

Work Task B2: Willow Beach National Fish Hatchery

FY06 Estimates	FY06 Actual	Cumulative Accomplishment Through FY06	FY07 Approved Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate
\$200,000	\$206,486	\$386,486	\$225,000	\$235,000	\$235,000	\$235,000

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Start Date: FY05

Expected Duration: FY55

Long-term Goal: Fish Augmentation

Conservation Measures: RASU3, RASU4, RASU5, RASU6, BONY3, and BONY4

Location: Reach 2, Willow Beach, AZ

Purpose: Annually contribute RASU and bonytail (BONY) to the LCR MSCP Fish Augmentation Program.

Connections with Other Work Tasks (past and future): Much of the activity at Willow Beach NFH is related to other Work Tasks in Section B, because most of the RASU and BONY reared for the LCR MSCP Fish Augmentation Program spend time at Willow Beach NFH. (For further information, please see the Fish Augmentation Plan, which provides an overview of the program and shows the interrelationships between the various hatcheries). Some of the fishery research actions described in Section C are ongoing at this facility, including Pen Rearing Tests (C9), Bonytail Rearing Studies (C11), and Humpback Chub Monitoring Program (C14).

Project Description: Willow Beach NFH is managed by the USFWS. The hatchery receives funding from the LCR MSCP for rearing of RASU and BONY for the Fish Augmentation Program. There are three primary tasks at the hatchery:

1. Receive fish to be reared. Each year the facility is to receive wild RASU larvae collected from Lake Mohave by the Native Fish Work Group (NFWG). Also, the hatchery is to receive fingerling BONY (25-75 mm TL) from Dexter NFH.
2. Provide fish to other hatcheries. Each year Willow Beach NFH is to: provide fingerling RASU to Bubbling Ponds SFH to be further reared and ultimately stocked into reaches 3-5 of the lower Colorado River, provide fingerling RASU from wild-caught larvae to Dexter NFH for further rearing and eventual repatriation to Lake Mohave, and provide juvenile BONY to Achii Hanyo Rearing Facility for further rearing and ultimately for stocking into reaches 3-5 of the lower Colorado River.

3. Rear up to 5,000 subadult RASU to 500 mm TL for repatriation to Lake Mohave. (These fish are being reared to this large size in order to accelerate brood stock development and provide test fish for C12.)

Previous Activities: This coldwater trout hatchery began operation in 1962 to produce rainbow trout for recreational fishing. Between 1994 and 1997, USFWS and Reclamation cooperatively added solar heating systems to the hatchery, converting 50% of its rearing capacity to warmwater fish production. Each year since 1996, the hatchery has received wild RASU larvae, reared juvenile RASU, and repatriated fish back to Lake Mohave. Similarly, the hatchery has provided fry to Bubbling Ponds SFH every year since 1997 for rearing and ultimately for return to the lower Colorado River.

FY06 Accomplishments: A total of 63,975 RASU larvae were received from Lake Mohave, fingerling RASU were distributed to Bubbling Ponds SFH and Dexter NFH for further rearing, fingerling BONY were distributed to Achii Hanyo for further rearing; and RASU juveniles for repatriation back to Lake Mohave and fingerling BONY for future distribution to Achii Hanyo rearing facility are currently being reared. A total of 1,810 RASU juveniles (250 mm TL) were distributed to lakeside rearing ponds (B7). A total of 10,191 RASU (381 mm average TL) were repatriated into Lake Mohave (Reach 2), and 6,268 RASU were repatriated into three backwaters along a 40-mile stretch of river below Davis Dam (Reach 3). The majority of funds were for salary and consumable materials (fish feed, medicines, chemicals, etc.).

FY07 Activities: Willow Beach NFH will receive 20,000 RASU larvae from Lake Mohave. Facilities will continue to rear and distribute RASU and BONY that are currently on station for the LCR MSCP Fish Augmentation Program. This includes 6,059 RASU of the 2004 year class, 24,000 RASU of the 2005 year class, and 28,000 RASU of the 2006 year class. At the end of 2006 there were approximately 10,000 BONY of the 2006 year class and 40,000 BONY of the 2007 year class at the hatchery. Some of these fish will be transferred to Achii Hanyo for rearing and stocking to the lower Colorado River under the LCR MSCP program (B3).

Willow Beach NFH takes water directly out of the Colorado River. During October 2006, a severe, local thunderstorm deposited sand and gravel in the river above the intake, which subsequently resulted in reduced water passage through the intake system. Electricity costs for the pumps have increased by one third. Funding from the LCR MSCP will support repair and cleaning of this water intake system to restore operation to its previous level of efficiency.

During January 2007, the exotic quagga mussel was discovered in Lake Mead and Lake Mohave, and was subsequently found in both Lake Mead SFH and Willow Beach NFH. Larval RASU that were to be transferred to Bubbling Ponds SFH will not be collected (B1) and no RASU of any size or year-class will be delivered to waters outside the lower Colorado River corridor until fish transport protocols are developed and approved by cooperating resource agencies.

Proposed FY08 Activities: Facilities will receive RASU larvae from Lake Mohave and continue to rear and distribute RASU and BONY for the LCR MSCP Fish Augmentation Program. Protocols developed for addressing issues with quagga mussel during fish distribution will be incorporated into the stocking program.

Pertinent Reports: *2006 Fish Augmentation Summary* will be posted to the LCR MSCP Web site.