

Work Task B1: Lake Mohave Razorback Sucker Larvae Collections

| FY09 Estimates | FY09 Actual | Cumulative Accomplishment Through FY09 | FY10 Approved Estimate | FY11 Proposed Estimate | FY12 Proposed Estimate | FY13 Proposed Estimate |
|----------------|--------------|--|------------------------|------------------------|------------------------|------------------------|
| \$200,000 | \$206,001.63 | \$1,016,321.45 | \$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 brood stock in Lake Mohave, maintain the brood stock, 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 brood stock 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 brood stock and the remaining larvae are reared for release into reaches 3-5 to accomplish augmentation goals of the program.

FY09 Accomplishments: Twenty-seven thousand five hundred and twelve (27,512) 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, 2009

| Zone | January | February | March | April | Total |
|------------------|----------------|-----------------|---------------|--------------|---------------|
| Nine Mile | 183 | 2,912 | 2,930 | 0 | 6,025 |
| Tequila | 0 | 2,205 | 5,000 | 1,285 | 8,490 |
| Yuma | 217 | 3,000 | 4,133 | 1,635 | 8,985 |
| AOP | 0 | 0 | 570 | 3,442 | 4,012 |
| Total | 400 | 8,117 | 12,633 | 6,362 | 27,512 |

Subsamples from each zone and for each month were preserved and provided to Arizona State University for genetic analyses. A status report summarizing the larval fish collections from 2005 to 2009 was developed and is in review. This report will be finalized in 2010 and posted to the LCR MSCP Web site.

FY10 Activities: A target of 36,000 larvae has been established for 2010. Thirty-three thousand larvae will be delivered to Willow Beach NFH for initial rearing, but 3,000 of these will be transferred to NDOW's Lake Mead Hatchery. Approximately 3,000 wild larvae will be captured during March and delivered to Arizona State University for research. 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. The status report developed in 2009 will be finalized and posted to the LCR MSCP Web site.

Proposed FY11 Activities: RASU larval collections will continue. The target level for FY11 is 30,000 to 35,000 larvae.

Pertinent Reports: A status report for the larvae collection program will be posted to the LCR MSCP Web site.