

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

FY12 Estimate	FY12 Actual Obligations	Cumulative Expenditures Through FY12	FY13 Approved Estimate	FY14 Proposed Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate
\$200,000	\$203,360.50	\$1,619,981.56	\$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 maintenance of 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.

Work normally commences in January and extends into April. Equipment is delivered to and staged at Cottonwood Cove, where a field station is established. The lake's shoreline is surveyed by helicopter, and locations of spawning aggregations of RASU are recorded. Crews of two to four staff meet at the field stations at sunset, gather batteries, lights, dip nets, and buckets, and set out by boat to the spawning areas. Razorback sucker larvae attracted to submerged lights suspended from the boat are captured by net and are counted. Crews return to the field station, label buckets of larvae, record their capture success and location, place batteries back on chargers, clean and stow other gear, and place air stones in buckets to maintain adequate oxygen levels. The next morning the larvae are transferred to Willow Beach NFH by either boat or vehicle, where they are logged in as to date received, number collected, and location. This work is repeated 4 to 6 nights per week through mid- to late April.

**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.

**FY12 Accomplishments:** Twenty-five thousand and three (25,003) wild larvae were collected from four areas. The contribution of larvae from each zone of Lake Mohave by month of capture is presented in the following table.

**Larval RASU Collected from Lake Mohave, 2012**

	January	February	March	April	May	Total
<b>Nine Mile</b>	0	2,630	4,169	0	0	6,799
<b>Tequila</b>	250	2,850	4,962	677	0	8,739
<b>Yuma</b>	500	2,750	3,487	225	0	6,962
<b>AOP</b>	0	0	638	1,865	0	2503
<b>Total</b>	<b>750</b>	<b>8,230</b>	<b>13,256</b>	<b>2,766</b>	<b>0</b>	<b>25,003</b>

**FY13 Activities:** A target of 25,000 larvae was established at the Lake Mohave Native Fish Work Group meeting. These larvae will be delivered to Willow Beach NFH for rearing.

**Proposed FY14 Activities:** RASU larvae collections will continue. The target level for FY14 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*, is posted on the LCR MSCP website. A summary report for 2010-2014 will be posted on the website.