

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

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved Estimate	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
\$175,000	\$143,000	\$201,823	\$225,000	\$200,000	\$200,000	\$200,000

**Contact:** Tom Burke, (702) 293-8711

**Start Date:** FY04 **Expected Duration:** FY55

**Long-Term Goal:** Develop and maintain razorback sucker broodstock and provide fish for augmentation program.

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

**Location:** Reach 2, Lake Mohave, AZ/NV

**Purpose:** To develop the razorback sucker (RASU) broodstock in Lake Mohave, maintain that broodstock, and harvest offspring for rearing as needed to accomplish the LCR MSCP Fish Augmentation Program.

**Connections with Other Work Tasks (past and future):** This Work Task was previously included in the FY04 Work Task as Electro-Fishing Boat Procurement (A3). 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 as Lake Mohave larvae.

**Project Description:** The RASU broodstock in Lake Mohave represent the remaining genomes for RASU and 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. Target capture is 60,000 to 75,000 larvae annually. Work includes biweekly helicopter surveys to locate spawning groups; nighttime 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.

Work normally commences in mid to late January. 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 station 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 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 four to six 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. The goal of the NFWG was to develop a population of 50,000 adult RASU. Various rearing techniques were tried between 1991 and 1993; in 1994 it was determined that capture of wild larvae from the lake and rearing them in captivity offered the best chance to successfully complete the program.

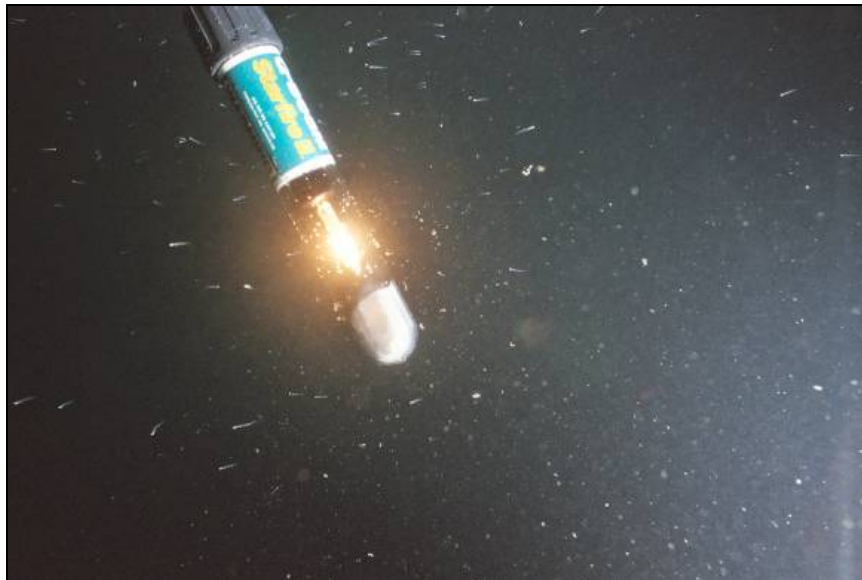
**FY05 Accomplishments:** Sixty thousand five hundred twelve (60,512) RASU larvae were captured from four areas of the lake: Nine Mile (30 percent), Tequila Cove (45 percent), Yuma Cove (24 percent), and Above Owl Point (1 percent).

**TABLE B1:** Distribution of the 60,512 wild razorback sucker larvae captured from Lake Mohave during 2005 (Number captured by month and zone).

	9-Mile	Tequila	Yuma	AOP	Total
<b>JAN</b>	0	0	0	0	0
<b>FEB</b>	4,079	8,257	7,900	0	20,236
<b>MAR</b>	12,275	14,252	6,800	0	33,327
<b>APR</b>	1,750	4,543	135	521	6,949
<b>TOTAL</b>	18,104	27,052	14,835	521	60,512

**FY06 Activities:** Sixty-three thousand nine hundred seventy-five (63,975) RASU larvae were captured from four areas of the lake.

**Proposed FY07 Activities:** Target larvae collection of a minimum of 60,000 and a maximum of 75,000.



**Figure B1:** Razorback sucker larvae attracted to submerged light. (The translucent slivers are the 11 - 12 mm long larvae.)