Work Task C14: Humpback Chub Program Support

FY10 Estimates	FY10 Actual	Cumulative Accomplishment Through FY10	FY11 Approved Estimate	FY12 Proposed Estimate	FY13 Proposed Estimate	FY14 Proposed Estimate
\$70,000	\$67,997.50	\$171,430.81	\$75,000	\$11,000	\$11,000	\$11,000

Contact: Ty Wolters, (702) 293-8463, twolters@usbr.gov

Start Date: FY05

Expected Duration: FY55

Long-term Goal: Support HUCH conservation.

Conservation Measures: HUCH1.

Location: Grand Canyon, Arizona; Willow Beach, Arizona; Dexter, New Mexico.

Purpose: Provide support to the Glen Canyon Dam AMP for conservation of HUCH.

Connections with Other Work Tasks (past and future): This work is connected to B2 and B4, as money will be transferred to USFWS through an agreement for activities at Willow Beach NFH and Dexter NFH.

Project Description: The LCR MSCP will provide a total of \$500,000 over the life of the program (50 years) to the Glen Canyon Dam AMP, or other entities approved by USFWS, to support implementation of planned, but unfunded HUCH conservation measures.

Previous Activities: As recommended by the Glen Canyon Dam AMP, funds were provided to USFWS at Willow Beach NFH in FY06 to support care of HUCH from the Little Colorado River that were held on station. To reduce administrative costs, funds were provided for a three-year period (FY06-08) at \$10,000 per year. During calendar year 2008, the LCR MSCP agreed to provide additional funds for the development of a refugia broodstock for HUCH. The agreement will be in place for FY09-FY11. Young-of-year fish were transferred from the Little Colorado River to Arizona Game and Fish's Bubbling Ponds Hatchery. The fish were treated for parasites and held in quarantine for 30 days, then transferred to Dexter NFH. All the fish were PIT-tagged, and in June 2009, 300 fish were provided for translocation to Shinumo Creek in Grand Canyon National Park. The remaining 287 fish were used to begin establishing the (500-1000) refuge population at Dexter. Dexter staff completed the draft USFWS *Genetic Management Plan for Captive and Translocated Endangered Humpback Chub* in the Lower Colorado River Basin.

FY10 Accomplishments: This marks the second year of a three-year agreement to develop a refuge population/captive broodstock of Grand Canyon HUCH at the Dexter National Fish Hatchery and Technology Center, in Dexter, New Mexico. Dexter received 178 young of the year HUCH collected from the Little Colorado River, Grand Canyon. Following a quarantine period, 175 fish were added to the captive broodstock. In 2010 Dexter successfully maintained 657 HUCH; 277 (2008 year class), 205 (2009 year class), and 175 (2010 year class). Dexter staff successfully translocated 300 HUCH into Shimuno Creek in Grand Canyon National Park. This was the second stocking of fish for the Shinumo Creek translocation project.

FY11 Activities: Development of the refuge population/captive broodstock for HUCH at Dexter NFH will continue. Dexter will receive 200 HUCH for grow out, tagging, and incorporation into the captive stock. The captive management plan will be finalized and posted to the LCR MSCP website.

Dexter staff will also evaluate and refine fish culture, marking, and transport methodologies for wild-caught HUCH. In addition, researchers will conduct acute toxicity tests on HUCH larvae and juveniles (90-160 mm) to determine median lethal concentration (LC50) of potassium chloride.

Proposed FY12 Activities: Continue support for HUCH conservation in coordination with USFWS and Glen Canyon AMP. Dexter will receive an additional 200 HUCH for grow out, tagging, and incorporation into the captive stock. The goal is to achieve 1,000 individuals in the refuge population at Dexter.

Pertinent Reports: N/A