

Work Task B8: Fish Tagging Equipment

FY16 Estimate	FY16 Actual Obligations	Cumulative Expenditures Through FY16	FY17 Approved Estimate	FY18 Proposed Estimate	FY19 Proposed Estimate	FY20 Proposed Estimate
\$135,000	\$140,133.31	\$1,044,308.39	\$135,000	\$135,000	\$135,000	\$135,000

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Start Date: FY04

Expected Duration: FY55

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

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

Location: N/A

Purpose: To mark fishes released into the lower Colorado River (LCR) for identification purposes to assess survival and distribution

Connections with Other Work Tasks (Past and Future): Activities are related to all work tasks that result in fish stocking for augmentation, fish research, and fish monitoring.

Project Description: Under the LCR MSCP, more than 1.2 million native fishes will be reared and stocked into the LCR. Fishes will be marked to assess distribution and survival and for effective research and decisionmaking. Funds provide for both tagging materials and detection equipment needed during monitoring and research. The Bureau of Reclamation anticipates the need for fish tags and tagging equipment throughout the life of the program.

Previous Activities: Fishes released into the LCR have been tagged with 400-kilohertz (kHz) passive integrated transponder (PIT) tags (Lakes Mead and 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 fishes used for research on Lakes Mead, Mohave, and Havasu. Fin clipping and floy tags have been used for short-term survival studies in some rearing and grow-out ponds.

In 2006, the LCR MSCP began using 134.2-kHz frequency PIT tags. These tags have a greater detection range than the previously used tags (12 versus 2 inches away from fish) and allow for testing and deployment of remote listening stations within spawning areas and other locations along the LCR. Purchase of the PIT tags, tag readers, and antennae began in 2006.

FY16 Accomplishments: PIT tags, tagging equipment, and tag readers were purchased as needed to mark fishes for monitoring and research. A total of 21,354 razorback suckers and 9,346 bonytail were PIT tagged and released into the LCR during FY16. These reported numbers of tagged fishes represent the total number of fishes implanted with tags and not the number of fishes repatriated and credited under the LCR MSCP Fish Augmentation Program. They include fishes used for research, smaller volunteer spawned fishes that have been translocated into other areas, and fish that have been retagged due to tag loss or replacement of older frequency tags.

FY17 Activities: PIT tags, tagging equipment, and tag readers will be purchased as needed to mark fishes for monitoring and research. The budget estimates reflect the increased fish number goals and the need for additional supplies and equipment to support ongoing tagging and remote sensing research and monitoring efforts.

Proposed FY18 Activities: PIT tags, tagging equipment, and tag readers will continue to be purchased as needed to mark fishes for monitoring and research.

Pertinent Reports: N/A