Work Task B4: Southwestern Native Aquatic Resources and Recovery Center in Dexter, New Mexico

FY16 Estimate	FY16 Actual Obligations	Cumulative Expenditures Through FY16	FY17 Approved Estimate	FY18 Proposed Estimate	FY19 Proposed Estimate	FY20 Proposed Estimate
$260,000	$253,146.40	$2,298,809.76	$260,000	$260,000	$260,000	$260,000

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

Start Date: FY05

Expected Duration: FY55

Long-Term Goal: Fish augmentation

Conservation Measures: BONY3, BONY4, HUCH1, RASU3, and RASU4

Location: Dexter, New Mexico

Purpose: To support operation and maintenance at the Southwestern Native Aquatic Resources and Recovery Center in Dexter, New Mexico (Center), support maintenance of the bonytail (*Gila elegans*) broodstock, and annually provide razorback suckers (*Xyrauchen texanus*) and bonytail for the LCR MSCP Fish Augmentation Program

Connections with Other Work Tasks (Past and Future): This work task is related to Work Tasks B2, B3, and B5, as fish from the Center will be delivered to the Willow Beach National Fish Hatchery (Willow Beach NFH), Achii Hanyo Native Fish Rearing Facility, and the Bubbling Ponds Fish Hatchery. Fish rearing research activities may also be conducted at the Center similar to work outlined in Work Tasks C10 (closed), C11 (closed), C14, and C30 (closed). A humpback chub (*Gila cypha*) refugium has been established at the Center as a safeguard in case of catastrophic events in the wild (C14).

Project Description: The Center is managed and operated by the U.S. Fish and Wildlife Service. It maintains one of only two refuge populations of bonytail in the world and has the only broodstock maintained and managed for bonytail production. The Center also retains a backup broodstock of razorback suckers. Funds provided will be used to maintain an extant broodstock, annually produce fingerling bonytail for distribution to other hatcheries, and to annually rear bonytail for distribution within Reaches 2–5. The Center plans to target a

305 millimeters (mm) total length (TL) for all bonytail stocked in FY16–18; however, fishes with TLs of 300 mm or larger may be stocked into Reach 3, while fishes stocked into Reaches 4 and 5 will be 305 mm TL or larger.

Previous Activities: The Bureau of Reclamation and the U.S. Fish and Wildlife Service have past and ongoing Interagency Agreements to support rearing and research for razorback suckers and bonytail at the Center. Beginning in FY14, the Center was not required to provide subadult razorback suckers for stocking into the lower Colorado River (LCR). The space made available by this action is being devoted to increased production of bonytail for the LCR MSCP.

FY16 Accomplishments:

Bonytail: The Center maintained 1,812 adult bonytail as broodstock that comprised six year-classes of Lake Mohave origin fish. In addition, 1,267 fish from the 2012–14 year-classes were transferred to the Mora National Fish Hatchery to be maintained as a backup broodstock and refuge population. An additional 1,000 bonytail were reared while building the broodstock for the Mora National Fish Hatchery, and ultimately these fish were added to the Center's inventory, bringing the total adult bonytail broodstock to 2,812 for FY16. Approximately 40,100 bonytail were maintained on station for future stocking (table 1).

Table 1.—Year-Class and Number of Bonytail Suckers on Station at the Center in FY16

Year-Class	Number
2012	8,000
2013	8,000
2014	19,100
2015	5,000

The Center harvested, tagged (with passive integrated transponders), hauled, and stocked 697 subadult bonytail (300+ mm TL) into Reach 3 and 1,289 subadult bonytail (305+ mm TL) into Reach 4. The Center hormonally induced the fish to spawn and hand-stripped eggs from 24 adult bonytail females, producing 351,600 eggs. Over 74,000 egg, larval, and juvenile bonytail were transferred to other stations for grow-out and research during FY16.

Razorback Suckers: The Center maintained a broodstock of 998 adult razorback suckers that comprised nine year-classes of Lake Mohave origin fish. Adult broodfish were hormonally induced to spawn; the eggs were hand-stripped from 18 adult razorback sucker females, producing 342,600 eggs. Approximately 65,000 razorback sucker larvae were transferred to the Bubbling Ponds Fish Hatchery and the Aquatic Research and Conservation Center at Bubbling Ponds

for grow-out and future stocking into the lower Colorado River. Approximately 1,000 subadult fish were maintained for use in a flow conditioning study to be conducted in FY17.

FY17 Activities: The bonytail broodstock will be maintained, and the hatchery will produce approximately 100,000 larvae or fingerling bonytail for distribution to the Willow Beach NFH, Achii Hanyo Native Fish Rearing Facility, Lake Mead Fish Hatchery, and the Aquatic Research and Conservation Center at Bubbling Ponds. The Center will rear 12,000–13,000 bonytail to 305 mm TL in FY17 for distribution within the lower Colorado River. Between October 2016 and January 2017, 691 bonytail were stocked into Reach 3, and 4,456 bonytail were stocked into Reach 4.

Proposed FY18 Activities: The bonytail broodstock will be maintained. Up to 100,000 larvae or fingerling bonytail will be produced for distribution to various rearing/research facilities, including the Aquatic Research and Conservation Center at Bubbling Ponds, Lake Mead Fish Hatchery, Willow Beach NFH, and the Achii Hanyo Native Fish Rearing Facility. Approximately 12,000–13,000 bonytail will be reared to 305 mm TL for distribution within Reaches 2–5.

Pertinent Reports: Annual administrative reports are available upon request.