

I. Project title: **Propagation Facilities, in the Grand Valley (24 Road Hatchery ,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 with construction of Horsethief Rearing Ponds. 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 razorbacks suckers for stocking into the Colorado, Gunnison, and San Juan Rivers.

In April and May of 2001, razorback broodstock held at Horsethief Rearing Ponds were spawned and the eggs were transferred to the 24 Road Hatchery. A total of 28 family lots of fish were hatched. Hatching success varied from 1% to 95%. Approximately 250,000 fish were hatched from the 28 lots. A total of 171,665 fry and fingerlings from the 2001 year-class were stocked into various ponds for grow out and harvest next spring or sent to other hatcheries between May and December of 2001. As of December 2001, 57,000 razorback suckers from the 2001 year-class remain in the hatchery.

A total of 49,872 2000 year-class fish were stocked in grow out ponds in 2001, from which 6,255 harvested fish over 200 mm in length were stocked in the Colorado and Gunnison rivers. The broodstock fish at Horsethief ponds were culled down and the excess stocked into the Gunnison River. Most of the fish were in the 400-550 mm size range.

All of the 2001 year-class fish and five ponds stocked with 2000 year-class fish were not harvested and were left to over winter. Two ponds were not completely harvested. One 15 acre pond is being used for additional grow out of fish from harvested ponds that were less than 200 mm in length.

IV. Study Schedule: Duration of Recovery Program

V. Relationship to RIPRAP: General Recovery Program Support Action Plan

IV. Manage genetic integrity and augment or restore populations

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

IV.C.2. Horsethief

VI. Accomplishment of FY 2001 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

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As a result of the State of Colorado changing it's stocking plan from approximately 500,000 variously-sized fish to 16,200 300 mm or larger fish, the propagation plan for the Grand valley was changed. Instead of producing a large number of smaller fish the propagation plan was changed to produce a smaller number of larger fish. This decision came in October of 2001, five months after spawning. Therefore some ponds were overstocked with excess 2001 year-class fish in an effort to reduce the load in the 24 Road Hatchery. The hatchery will now produce approximately 40,000 200-mm-long fish for stocking into growout ponds in spring 2001. The final goal is to harvest 16,200 300-mm-long fish from the grow-out ponds for stocking in fall 2002. The ponds that have been over stocked may create a bottleneck until the fish have been culled or have been harvested, but this was the best plan to get on track with the new stocking plan as soon as possible.

Razorback sucker broodstock currently held at Horsethief ponds:

6	wild adults from the Green River.
17	1991 year-class, F ₁ s from Green River broodstock
66	1992 year-class, F ₁ s from original broodstock
38	1994 year-class, F ₁ s from original broodstock
13	1995 year-class, F ₁ s from Green River broodstock
91	1995 year-class, F ₁ s from original broodstock
6	1996 year-class, F ₁ s from original broodstock
42	1997 year-class, F ₁ s and F ₂ s from all broodstock
84	1998 year-class, F ₁ s and F ₂ s from all broodstock
32	1998 year-class, F ₁ s from wild Mojave broodstock
97	1999 year-class, F ₁ s and F ₂ s from all broodstock

In addition there are an unknown number (probably less than 50) of 1998 year-class F₁s from wild Mojave broodstock in Bound's pond — a deep 7 acre lake. This year 15 fish from each harvested lot of year-class 2000 fish were PIT tagged and put in Bound's pond for future broodstock. The 2000 year-class fish are F₁s and F₂s from all broodstock.

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

II Project Status: Project is ongoing and on track

IX. FY Budget:

A. Funds Provided: 330 K

B. Funds Expended: 330 K

C. Difference: -0-

D. Percent of the FY 2001 work completed, and projected costs to complete

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

X. Status of Data Submission: NA

XI. Signed: Frank K. Pfeifer 12/10/01