

Work Task B10: Uvalde National Fish Hatchery

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved Estimate	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
\$0	\$0	\$0	\$60,000	\$260,000	\$60,000	\$60,000

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Start Date: FY06 **Expected Duration:** FY16

Long-Term Goal: Maintain fish rearing capability to provide razorback sucker and bonytail for the LCR MSCP Fish Augmentation Program.

Conservation Measures: RASU3, RASU4, BONY3, and BONY4

Location: Off-River, Uvalde, TX

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

Connections with Other Work Tasks (past and future): This new Work Task was added in April 2006 following approval of Steering Committee, with concurrence from FWS. Funds were allocated to this Work Task from Work Task B5. This work is related to Work Task B4, as RASU and BONY for Uvalde NFH will be supplied by Dexter NFH. The work is also related to Work Tasks B1 and B2, as Uvalde NFH may also rear RASU for repatriation to Lake Mohave. Finally, the work is related to Work Tasks 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 warm water fish culture facility established in southwest Texas in 1934. The facility has 47 ponds totaling over 50 surface acres for fish production. Water is supplied by two deep wells which provide 72 degree Fahrenheit water year round. A third, undeveloped well (Wilson Well) will be available once developed. 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 (rehab 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 (Figures B10a, B10b, B10c, and B10d).

The LCR MSCP has a requirement to stock 24,000 RASU and 12,000 BONY each year for five 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 which may provide additional rearing capacity.

Previous Activities: Prior to being shut down for renovation, Uvalde NFH had fifteen years experience rearing native fishes, including Comanche Springs pupfish, paddlefish, Yaqui catfish and fountain darters. During the 1990's, 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 rehab of the Spurgeon Well, one of two deep wells developed on station.

FY05 Accomplishments: This is a new start in FY06.

FY06 Activities: During April 2006, BONY and RASU were brought on station from Dexter NFH for initial rearing; both groups of fishes were from hand-spawning of broodstock on station at Dexter NFH. The goal is to assess the growth rate and rearing capacity of Uvalde NFH for these species. Fish are monitored monthly for growth and this will continue through November 2006. The plan is to move these fish inside during the coldest three months of the year (December through February). Rehabilitation of the Burkett Well (replace pump, column pipe, and well head) will be completed, and preliminary work (parts list, selection of installer, etc.) for development of the Wilson Well will be initiated.

Reclamation initially planned to utilize Uvalde NFH to develop a backup brood stock of BONY. Reclamation and FWS will first evaluate BONY growth and survival at Uvalde NFH before making any long-term commitment to broodstock development. During September 2006, RASU fingerlings from Willow Beach NFH (originally captured as larvae from Lake Mohave) will be transferred to Uvalde NFH via Dexter NFH for rearing to 500 cm (20 inches) for replacement broodstock. This need only developed in April 2006 following decision by Lake Mohave NFWG to increase target size of RASU.

Proposed FY07 Activities: Continue rearing RASU and BONY from the 2006 year class; receive RASU and BONY young (2007 year class) from Willow Beach NFH and Dexter NFH for rearing; evaluate growth and survival to date; and calculate production loads and schedules for future work. Develop the Wilson Well (new pump, well-head, motor, backup power supply, and alarm system). Design and implement research investigation regarding fish hauling techniques for BONY.

Pertinent Reports: Scope of Work for Interagency Agreement between Reclamation and FWS will be available following execution of the agreement.



Figure B10a: Reclamation and FWS staff inspecting lined rearing pond at Uvalde NFH.



Figure B10b: Unlined rearing ponds at Uvalde NFH.



Figure B10c: Well house and power head for Burkett Well (to be refurbished).



Figure B10d: Uvalde NFH, Wilson Well (pipe in center) to be developed in FY07.