

I. Project title: **Operation and Maintenance of Ouray National Fish Hatchery.**

II. Principal Investigator(s):
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III. Project Summary:

Ouray National Fish Hatchery (ONFH) was established in May 1996 as a fish refugia and technology development facility to assist in the recovery of the four listed Colorado River fish: razorback sucker, Colorado pikeminnow, bonytail, and humpback chub. Currently, the facilities primary focus is razorback sucker.

The facility, completed September 1998, consists of approximately 11 acres of rearing and refugia ponds, a conditioning reservoir, a one acre well field and lift station, a water treatment building, shop, and hatchery building. In addition to the hatchery facilities, 27.5 acres of grow out ponds have been acquired in the Uinta basin to supplement hatchery production.

The basic operation plan for the facility is to operate a genetically sound captive propagation program to maintain approximately 500 captive razorback sucker brood stock and produce sufficient larvae needed for flood plain wetland studies and hatchery production. The production goals are to rear approximately 15,000, ≥ 300 mm (12 inch) sub-adult razorback sucker to stock into the middle and lower Green River in Utah on a yearly basis for six years.

IV. Study Schedule: Ongoing.

V. Relationship to 2003 RIPRAP:

General Recovery Program Support Action Plan (page 23)

IV.A.4. Secure and manage the following presumptive stocks in refugia

IV.A.4.a. Razorback sucker

IV.A.4.a.(1). Green River

IV.C. Operate and maintain facilities (page 24)

IV.C.2. Ouray

Green River Action Plan: Mainstem (page 27)

IV.A.1. Develop state stocking plan for four endangered fishes in the Green River

IV.A.1.c. Implement plan

VI. Accomplishment of FY 2003 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings.

The ONFH spawned 98 female and 111 male razorback sucker captive brood fish in May 2003. The result was 1,140,000 eggs and 64,306 larvae (5.6% hatch). We normally experience a 50% or better hatch, and really can't explain the poor hatch this year, but are evaluating what factors might have been different this year and planning appropriate actions for 2004. The low numbers of larvae produced provided adequate fish for propagation and a study request from the State of Utah, but fell short of larvae requested by the Service for flood plain survival studies. The Grand Valley Propagation Facility in Grand Junction, Colorado had a successful spawning season producing approximately 309,023 surplus razorback sucker larvae. ONFH requested the excess larvae from the Grand Junction facility and the fish were delivered to ONFH on June 16, 2003. ONFH retained approximately 27,800 razorback sucker from both sources which are being reared to meet the State of Utah's stocking plan and the remaining 345,529 fish were used by the U.S. Fish and Wildlife Service and Utah Division of Wildlife Resources for field experiments.

The middle Green River was stocked April 4-8, 2003 with 7,832 razorback suckers averaging, 267mm (10.5 inches) from a 2001 year class. These fish were reared intensively utilizing a new reuse system that was installed in the hatchery building in the spring of 2002. The middle Green River was subsequently stocked on September 5 and 26, 2003 with 304, 205mm (8.1 inches) and 375, 352mm (13.9 inches) 2001 year class razorback sucker. These fish were harvested from Uinta basin grow out ponds (Table 1). We believe several hundred fish still exist in two of the ponds, but cool weather hampered harvest efforts. Another attempt at harvest will be made during spring 2004. All the fish were stocked at the Split Mountain boat ramp located on the Dinosaur National Monument in Utah. Also on October 23, 2003, 108, 300mm (12 inches) 2001 year class razorback sucker were harvested from hatchery ponds and stocked at the Ouray NFH boat ramp on the Ouray National Wildlife Refuge. The three stocking efforts represented 58% (8,619 fish) of the required number of razorback sucker (14,895 fish) to be stocked to the Middle and Lower Green River in 2003. The plan entitled, An Integrated Stocking Plan for Razorback sucker, Bonytail, and Colorado pikeminnow for the Upper Colorado River Endangered Fish Recovery Program, calls for 14,895 razorback sucker ≥ 300 mm (12 inches) in the Middle and Lower Green River yearly for 6 years.

The ONFH is currently maintaining approximately 500 (25 lots) genetically sound Green River razorback sucker brood stock and continues to rear 27,800, 2003 razorback sucker to meet Recovery plan goals.

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

VIII. Project Status: Project is ongoing and on track.

IX. FY Budget:

A. Funds provided: \$420,000

B. Funds expended: \$420,000

C. Difference: \$0

D. Percent of the FY2003 work completed and projected costs to complete: 100%

E. Recovery Program funds spent for publication charges: \$0

X. Status of Data Submission: PIT-tag data submitted by November 14, 2003.

XI. Signed: Steven H. Severson Date: 11/17/03

Table 1. 2003 HARVEST OF RAZORBACK SUCKER FROM LEASED PONDS

Pond	Acres	Date Stocked	Number Stocked	Number/ acre	Size Stocked (mm)	Date Harvested	Number Harvested	Percent Harvested	Size Harvested	Current Status
Brotherson-1	6	05/19/01	20208	3368	15	-	0	0	0	No RZs. Contains LM Bass, must remove
Brotherson-2	6	05/17/01	15498	2583	15	09/25/01	6409	41	?	Dry. Can not over-winter fish, restocked Rzs into other ponds
Brotherson-3	1	05/17/01	2442	2442	15	10/03/01	840	34	?	No RZs. Can not over-winter fish, restocked Rzs into other ponds
Hackford	2	-	-	-	-	-	-	-	-	Unusable. Will not hold water
Hughes	2	05/15/01 10/03/01 06/27/02	6396 1674 1523		15 15 145					Drainable, but needs a wet winter to refill, Can overwinter fish
			9593	4780		09/05/03	304	3.2	205 mm	~ 200 (visable) RZ's still in pond
Jolley	1	05/22/01	3750	7500	15	10/06/03	0	0.00%	-	Pond is smaller than 0.5 acres. Partially drainable. Pond was not screened, fish may have escaped. Lots of vegetation hampers harvest effort
Rinderknecht (upper)	2	10/03/01	5575	2788	???	09/26/03	191	3.4	354	Nice ponds, very deep (15' and 30' respectively). Harvest in spring when fish are moving out of the deep water. In fall, fish stay in deep water and are hard to catch. There was no screen in place so some fish may have escaped.
Rinderknecht (lower)	6	06/26/01	2666	444	145	09/26/03	94	3.5	365	
Vincent	1.5	05/15/01	3750	2500	15	09/05/03	90	2.4	337	Productive pond, but small. Owner is reshaping pond, possibly making additional ponds over the winter.
Totals	27.5 (1)		63482 (2)	2308			679			

(1) Pond sizes have been overestimated, actual acreage available to grow-out fish is less than this.

(2) Ponds have been overstocked, should not exceed 500 fish/acre in most situations.