

**COLORADO RIVER RECOVERY PROGRAM
FY-2002/2003 PROPOSED SCOPE OF WORK**

Project No.: 29b

Lead Agency: Fish and Wildlife Service
Ouray National Fish Hatchery

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Date: June 5, 2001
Revised: November 26, 2001

<u>Category</u>	<u>Expected Funding Source</u>
<input type="checkbox"/> Ongoing project	<input checked="" type="checkbox"/> Annual funds
<input checked="" type="checkbox"/> Ongoing-revised project	<input type="checkbox"/> Capital Funds
<input type="checkbox"/> Requested project	<input type="checkbox"/> Other
<input type="checkbox"/> Unsolicited proposal	

I. Title of Proposal: **Operation and Maintenance of Ouray National Fish Hatchery.**

II. Relationship to RIPRAP:

General Recovery Program Support Action Plan:

IV. Manage genetic integrity and augment or restore populations.

IV.A. Genetics Management.

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

IV.A.4.a. Razorback sucker

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

IV.C. Operate and maintain facilities.

IV.C.1. Ouray National Fish Hatchery.

Green River Action Plan: Mainstem

IV.A. Augment and restore populations as needed.

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

IV.A.1.c. Implement plan.

III. Study Background/Rationale and Hypotheses

This project is directly related to Section 2.4 IV. "Conserve Genetic Integrity and Augment or Restore Populations" in the Recovery Program Recovery Action Plan (USFWS 1993). One of five elements in the Recovery Program is "native fish stocking" (USFWS 1987). The goal of this element is to produce sufficient captive-reared

endangered fishes for conducting laboratory and field research and to develop brood stocks with genetic diversity similar to the wild stock used as founders (Williamson and Wydoski 1994). The need for captive-reared endangered fish and propagation facilities is identified in Wydoski (1994).

IV. Study Goals, Objectives, End Product:

Goal: To operate a genetically sound captive propagation program for high priority endangered fish species for the RIP in the Upper Colorado River Basin in accordance with the Annual Propagation Operation Plan.

Objective: Operate and maintain propagation facilities that are needed to hold, rear, and produce captive-reared endangered fishes for the RIP in the Upper Colorado River Basin in accordance with the Annual Propagation Operation Plan.

End Product: Maintenance of endangered fish in refugia to prevent extinction; development of genetically sound broodstocks for production of young fish for stocking to stabilize or enhance wild stocks; production of captive-reared endangered fish for priority laboratory and field experiments.

V. Description of Past Performance on This or Similar Projects:

Razorback suckers have been propagated on the Ouray National Wildlife Refuge since 1987. The first facilities were established by the Vernal Colorado River Fish Project on the Ouray National Wildlife Refuge and was limited to 3, .1 acre ponds, 3, .2 acre ponds and two steel buildings housing 14, 4' incubation and rearing troughs, 6, 4' circular tanks, 15, 3' circular tanks and 10, 8' circular tanks. Because of the success shown with the small facility, a decision was made by the U.S. Fish and Wildlife Service (USFWS) to construct a permanent facility using "Stewardship", Drought Relief Funds, Recovery Funds and USFWS funds. The permanent facility was completed in September of 1998 and consists of a hatchery building housing 40, 4' fiberglass hatching troughs; 21, 3' circular fiberglass tanks; 25, 4' circular fiberglass tanks; 15, 8' circular fiberglass tanks; 24, .2 acre rearing ponds and 12, .5 acre brood (refugia) ponds. The hatchery facility has been used for spawning, incubation, fish tagging, fish health and pond inventory during FY 2000 and FY 2001. Tentative plans for the hatchery are to overwinter approximately 15,000 2001 RBS. The 24 .2 acre ponds have been tested with stocking rates ranging from 2,500 to 25,000 swim-up fry per acre. The .5 acre ponds are used for broodstock development and maintenance.

Since the Fall of 1998 through the Spring of 2001, the Ouray facility has stocked 225,998 GR RBS to wetlands along the Green River and to the Green River in northeastern Utah. During the Spring of 2001, 52,480 GR RBS fry were stocked to 18 surface acres of leased grow-out ponds in the Uintah Basin and 66,100 GR RBS fry were stocked to a 100 acre wetland (L-10) on the Ouray National Wildlife Refuge. In addition, the Ouray National Fish Hatchery currently has 20, .2 acre hatchery ponds

stocked with 33,777, 2001 GR RBS fry; 4, .2 acre ponds with 270 future broodstock and 12, .5 acre ponds stocked with 379 broodstock and 280 future brood stock. Future broodstock and broodstock are offspring from 25 individual mated pairs. Accurate records of lineage for all fish are to be maintained so genetic and stocking plans can be addressed. Spawning and stocking is coordinated with the USFWS propagation coordinator, the current Utah stocking plan and others within the recovery program.

VI. Study area: Upper Colorado River Basin — Propagation facilities in Utah.

VII. Methods/Approach:

Conduct all tasks associated with the operation and maintenance of the Ouray National Fish Hatchery in accordance with the Genetic Management Plan (Williamson and Wydoski 1994) and the annual propagation plan.

VIII. Task Description and Schedule:

All tasks are done annually

1. Develop and maintain captive razorback sucker broodstock.
2. Maintain genetic refugia of RBS held at the Ouray National Fish Hatchery.
3. Spawn razorback sucker broodstock and produce family lots for stocking in the Green River in Utah.
4. Over winter pond cultured YOY RBS intensively at the Ouray National Fish Hatchery.
5. Stock fry and 4-inch-long razorback suckers into grow-out ponds in spring.

IX. FY-2002 Work

Salaries	261,000
(½ yr Project Leader	
1 yr Assistant Manager	
1 yr Biologist	
1 yr Maintenance Person	
½ yr Clerk	
1 yr Technician	
4 wks Seasonal Technician)	
Electricity	45,000
Propane	32,000
Fish Food	30,000
Chemicals and Fertilizer	5,000

Travel & Training	8,000
Supplies	7,000
Vehicles	9,000
Miscellaneous	<u>3,000</u>
	400,000

FY-2003 Work

Salaries	270,000
(½ yr Project Leader	
1 yr Assistant Manager	
1 yr Biologist	
1 yr Maintenance Person	
½ yr Clerk	
1 yr Technician	
4 wks Seasonal Technician)	
Electricity	50,000
Propane	34,000
Fish Food	32,000
Chemicals and Fertilizer	6,000
Travel & Training	9,000
Supplies	7,000
Vehicles	9,000
Miscellaneous	<u>3,000</u>
	420,000

X. Ouray National Fish Hatchery Well Maintenance

The Bureau of Reclamation's Well-Team will maintain and service wells including replacing pumps, jet cleaning wells and developing new wells on an annual basis.

Estimate (FY-02)	40,000
Estimate (FY-03)	40,000

XI. Reviewers:

Various Service and Recovery Program staff.

XII. References:

USFWS (U. S. Fish and Wildlife Service). 1987. Recovery implementation program for endangered fish species in the upper Colorado River basin. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. Six sections. Various pagination.

USFWS (U. S. Fish and Wildlife Service). 1996. Section 7 consultation, sufficient progress, and historic projects agreement and recovery action plan. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. Six sections. 52 pp. + Appendix A.

Williamson, J. H., and R. S. Wydoski. 1994. Genetics management guidelines. Recovery implementation program for endangered fish species in the upper Colorado River basin. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. 40 pp.

Wydoski, R. S. 1994. Coordinated hatchery facility plan: need for captive-reared endangered fish and propagation facilities. Recovery implementation program for endangered fish species in the upper Colorado River basin. U. S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. 133 pp.