

RECOVERY PROGRAM
FY 2014-2015 SCOPE OF WORK for:
Ouray National Fish Hatchery Operation and Maintenance

Recovery Program Project Number: 29b

Lead agency: Fish and Wildlife Service

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Category:

- Ongoing project
 Ongoing-revised project
 Requested new project
 Unsolicited proposal

Expected Funding Source:

- Annual funds
 Capital funds
 Other [*explain*]

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

II. Relationship to 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 facility was 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 AStewardship@, 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. The hatchery overwinters approximately 20,000 RBS each year and 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 fall of 2012, 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.

The hatchery also maintains genetic refugia for two populations of humpback chubs (*Gila cypha*), one from the Yampa River and the other from Desolation Canyon of the Green River.

Bonytail chub will be produce at ONFH beginning 2013 but the ISP is not yet established. However there should not be any budgetary changes because the request for razorbacks will decrease proportionately.

IV. Study Goals, Objectives, End Product(s):

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. Study 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; Czaplá 1999) and the annual propagation plan (Czaplá 2003).

VII. Task Description and Schedule:

1. Develop and maintain captive razorback sucker broodstock.
2. Maintain genetic refugia of RBS and HBC 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 150-200 millimeter long razorback suckers into ponds in spring.
6. Stock 15,000 300+ millimeter long razorback sucker in the Green River in Utah
7. Captive rear Gila spp. as a refugia and/or broodstock.

Deliverables, Due Dates, and Budget by Fiscal Year:

FY-2014 Work Budget

Task Activity	Cost
<i>Salaries</i>	
GS-0482-13 Project Leader/Hatchery Mgr. 26 Pay Period	\$ 127,241.87
GS-0341-09 Admin Officer 13 pay periods	\$ 36,723.00
GS-0482-11 Fish Biologist 26 Pay Periods	\$ 98,326.52
GS-0404-05/06/07 Bio Sci-Techn 26 Pay Periods	\$ 48,208.36
WG-4749-08 Maintenance Mech 26 Pay Periods	\$ 67,004.89
Subtotal	\$ 377,504.64

<i>Operational Costs</i>	Costs
Electricity	\$ 32,254.00

Propane	\$ 16,867.00
Fish Food	\$ 24,850.00
Chemicals and Fertilizer	\$ 19,767.00
Travel and Training, travel for stocking	\$ 1,200.00
Vehicles, Fuel, Repairs, Maintenance	\$ 6,896.00
Supplies (Brum Media \$70K, UV Lights \$1200K, Equipment and Maintenance	\$ 34,350.00
Estimated Overtime (3.0% of total annual salary) and (Sunday Premium Pay 1.25%) (see attached for details)	\$ 3,980.00
Subtotal	\$ 140,164.00
2014 Total	\$ 517,668.64

FY2014	Hatchery \$517,669	BOR O&M Well \$6,050
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FY-2015 Work Budget

Task Activity	Cost
<i>Salaries</i>	
GS-0482-13 Project Leader/Hatchery Mgr. 26 Pay Period	\$ 127,241.87
GS-0341-09 Admin Officer 13 pay periods	\$ 40,336.47
GS-0482-11 Fish Biologist 26 Pay Periods	\$ 101,294.00
GS-0404-05/06/07 Bio Sci-Techn 26 Pay Periods	\$ 49,654.61
WG-4749-08 Maintenance Mech 26 Pay Periods	\$ 70,395.34
Subtotal	\$ 388,922.29

Operational Costs	Costs
Electricity	\$ 32,899.08
Propane	\$ 17,204.34
Fish Food	\$ 25,347.00
Chemicals and Fertilizer	\$ 20,162.34
Travel and Training, travel for stocking	\$ 1,224.00
Vehicles, Fuel, Repairs, Maintenance	\$ 7,033.92
Supplies (Brum Media \$70K, UV Lights \$1200K, Equipment and Maintenance	\$ 35,037.00
Estimated Overtime (3.0% of total annual salary) and (Sunday Premium Pay 1.25%) (see attached for details)	\$ 4,059.60
Subtotal	\$ 142,967.28
2015 Total	\$ 531,889.57

FY2015 Hatchery
\$531,890

BOR O&M Well
\$6,171

FY-2016 Work Budget

Task Activity	Cost
<i>Salaries</i>	
GS-0482-13 Project Leader/Hatchery Mgr. 26 Pay Period	\$
GS-0341-09 Admin Officer 13 pay periods	\$
GS-0482-11 Fish Biologist 26 Pay Periods	\$
GS-0404-05/06/07 Bio Sci-Techn 26 Pay Periods	\$
WG-4749-08 Maintenance Mech 26 Pay Periods	\$
Subtotal	\$ 396,700.73

Operational Costs	Costs
Electricity	\$
Propane	\$
Fish Food	\$
Chemicals and Fertilizer	\$
Travel and Training, travel for stocking	\$
Vehicles, Fuel, Repairs, Maintenance	\$
Supplies (Brum Media \$70K, UV Lights \$1200K, Equipment and Maintenance	\$
Estimated Overtime (3.0% of total annual salary) and (Sunday Premium Pay 1.25%)	\$
(see attached for details)	
Subtotal	\$ 145,826.62
2016 Total	\$ 542,527.35

FY2016 Hatchery
\$542,527

BOR O&M Well
\$6,294

FY-2017 Work Budget

Task Activity	Cost
<i>Salaries</i>	
GS-0482-13 Project Leader/Hatchery Mgr. 26 Pay Period	\$
GS-0341-09 Admin Officer 13 pay periods	\$
GS-0482-11 Fish Biologist 26 Pay Periods	\$
GS-0404-05/06/07 Bio Sci-Techn 26 Pay Periods	\$

WG-4749-08 Maintenance Mech 26 Pay Periods	\$
Subtotal	\$ 404,634.74

<i>Operational Costs</i>	Costs
Electricity	\$
Propane	\$
Fish Food	\$
Chemicals and Fertilizer	\$
Travel and Training, travel for stocking	\$
Vehicles, Fuel, Repairs, Maintenance	\$
Supplies (Brum Media \$70K, UV Lights \$1200K, Equipment and Maintenance	\$
Estimated Overtime (3.0% of total annual salary) and (Sunday Premium Pay 1.25%)	\$
(see attached for details)	
Subtotal	\$ 148,743.15
2017 Total	\$ 553,377.89

	Hatchery	BOR O&M Well
FY2017	\$553,378	\$6,420

FY-2018 Work Budget

Task Activity	Cost
<i>Salaries</i>	
GS-0482-13 Project Leader/Hatchery Mgr. 26 Pay Period	\$
GS-0341-09 Admin Officer 13 pay periods	\$
GS-0482-11 Fish Biologist 26 Pay Periods	\$
GS-0404-05/06/07 Bio Sci-Techn 26 Pay Periods	\$
WG-4749-08 Maintenance Mech 26 Pay Periods	\$
Subtotal	\$ 412,727.43

<i>Operational Costs</i>	Costs
Electricity	\$
Propane	\$
Fish Food	\$
Chemicals and Fertilizer	\$
Travel and Training, travel for stocking	\$
Vehicles, Fuel, Repairs, Maintenance	\$
Supplies (Brum Media \$70K, UV Lights \$1200K, Equipment and Maintenance	\$
Estimated Overtime (3.0% of total annual salary) and (Sunday Premium Pay 1.25%)	\$

(see attached for details)		
	Subtotal	\$ 151,718.01
	2018 Total	\$ 564,445.44

	Hatchery	BOR O&M Well
FY2018	\$564,445	\$6,549

VIII. Budget Summary:

	Hatchery	BOR O&M Well
FY2014	\$517,669	\$6,050
FY2015	\$531,890	\$6,171
FY2016	\$542,527	\$6294
FY2017	\$553,378	\$6420
FY2018	\$564,445	\$6549

IX. Reviewers:

Various Service and Recovery Program staff

X. 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.