Work Task B1: Lake Mohave Razorback Sucker Larvae Collections

FY13 Estimate	FY13 Actual Obligations	Cumulative Expenditures Through FY13	FY14 Approved Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate
$200,000	$195,004.95	$1,772,617.26	$200,000	$200,000	$200,000	$215,000

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Start Date: FY04

Expected Duration: FY55

Long-term Goal: Fish augmentation.

Conservation Measures: RAUS3, 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 surveys to locate spawning groups, night-time larvae collection, and maintaining the boat fleet and field station at Cottonwood Cove. Larvae are captured one at a time, making this a labor-intensive program. Salaries, travel and fuel represent the majority of expenditures for this work task.

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, 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. 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.

FY13 Accomplishments: Twenty-four thousand nine hundred and twenty-four (24,924) wild larvae were collected from four areas. This number was 76 larvae less than the target larval goal (25,000). Inclement weather causing unsafe boating conditions throughout the collection season resulted in the lower number collected. The contribution from each zone of Lake Mohave by month of capture is presented in Table 1.

Table 1. Larval RASU Collected from Lake Mohave, 2013

	January	February	March	April	May	Total
Nine Mile	7	2,852	3,900	768	0	7,527
Tequila	250	2,750	4,000	820	0	7,820
Yuma	500	2,822	3,182	768	0	7,272
AOP	0	0	1,085	1,220	0	2,305
Total	757	8,424	12,167	3,576	0	**24,924**

Helicopter surveys along the shoreline were not conducted due to scheduling conflicts and the suspension of the Reclamation air program. The value of helicopter surveys is being assessed and alternate means of identifying spawning aggregations are being explored.

FY14 Activities: A target of 30,000 larvae was established for FY14 in coordination with the Lake Mohave Native Fish Work Group. These larvae will be delivered to Willow Beach NFH for rearing.

Proposed FY15 Activities: RASU larvae collections will continue. The target level for FY15 is expected to be 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: 2010-2014,* will be posted to the LCR MSCP website when completed.