuild the adult stock of RASU in Lake Mohave so that these fish could be used as brood fish for RASU recovery. A portion of the larvae collected are used to sustain broodstock and the remaining larvae are reared for release into reaches 3-5 to accomplish augmentation goals of the program.

**FY10 Accomplishments:** Thirty-three thousand eight hundred and eighty-nine (33,889) wild larvae were collected from four areas. The contribution of larvae from each zone of Lake Mohave by month of capture is presented in Table 1.

**Table 1. Larval RASU Collected from Lake Mohave, 2010**

	January	February	March	April	May	Total
Nine Mile	0	3,000	4,600	494	0	8,094
Tequila	0	2,850	5,250	3,970	0	12,070
Yuma	0	3,000	4,908	753	0	8,661
AOP	0	0	1,224	3,840	0	5,064
<b>Total</b>	0	8,850	15,982	9,057	0	<b>33,889</b>

Subsamples from each zone and for each month were preserved and provided to Arizona State University for genetic analyses. The sampling effort for the lowermost portion of Lake Mohave was not accomplished in FY10 because all efforts were focused on obtaining the annual goal. This sampling effort will be accomplished in FY 11. A status report was posted to the LCR MSCP website.

**FY11 Activities:** A target of 30,000 larvae has been established for 2011. Of the 30,000 larvae that will be delivered to Willow Beach NFH, up to 5000 of these will be transferred to NDOW's Lake Mead Hatchery. In addition to the four lake zones shown in Table 1, a survey will be conducted in the lowermost portion of Lake Mohave to search for additional new spawning sites. If spawning groups are located, attempts will be made to capture larvae from these areas.

**Proposed FY12 Activities:** RASU larval collections will continue. The target level for FY12 is 25,000 to 30,000 larvae.

**Pertinent Reports:** A status report titled, *Five-Year Summary of Razorback Sucker (Xyrauchen texanus) Larval Collections on Lake Mohave: 2005-2009*, will be posted on the LCR MSCP website.