

**COLORADO RIVER RECOVERY PROGRAM
FY-2009 PROPOSED SCOPE OF WORK for:
O&M Ouray**

Project No.: 29b

Lead Agency: Fish and Wildlife Service
Ouray National Fish Hatchery
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<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 checked="" 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 2003 RIPRAP:

General Recovery Program Support Action Plan:

4. 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 or restore populations as needed.

IV.A.1. Develop State stocking 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 2003). One of five elements in the Recovery Program is "native fish stocking". 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).

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, 0.1 acre ponds, 3, 0.2 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 30, 4' circular fiberglass tanks; 27, 8' circular fiberglass tanks; 24, 0.2 acre rearing ponds and 12, 0.5 acre brood (refugia) ponds. The hatchery facility has been used for spawning, incubation, fish tagging, fish health and pond inventory since 1998. Tentative plans for the hatchery are to overwinter approximately 20,000 2001 RBS. The 24, 0.2 acre ponds are used for production of 15,000 300 mm razorback suckers per year. The 0.5 acre ponds are used for both broodstock development and maintenance, and for production purposes.

Since the Fall of 1998 through the Spring of 2009, the Ouray facility has stocked Green River razorback sucker to wetlands along the Green River and to the Green River in northeastern Utah. Broodstock from 25 individual mated pairs are being maintained. Accurate records of lineage for all fish are being maintained so genetic and stocking plans can be addressed. Spawning and stocking is coordinated with the USFWS propagation coordinator, the current coordinated stocking plan and others within the recovery program.

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 (Czapla 2003).

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

VI. 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; Czapla 1999) and the annual propagation plan (Czapla 2003).

VII. 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.
6. Test rearing Gila spp. as a refugia and/or broodstock.

VII. FY-2009 Work Budget

Task Activity	Cost
Salaries	
GS-14 Project Leader (\$65.82/hr x 8 hrs/day x 130 days)	\$68,453
GS-12 Assist. Project Leader (\$45.33/hr x 40 hrs/week x 52 weeks)	\$94,287
GS-9 Admin Assist. (\$34.61/hr x 8 hrs/day x 130 days)	\$35,994
GS-11 Fisheries Biologist (\$41.20/hr x 40 hrs/week x 52 weeks)	\$85,696
GS-7 Fisheries Tech (\$25.88/hr x 40 hrs/week x 52 weeks)	\$53,830
WG-9 Maintenance Worker (\$35.63/hr x 40 hrs/week x 52 weeks)	\$74,106
2 YCC (2 Youth x \$6.55/hr x 8 hrs/day x 65 days)	\$6,812

Subtotal	\$419,178
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Operational Costs	Cost
Electricity	\$24,700
Propane	\$15,300
Fish Food	\$12,800
Chemicals and Fertilizer	\$ 7,900
Travel and Training	\$ 6,800
Vehicles	\$13,800
Supplies	\$ 2,200

Subtotal	\$83,500
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Total	\$502,678
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Projected FY2010 \$502,700

U.S. Bureau of Reclamation Well field work

\$6,050

IX. Budget Summary:

	Hatchery	O&M Well
FY2009	\$502,800	\$6,050
FY2010	\$502,800	\$6,050

X. Reviewers:

Various Service and Recovery Program staff.

XI. References:

Czapla, T.E. 1999. Genetics Management Plan. Upper Colorado River Endangered Fish Recovery Program, Denver, Colorado.

Czapla, T.E. 2003. Propagation Activities, 2003. Upper Colorado River Endangered Fish Recovery Program, Denver, Colorado.

USFWS (U. S. Fish and Wildlife Service). 2003. 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.

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.

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.