

I. Project title: Propagation Facilities, in the Grand Valley (Ouray National Fish Hatchery (Grand Valley Unit), Horsethief Ponds, and grow-out ponds), for Captive Rearing of Endangered Fishes for the Upper Colorado River Basin.

II. Principal Investigator(s):

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III. Project Summary:

Captive rearing of endangered fish for the Upper Colorado River Basin began in the Grand Valley in 1992. The Horsethief Rearing Ponds were put into operation to secure propagation facilities with adequate equipment and personnel for captive propagation of endangered species for the Recovery Program in the upper Colorado River Basin. Additional propagation facilities were needed to expand propagation efforts, therefore in 1996 the 24 Road Hatchery was constructed inside of an existing warehouse (donated by the Bureau of Reclamation) at 1149 24 Road, Grand Junction, CO. The hatchery was expanded in the winter of 1998–1999, and now contains two separate water re-use systems. In addition to the hatchery expansion, numerous ponds have been acquired and are used to grow razorback sucker for stocking into the Colorado, Gunnison, and San Juan Rivers.

Broodstock are held at Horsethief Ponds and spawned in spring. Eggs are taken to the 24-Road Hatchery, hatched and reared for about one year. Excess fry are stocked into several of our grow-out ponds including Butch Craig pond. After 1 year in the hatchery, fish are stocked into grow-out ponds where they are held for about 6 months. After additional growth in the ponds, fish are harvested and stocked into the Colorado, Green

and Gunnison rivers in accordance with approved stocking plans. Additional fish are held in the 24-Road Hatchery until they reach about 300 mm total length and are then stocked directly into the upper basin rivers.

- IV. Study Schedule: 2010 to end of Recovery Program
- V. Relationship to RIPRAP: General Recovery Program Support Action Plan

- IV.A. Genetic Management

- IV.A.1. Augment razorback sucker

- IV.A.4. Secure and manage genetic stocks in refugia

- IV.C. Operate and maintain facilities

- VI. Accomplishment of FY 2010 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

- Grand Valley Unit Intensive Culture Hatchery

- Prior to spawning in April, 2010, about 21,000 age-1 razorback sucker were stocked into various grow-out ponds in the Grand Valley from the Grand Valley Unit. These fish represented young from 14 different paired matings. Fish were stocked as a mixture of fish from each lot. Fish from the different lots were stocked in equal numbers in each pond. These fish were not PIT tagged so that individuals from the different lots will not be identifiable at harvest time.

- In 2010, 7,022 fish were held in the hatchery and reared to stocking size and then stocked directly into the Colorado and Gunnison rivers to supplement fish reared in the grow-out ponds. In 2010, 2,081 razorback sucker were stocked into the Gunnison River, and 4,941 razorback sucker were stocked into the Colorado River directly from the intensive culture hatchery. These fish averaged 241mm total length (range, 220–395 mm).

- In April 2010, razorback sucker broodstock held at Horsethief rearing ponds were spawned and the eggs were transferred to the Grand Valley Unit. 100,000+ excess fry were stocked into grow-out ponds including Butch Craig pond. These fish are from 20 individual paired matings and will be harvested in 2011. The hatchery is currently holding about 28,000 3–4 inch fish for stocking in 2011. These fish are from 14 individual paired matings. About 21,000 of these fish will be stocked into grow-out ponds next spring and the remainder will be held in the hatchery until stocking size and stocked directly into the Green, Gunnison, and Colorado rivers in late spring 2011.

Horsethief Ponds

About 350 adult broodstock are currently being held in Horsethief Ponds. These fish will be used for future spawning.

Grow-out Ponds

In fall 2010, 7,845 razorback suckers were harvested from grow-out ponds and stocked into the Colorado (6,784) and Gunnison (1,061) rivers. Survival in the grow-out ponds remained consistent with harvest rates from previous years. Condition of harvested fish varied among the ponds. Fish stocked from all ponds averaged 264 mm TL.

All leased ponds required sampling with fyke nets which is less than 100% effective. We know that at least some of the leased ponds have holdovers which we will attempt to catch next spring. Some of these ponds are very deep and sampling with fyke nets is not effective under some conditions. Evaluation of management of the grow-out ponds is a continuous process. We implemented several management changes that increased production in some of our ponds. We are continuing to evaluate management options that will improve the survival and growth of razorback suckers in the grow-out ponds.

Leases for Morse, Brunett, Heuton and McGuire Ponds expired in FY2010. We renewed the lease on Morse pond for another 3 years. Other ponds available for FY2011 that are “freebies” include Elam, Feurborne, and Beswick Ponds

Stocking Summary

We stocked a total of 14,867 razorback suckers into the Colorado (6,784), Gunnison (3,142) and Green (4,941) rivers in 2010 with an overall average length of 253 mm.

VII. Recommendations: Continue management and operation of facilities to serve as a primary refuge for endangered fishes of the Upper Colorado Basin.

II. Project Status: Project is ongoing and on track

IX. FY 2010 Budget:

A. Funds Provided: \$507,224

B. Funds Expended: \$507,224

C. Difference:-0-

D. Percent of the FY 2010 work completed, and projected costs to complete

E. Recovery Program funds spent for publication charges:-0-

X. Status of Data Submission: PIT tag numbers and data associated with stocked fish have been submitted to the data base.

XI. Signed: Thad Bingham

Brian Scheer

11/2/2010