

Work Task B10: Uvalde National Fish Hatchery

FY07 Estimates	FY07 Actual	Cumulative Accomplishment Through FY07	FY08 Approved Estimate	FY09 Proposed Estimate	FY010 Proposed Estimate	FY11 Proposed Estimate
\$260,000	\$260,000	\$317,122	\$60,000	\$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 are sharing costs for upgrading water supply systems and for rearing native fishes. The LCR MSCP will utilize the facility to assess rearing capacity for BONY, rear RASU for brood stock development at Lake Mohave, and conduct research on fish hauling and transportation.

The LCR MSCP has a requirement to stock 12,000 BONY each year for 5 consecutive years. This is beyond the current capacity of the LCR MSCP Fish Augmentation Program, primarily because of the target size being 300 mm TL (12 inches). Bonytail tend to be sexually mature by the time they reach 150 mm TL. During pond culture, these fish typically spawn and increase the number of fish in the pond. This in turn results in slow growth of the original fish. Initial actions at Uvalde NFH will focus on capability and techniques to grow BONY to target size in one growing season.

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.

During 2006, young-of-year and yearling BONY were brought on station from Dexter NFH to assess growth rate and rearing capacity of Uvalde NFH for this species. The fingerling fish averaged 172 mm TL and 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 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 LCR. The fish were stocked into Reach 3 of the LCR at Park Moabi, south of Needles, California.

FY07 Accomplishments: BONY fry that had been received from Dexter NFH in 2006 were sorted and measured. A total of 7,500 of these fish averaging 196 mm TL were stocked into grow-out ponds in April. Three 1-acre ponds received 1,000 BONY and three 1-acre ponds received 1,500 BONY. Ponds were harvested in October. One pond that had received 1,000 fish had been lost over summer due to a mechanical problem. Of the remaining five ponds that had started out with 6,500 BONY, more than 5,992 BONY had survived (92%) and roughly 88% reached the target size of 300 mm TL.

During routine fish health inspections in July 2007, a subsample of Guadalupe largemouth bass on station tested positive for Largemouth Bass Virus. This is a restricted pathogen in both Arizona and California. Bonytail were also tested and came up negative; however, the states of Arizona and California have asked that no fish from this facility be stocked into the Colorado River until the hatchery receives a Class A rating. As a result, no BONY were stocked from Uvalde NFH into the LCR during 2007. The fish are being held at Uvalde NFH for future research.

FY08 Activities: Uvalde NFH will continue rearing of BONY remaining on station from 2007. No new fish will be brought on station. These 2-year-old fish will be subjects for fish research until such time that Uvalde NFH's Class A rating is reinstated. Fish health inspections will be

repeated during the year to assess status of Largemouth Bass Virus. If Uvalde NFH tests positive for Largemouth Bass Virus, this project will be terminated and the fish will be disposed of according to USFWS protocols.

Proposed FY09 Activities: At this time, it is uncertain whether BONY and RASU production and research will continue at Uvalde NFH. The decision to continue with this work will be determined following fish health tests scheduled for July 2008.

Pertinent Reports: The scope of work is available upon request from the LCR MSCP. A production report is under review in USFWS Region 2 and will be posted to the LCR MSCP Web site.