

Work Task B8: Fish Tagging Equipment

FY08 Estimates	FY08 Actual	Cumulative Accomplishment Through FY08	FY09 Approved Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate
\$75,000	\$66,890.83	\$307,933.83	\$75,000	\$75,000	\$75,000	\$75,000

Contact: Jon Nelson, (702) 293-8046, jnelson@usbr.gov

Start Date: FY04

Expected Duration: FY19 decision point

Long-term Goal: Acquire and maintain supply of fish-tagging materials and equipment for marking fish to be released for research and for augmentation stockings.

Conservation Measures: RASU3, RASU4, RASU5, RASU6, BONY3, BONY4, and BONY5.

Location: N/A.

Purpose: Fish released into the LCR by the LCR MSCP will be marked for identification purposes to assess survival and distribution.

Connections with Other Work Tasks (past and future): This work task was previously listed in FY04 work tasks as PIT Tag (A2). Activities are related to all work tasks that result in fish stocking for augmentation, fish research, and fish monitoring. Work task C23 is evaluating new PIT-tag technology and results may influence future purchases.

Project Description: The LCR MSCP will rear and stock more than 1.2 million native fish into the LCR over the 50-year term of the program. Reclamation currently plans to mark these fish to assess distribution and survival and to provide for effective research and monitoring. This information is required for decision making under the AMP.

Current marking techniques include PIT tagging, wire tagging, fin clipping, radio tagging, and sonic tagging. Funds associated with this work task provide for both the tagging materials and for the detection equipment needed during monitoring and research. Costs are expected to be highest during the first 10 to 15 years of the LCR MSCP and decrease in later years as research actions transition to routine monitoring.

Under conservation measures outlined in the HCP, LCR MSCP will implement an experimental augmentation of 24,000 RASU and 8,000 BONY each year for 5 years (160,000 total), and conduct intensive follow-up monitoring. Reclamation plans to conduct these two actions simultaneously during FY11-FY16, expects to PIT tag all of these fish, and plans to radio tag or sonic tag a subset of these fish. Following completion of this work, Reclamation will evaluate monitoring results through the adaptive management process and assess the need for

continuation of tagging of RASU and BONY through augmentation stockings. This decision is expected to be made in FY19 after observations and analysis have been completed.

Previous Activities: Fish released into the LCR have been tagged with 400-kHz PIT tags (Lake Mead and Lake Mohave, reaches 1 and 2), 125-kHz PIT tags (Davis Dam to Parker Dam, Reach 3), and wire tags (Davis Dam to Imperial Dam, reaches 3, 4, and 5). Recaptured fish below Parker Dam have been retagged with 125-kHz PIT tags. In addition, both radio tags and sonic tags have been implanted in fish used for research on lakes Mead, Mohave, and Havasu. Fin clipping and spaghetti tags (or Floy tags) have been used for short-term survival studies in some rearing and grow-out ponds.

A decision was made in 2006 to begin using the newest PIT-tag technology, 134.2-kHz frequency tags. These new tags have a greater detection range than the previously used tags (12 inches versus 2 inches away from fish) and will allow for testing and deployment of remote listening stations within spawning areas. Purchase of the new PIT tags, tag readers, and antennae began in 2006.

FY08 Accomplishments: PIT tags, tagging equipment, and tag readers were purchased as needed to mark fish for monitoring and research. A total of 19,433 RASU and 5,136 BONY were PIT and/or wire tagged and released into the LCR during 2008.

FY09 Activities: PIT tags, tagging equipment, and tag readers will be purchased as needed to mark fish for monitoring and research.

Proposed FY 10 Activities: PIT tags, tagging equipment, and tag readers will be purchased as needed to mark fish for monitoring and research.

Pertinent Reports: N/A