Work Task B10: Uvalde National Fish Hatchery

FY06 Estimates	FY06 Actual	Cumulative Accomplishment Through FY06	FY07 Approved Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate
\$60,000	\$57,122	\$57,122	\$260,000	\$60,000	\$60,000	\$60,000

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Start Date: FY06

Expected Duration: FY16

Long-term Goal: Maintain fish-rearing capability to provide RASU and BONY for the LCR MSCP Fish Augmentation Program.

Conservation Measures: RASU3, RASU4, BONY3, and BONY4

Location: Uvalde, TX

Purpose: Provide backup source and rearing capacity for RASU and BONY as needed for Fish Augmentation Program, and provide a facility where species research can occur.

Connections with Other Work Tasks (past and future): This work task was added in April 2006 following approval by the Steering Committee, with concurrence from USFWS. Funds were allocated to this work task from B5. This work is related to B4, as RASU and BONY for Uvalde NFH will be supplied by Dexter NFH. The work is also related to B1 and B2, as Uvalde NFH may also rear RASU for repatriation to Lake Mohave. Finally, the work is related to C10 and C11, as species research relative to rearing and growth of BONY and RASU may be conducted at this facility.

Project Description: Uvalde NFH is a large warmwater fish culture facility established in southwest Texas in 1934. The facility has 47 ponds totaling more than 50 surface acres for fish production. Water is supplied by two deep wells, which provide 72°F water year-round. A third, undeveloped well (Wilson Well) will be developed to secure the long-term water supply for rearing ponds. The facility was shut down for renovation in 2001 following a major flood event and is now again ready for fish culture activities. Currently, 37 of the 47 ponds are available for fish culture.

The LCR MSCP and the San Juan River Recovery Implementation Program will share costs for upgrading water supply systems (rehabilitate Burkett Well and develop Wilson Well) and for rearing native fishes. The LCR MSCP will utilize the facility to assess rearing capacity for BONY, rear RASU for broodstock development at Lake Mohave, and conduct research on fish hauling and transportation.

The LCR MSCP has a requirement to stock 24,000 RASU and 12,000 BONY each year for 5 consecutive years. This is beyond the current capacity of the LCR MSCP Fish Augmentation Program. However, as described in the introduction to Section B, Reclamation is working with LCR MSCP partners to expand native fish-rearing capacity by FY10 to implement the accelerated augmentation stockings. Uvalde NFH is one of the facilities that may provide additional rearing capacity.

Previous Activities: Prior to being shut down for renovation, Uvalde NFH had 15 years of experience rearing native fishes, including Comanche Springs pupfish, paddlefish, Yaqui catfish, and fountain darters. During the 1990s, as many as six species were being cultured, producing 2.6 million fish (60,000 pounds produced). The facility was put back on line in 2005 following rehabilitation of the Spurgeon Well, one of two deep wells developed on station.

FY06 Accomplishments: During the first week of April 2006, 3,000 BONY fry were brought on station from Dexter NFH for initial rearing and to assess the growth rate and rearing capacity of Uvalde NFH for this species. The fish were from hand-spawning of broodstock on station at Dexter NFH. Fish were stocked into four 1-acre ponds; two ponds were at densities of 500 fish per acre and two ponds were at densities of 1,000 fish per acre. In late October, the fish were harvested from the ponds and hauled by tank truck to Dexter NFH. After a 2-week rest period, the fish were measured and tagged for distribution. Survival following the 180-day growing period, fish harvest, and transport was excellent at 92% (2,744 fish). Growth was remarkable, with 86% of the BONY having attained the target size of 300 mm TL or more in this short time period. A total of 2,358 BONY having an average length of 325 mm TL were PIT tagged and transported to the lower Colorado River. The fish were stocked into Reach 3 of the lower Colorado River at Park Moabi, south of Needles, California.

FY07 Activities: Uvalde NFH will continue rearing of BONY, growth and survival will be evaluated, and production loads and schedules for future work will be calculated. Wilson Well will be developed (new pump, well-head, motor, backup power supply, and alarm system). A research investigation regarding fish hauling techniques for BONY will be designed and implemented.

Proposed FY08 Activities: Uvalde NFH will continue rearing of BONY, and continue evaluation of fish hauling techniques.

Pertinent Reports: The scope of work is available upon request from the LCR MSCP.