## Work Task F5: Post-Development Monitoring of Fish Restoration Sites

FY06 Estimates	FY06 Actual	Cumulative Accomplishment Through FY06	FY07 Approved Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate
\$0	\$0	\$0	\$65,000	\$130,000	\$130,000	\$130,000

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Start Date: FY07

**Expected Duration:** FY55

Long-term Goal: Post-develop monitoring

**Conservation Measures:** RASU6 and BONY5

**Location:** Reaches 3-6, backwater habitats developed and stocked with RASU and BONY, NV, AZ, and CA

**Purpose:** Monitor fish use of habitat creation sites to provide data for the adaptive management process and develop management guidelines for created backwater habitats.

Connections with Other Work Tasks (past and future): All backwaters created in Section E.

**Project Description:** This work will monitor the fish and fish habitat at restoration sites. It is anticipated that fish restoration sites will play various roles for conservation of target fish species throughout the term of the LCR MSCP. Some habitats will be able to develop self-sustaining populations, others may become overpopulated requiring harvest or thinning, and some will require continuous population augmentation. Most isolated fish habitats will require some stock rotation to maintain genetic diversity through time. Basic surveys of the fish population and the physical and chemical habitat developed or restored will be required. Fish monitoring will include trapping (hoop, fyke, and minnow traps), trammel netting, electro-fishing, larvae light trapping, and ocular surveys (including scuba and snorkeling where necessary and practical). Water quality assessment will require annual measurements of temperature, oxygen, pH, and conductivity (salinity), as well as periodic monitoring of chemical makeup, including electro-ions and selenium.

## Previous Activities: N/A.

## FY06 Accomplishments: New start in FY07.

**FY07 Activities:** An interagency meeting was held at Bill Williams River NWR to scope monitoring parameters for native fish backwater habitats. The USFWS developed a draft fishery management plan for Beal Lake. Physical and chemical habitat at Beal Lake is being monitored, and monitoring of fish will be conducted (electrofishing and netting). All nonnative fish

encountered will be removed to reduce the biological demand in the pond and allow for greater growth of the remaining RASU and BONY.

Reclamation is in the process of finalizing a monitoring plan for the Imperial Ponds (E14). Stocking and monitoring of these ponds is likely to commence during winter 2007/2008.

**Proposed FY08 Activities:** Post-development monitoring of Beal Lake similar to FY07 monitoring will be continued. Increased monitoring of the Imperial Ponds will be continued to include physical and chemical conditions in the ponds and surveys of the fish populations. Netting and electrofishing will be used when water temperatures are less stressful to fish. Larvae light trapping will be conducted monthly from February to May to assess reproduction and recruitment. If needed, funds will be utilized for Imperial Pond non-native fish removal.

Pertinent Reports: N/A