

## Work Task C61: Evaluation of Alternative Stocking Methods for Fish Augmentation

FY12 Estimate	FY12 Actual Obligations	Cumulative Expenditures Through FY12	FY13 Approved Estimate	FY14 Proposed Estimate	FY15 Proposed Estimate	FY16 Proposed Estimate
\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$150,000

**Contact:** Jim Stolberg, (702) 293-8206, [jstolberg@usbr.gov](mailto:jstolberg@usbr.gov)

**Start Date:** FY14

**Expected Duration:** FY18

**Long-term Goal:** To improve survival of fish stocked under the Fish Augmentation Program.

**Conservation Measures:** RASU3, RASU5, RASU6, BONY3, BONY5

**Location:** The Lower Colorado River within the LCR MSCP planning area, including reservoirs and connected channels from Lake Mead downstream to Imperial Dam.

**Purpose:** To evaluate the effects alternative stocking methods have on survival of RASU and BONY stocked within the LCR MSCP planning area.

**Connections with Other Work Tasks (past and future):** Related work tasks include B2, B3, B4, B5, B6, C10, C11, C31, C33, C39, C46, D8, and G3.

**Project Description:** The LCR MSCP Fish Augmentation Program is to provide a total of 660,000 RASU and 620,000 BONY for reintroduction into the Colorado River over a 50 year period. The LCR MSCP is committed to extensive monitoring of these stocked fish, and in accordance with the HCP several monitoring and research elements have been included as part of the Fish Augmentation Program.

This project addresses two of these research elements, including 1) understanding and minimizing adverse effects of stocking, and 2) understanding post-stocking distribution and survival. This work task will evaluate alternative stocking methods for RASU and BONY within the Fish Augmentation Program boundaries. Alternative methods to be evaluated may include stocking during different seasons, stocking at night, stocking cohorts of various quantities, and stocking at specific locations. These alternative methods will generally be evaluated through multiple iterations of paired stockings with one group representing the more traditional stocking and one representing the alternative method being investigated.

In addition to these alternative stocking methods, fish reared by alternative means may also be evaluated through these efforts. These stockings would be done in paired groups and may include fish that have been either flow conditioned or trained to recognize predators. Information regarding post-stocking distribution and survival will be obtained through ongoing research and monitoring work tasks. As information on these stockings becomes available, specific combinations of these alternative stocking methods may also be evaluated.

**Previous Activities:** N/A

**FY12 Accomplishments:** N/A

**FY13 Activities:** This is a new start in FY14.

**Proposed FY14 Activities:** During FY14 a portion of the RASU stockings taking place in Lake Mohave will be carried out through day and night paired stockings. RASU will be transported by boat or by truck, and stockings at each location will be separated by a minimum of 12 hours with night stockings occurring at least 2 hours after sunset. Stocking cohorts will be a minimum of 500 fish each for the purpose of increasing post-stocking detectability. Monitoring efforts conducted during FY14 and in future years will be used to determine the effectiveness or benefit of night stockings as compared to traditional day stocking events. Additional alternatives to traditional stockings will also be evaluated during the year, and potential opportunities to implement these alternatives will be evaluated as fish become available.

**Pertinent Reports:** N/A