

COLORADO RIVER RECOVERY PROGRAM
FY-2014/2015 PROPOSED SCOPE OF WORK for:
Operation and Maintenance of Ouray National Fish Hatchery - Grand Valley Unit

Project No.: 29a

Reclamation Agreement number: R10PG40080

Reclamation Agreement term: October 1, 2013 through September 30, 2018

Lead Agency: Fish and Wildlife Service
Ouray National Fish Hatchery - Grand Valley Unit (Ouray NFH-GVU)

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Date Last Modified: 5/2/2013

Category

- Ongoing project
 Ongoing-revised project
 Requested project
 Unsolicited proposal

Expected Funding Source

- Annual funds
 Capital Funds
 Other

I. Title of Proposal: **Operation and Maintenance of Ouray National Fish Hatchery - Grand Valley Unit**

II. Relationship to 2013 RIPRAP:

General Recovery Program Support Action Plan:

IV. Manage genetic integrity and augment or restore populations (stocking endangered fishes).

IV.A. Genetics Management.

IV.A.4. Secure and manage the following species in hatcheries (according to the Genetics Management Plan).

IV.A.4.a. Razorback sucker.

IV.A.4.a.(2) Upper Colorado River.

IV.A.4.b. Bonytail.

IV.A.4.c. Humpback chub.

- IV.A.4.c.(1) Black Rocks Canyon (Broodstock currently represented by wild fish in the river).
- IV.B. Conduct annual fish propagation activities.
- IV.B.2. Implement integrated stocking plan (2012 Revised Integrated Stocking Plan of the Upper Colorado River Endangered Fish Recovery Program).
- IV.C. Operate and maintain facilities.
- IV.C.2. Ouray NFH – Grand Valley Unit

Four program documents are used to plan, implement, and coordinate genetics management and artificial propagation activities for endangered fishes at Ouray NFH-GVU. These are the Genetics Management Guidelines, Genetics Management Plan, Coordinated Hatchery Facility Plan (Facility Plan), and Integrated Stocking Plan.

III. Study Background/Rationale and Hypotheses

This project is directly related to Section 2.4 IV. A Conserve Genetic Integrity and Augment or Restore Populations (Stocking Endangered Fishes) (USFWS 2013). 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).

Endangered fishes have been cultured and reared in the upper basin since 1987. Propagation began in the Grand Valley in 1991 with construction of Horsethief Refugia Ponds at Horsethief State Wildlife Area. The refugia ponds were constructed to develop and hold broodstock consisting of the last wild razorback suckers captured from the upper Colorado River. Production of razorback suckers began in 1996 when an intensive-rearing, water-reuse hatchery building (24-Road Hatchery) was built. The hatchery was expanded in 1998 and is currently capable of producing about 28,000 young razorback suckers averaging 200mm long each year. During the 2000s, numerous constructed and leased grow-out ponds were used to rear razorback suckers large enough for stocking into the rivers of the upper basin. However, these ponds were not only geographically widespread, but also very disparate in terms of shape, size, depth, ease of access, security, productivity, and rates of return. In 2010 and 2011 most of the leases on these ponds were allowed to expire. The Recovery Program now only maintains one leased (Aubyn Morse pond) and a few “freebie” grow-out ponds (Peters’, Feuerbourne, and CDOT ponds). The newly-constructed Horsethief Canyon Native Fish Facility (HCNFF) ponds, completed in summer 2012, will replace these older, less efficient grow-out ponds. This facility located near Fruita, CO consists of 22 (6.2 total acres of) lined ponds that will allow Ouray NFH-GVU that will greatly simplify producing, rearing, and managing endangered fish production.

To summarize, the Ouray NFH-GVU currently consists of several separate facilities, all of which are managed by hatchery staff to achieve the same goal. These include the 24-Road Hatchery building, the newly constructed HCNFF ponds, the older Horsethief refugia ponds, Peter's Ponds, Morse Pond (leased) and several other "freebie" grow-out ponds.

The first young razorback suckers produced at what is now Ouray NFH-GVU were stocked into the Gunnison River in 1995. More than 100,000 razorback suckers have been stocked into the Gunnison and Colorado rivers since then. Ouray NFH-GVU currently has a broodstock of about 500 adults, including offspring (f_1 s) from wild razorback suckers comprising four year classes. Fish from younger year classes (f_2 s) are also being held and will be added to the broodstock as they mature. Accurate records of lineage for all fish are maintained to ensure that the maximum amount of original genetic material is maintained in the broodstock. Spawning is controlled to ensure that equal numbers of offspring (eventually encompassing several generations) from the original, wild broodstock will be stocked into the river system over the duration of the propagation program.

In May 2013, bonytail will be transferred to Ouray NFH-GVU from the Colorado Parks and Wildlife's Mumma Hatchery. These fish will be held both for production of broodstock and for production of fish for stocking into the rivers of the upper Colorado River basin.

Also in 2013, the Colorado River Fishery Project (CRFP) office in Grand Junction, CO will attempt to seine up and bring in wild juvenile chub (*Gila* spp.) from the Black Rocks area of the Colorado River near the Colorado-Utah state line to Ouray NFH-GVU. These fish will be reared to a size where species can be determined. If wild humpback chub are among them, these fish will be held at Ouray NFH-GVU for development of a broodstock and as a refugia population. Any wild roundtail chub from this group of fish will be repatriated to the Colorado River.

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 Stocking Plan (Nesler et al. 2003).

Objective: Operate and maintain propagation facilities that are needed to hold, rear, or 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 C Ouray NFH-GVU propagation facilities are located in and around Grand Junction and Fruita, CO.

VI. Methods/Approach:

Conduct all tasks associated with the operation and maintenance of Ouray NFH-GVU facilities in accordance with the Genetic Management Plan (Williamson and Wydoski 1994; Czaplá 1999) and the annual propagation plan.

VII. Task Description and Schedule:

All tasks are done annually

1. Develop and maintain captive broodstock for:
 - a. Razorback sucker
 - b. Bonytail
2. Spawn broodstock and produce family lots for culture at either the HCNFF ponds or the 24-Road Hatchery building
 - a. Razorback sucker
 - b. Bonytail.
3. Intensively rear razorback sucker and bonytail.
 - a. Also potentially rear humpback chub brought into captivity.
4. Stock 200mm razorback suckers into grow-out ponds in spring.
5. Maintain water level, water quality, and productivity in HCNFF ponds, Morse Pond and “freebie” grow-out ponds.
6. Operate and maintain Ouray NFH-GVU facilities to:
 - a. Hold, produce, and rear razorback sucker and bonytail
 - c. Hold and rear humpback chub brought in from the wild
7. Harvest, PIT tag, and stock target numbers of endangered fish annually:
 - a. 6,000 razorback sucker (mean = 350 mm TL) into the Gunnison and Colorado rivers (anticipated at 3,000 in each river)
 - b. 10,000 bonytail (mean = 250 mm TL) with stocking locations to be determined by hatchery and state managers along with the Recovery Program Office as time of stocking approaches.

VIII. Fiscal Year 2014 Budget:

(Based on projected FY-2014 costs for Tasks 1-7)

Personnel/Labor Costs (Federal Salary + Benefits)

Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$49.99/hr)	\$ 97,980
Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$49.99/hr)	\$ 97,980
Biological Technician (GS-7 – 1,960 hrs {245 days} @ \$31.76/hr)	\$ 62,250
Biological Technicians (Two GS-5 – 600 hrs {75 days} each {1,200 total hrs} @ \$18.39/hr)	\$ 22,068
Overtime:	
Biological Technician Overtime (GS-7): 1 person 120 total hrs O/T @ \$47.64/hr 10 weekend days @ 8 hrs O/T per day (80 hrs) 20 weekdays @ 2 hrs O/T per day (40 hrs)	\$ 5,717
Biological Technicians Overtime (GS-5): 2 people 80 total hours O/T @ \$27.59/hr 20 weekdays @ 2 hrs per day X 2 people	\$ 2,207
Sub Total	\$288,202

Permitting; Coordination; Data Input, Analysis, Management & Presentation; Report Writing; Office & Administrative Support (Federal Salary + Benefits)

Project Leader (GS-14 - 320 hrs {40 days} @ \$78.63/hr)	\$ 25,162
Administrative Officer (GS-9 – 320 hrs {40 days} @ \$42.15/hr)	\$ 13,488
Sub Total	\$ 38,650

Bozeman Fish Technology Center (in kind service)
Grind and sift fish food for larval razorback suckers <\$ 2,575>

Operations (Fish Food, Chemicals and Fertilizer, Hatchery Supplies, Vehicles and Fuel, Electricity)

Fish Food (from Skretting, USA)
Actual costs = 4 orders of fish food per year (1 order per fiscal quarter) at \$17,800 each = \$71,200. The line items below represent one of our four orders (placed 4/17/2013). This fish food order will last us 90 days. We have several different sizes of fish on station, thus the different sizes of food in each order.

Trout # 1 Crumble: 1,000 lbs @ \$1.14 per lb = \$1,140
Trout # 2 Crumble: 1,000 lbs @ \$1.14 per lb = \$1,140

1.0 mm RZ Grower 2,000 lbs @ \$0.97 per lb = \$1,940	
2.0 mm RZ Grower 4,000 lbs @ \$0.97 per lb = \$3,880	
3.0 mm RZ Grower 8,000 lbs @ \$0.97 per lb = \$7,760	
4.0 mm RZ Grower 2,000 lbs @ \$0.97 per lb = \$1,940	
Fish Food Sub Total	<u>\$ 71,200</u>

Chemicals and Fertilizer

Sodium Bicarbonate (pH increaser)	
Eighty 50-lb bags @ \$70 per bag annually	\$ 5,600
Copper Sulfate	
Ten 50-lb bags (pellets) @ \$95 each = \$950	
50 gallons 10% solution @ \$77.50/gallon = \$3,875	\$ 4,825
Spartan Sparquat 256 Germicidal Cleaner	
10 gallons @ \$30 per gallon	\$ 300
Chloram-X (dechlioniater)	
Sixteen 10 lb buckets (4/case, 4 cases/year) @ \$90/bucket	\$ 1,440
Finquel brand MS-222 anesthetic	
Two 1 kg bottles @ \$450/bottle	\$ 900
Chloramine-T	
Two 55-lb containers @ \$440 per container	\$ 880
Formalin (10% fixative) 55-gallon drum	\$ 275
Denatured ethyl alcohol	
Eight 5-gallon jugs @ \$95 per jug	\$ 760
Distilled water	
Ten 2-gallon jugs @ \$30 per jug	\$ 300
Stress Coat (slime coat replacement)	
Two 5-gallon containers @ \$145 each	\$ 290
No-Foam De-Foamer	
6 gallons @ \$35/gallon	\$ 210
Weed killer (2,4-D and Roundup)	
2,4-D 40 quarts of concentrate @ \$35 each	\$ 1,400
Roundup 10 gallons concentrate @ \$180 each	\$ 1,800
Aquashade (water colorant) 50 gallons @ \$60 per gallon	\$ 3,000
Dimilin 25W (for anchor worm control)	
Twenty 5 lb boxes @ \$250 per 5 lb box	<u>\$ 5,000</u>
Chemicals and Fertilizer Sub Total	\$ 26,980

Hatchery Supplies and Equipment Repair and Replacement

Egg hatching jars – Model J30 5 @ \$85/each	\$ 455
24-hr belt feeder (repair/replace 10 annually)	
@ \$270 each	\$ 2,700
Waders (replace 3 pair annually) @ \$75 each	\$ 225
Duraframe dip nets (replace 5 annually) @ \$300 each	\$ 1,500

Digital scale repair, replace battery, recalibration (3 scales per year @ \$500 per service per scale)	\$ 1,500
YSI brand water chemistry meters (dissolved oxygen, pH, salinity) – repair, replace, recalibrate annually	\$ 2,000
HVAC service (done annually)	\$ 1,200
Service fish food cooler refrigeration unit (done annually)	\$ 750
Service the backup generator (done annually)	\$ 700
Pump & motor maintenance/service (labor & parts)	\$ 5,700
Rebuild portable water pump (1 pump/year) = \$1,700	
Rebuild hatchery motor/pump (1 set/year) = \$4,000	
Fluorescent hatchery lights (replace about ½ annually)	\$ 2,200
Tank Cleaning Supplies (Scotch-Brite Pads, Scrubbing Handles)	\$ 235
Maintenance tool replacement (screwdrivers, crescent wrenches, monkey wrenches, vise grips, hammers, rubber mallets, ratchets & sockets, drills & drill bits, chop saw blades)	\$ 400
Plumbing supplies (PVC) Pipe, couplers, primer & glue	\$ 2,000
Refill compressed oxygen bottles (50 per year) @ \$50 each	\$ 2,500
Air stones, tubing couplers, hose clamps	\$ 1,500
Twenty 0.4” air stones @ \$50 each = \$1,000	
Tubing, couplers, hose clamps = \$500	
Screens and pond boards	\$ 3,700
10 screens @ \$300/screen = \$3,000	
PVC lumber for making screen frames	
Metal mesh for making screens	
Redwood pond boards	
100 boards (2” X 8” X 6’) @ \$7 each = \$700	
Koch rings (for aerating water in packed columns)	\$ 500
Sand (for sand filters)	
1 pallet = twenty 80 lb bags	<u>\$ 2,000</u>
Hatchery Supplies Sub Total	\$ 31,765

Office Supplies	<u>\$ 1,500</u>
Staples, copier paper, pencils/pens, paperclips, note pads, cleaning supplies, toilet paper, paper towels, etc.	
Office Supplies Sub Total	\$ 1,500

Vehicles (maintenance & repair) and fuel
Vehicles: GSA-lease rate (\$334/month = \$11/day & 0.30.mile)

Hatchery pickup truck	
24-Road Hatchery Building to Horsethief Canyon Native Fish Facility ponds (45 mile round trip X 1 vehicle X 365 days per year = 16,425 total miles per year)	\$ 8,945
Stocking truck	
5 stocking trips from 24 Road Hatchery Building to Green River, UT (220 miles round trip X 1 truck) X 2 days per trip	\$ 440
5 stocking trips to Palisade, CO (25 miles round trip X 1 truck)	\$ 95
5 stocking trips to Whitewater, CO (65 miles round trip X 1 truck)	\$ 155
5 stocking trips to Delta, CO (80 miles round trip X 1 truck)	\$ 175
5 stocking trips to DeBeque, CO (65 miles round trip X 1 truck)	\$ 155
Fuel for water pumps used to fill stocking truck and temper fish (40 gallons 91 octane fuel @ \$4.50 gallon)	\$ 180
Diesel fuel	\$ 350
For Kubota tractor – one 55-gallon drum of diesel @ \$250 (includes fuel, barrel & delivery) = \$250	
For back-up generator at hatchery – 25 gallons @ \$4.00/gallon = \$100	
Repair/replace shocks, struts, brakes	<u>\$ 800</u>
Vehicles and Fuel Sub Total	\$ 11,295
Electricity (for pump and spawning shed at the Horsethief State Wildlife Area brood ponds)	
8 months operation at \$800/month	<u>\$ 6,400</u>
Electricity Sub Total	\$ 6,400
Operations Sub Total	\$149,140
Fish and Wildlife Service CRFP Total	\$475,992
Bureau of Reclamation	
Utilities for 24 Rd Hatchery (gas, electricity, phone)	\$ 43,000
FY-2014 Total	\$518,992

Fiscal Year 2015 Budget:

(Based on projected FY-2015 costs for Tasks 1-7)

Personnel/Labor Costs (Federal Salary + Benefits)

Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$51.49/hr)	\$100,920
Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$51.49/hr)	\$100,920
Biological Technician (GS-7 – 1,960 hrs {245 days} @ \$32.72/hr)	\$ 64,131
Biological Technicians (Two GS-5 – 600 hrs {75 days} each {1,200 total hrs} @ \$18.94/hr)	\$ 22,728
Overtime:	
Biological Technician Overtime (GS-7): 1 person 120 total hrs O/T @ \$49.08/hr 10 weekend days @ 8 hrs O/T per day (80 hrs) 20 weekdays @ 2 hrs O/T per day (40 hrs)	\$ 5,890
Biological Technicians Overtime (GS-5): 2 people 80 total hours O/T @ \$28.41/hr 20 weekdays @ 2 hrs per day X 2 people	<u>\$ 2,273</u>
Sub Total	\$296,863

Permitting; Coordination; Data Input, Analysis, Management & Presentation; Report Writing; Office & Administrative Support (Federal Salary + Benefits)

Project Leader (GS-14 - 320 hrs {40 days} @ \$80.99/hr)	\$ 25,917
Administrative Officer (GS-9 – 320 hrs {40 days} @ \$43.41/hr)	<u>\$ 13,891</u>
Sub Total	\$ 39,808

In-Kind Services

Bozeman Fish Technology Center Grind and sift fish food for larval razorback suckers *** see FY-2014 budget for line item breakdowns	
FY-2014 Budget Cost	<u><\$2,575></u>
Subtotal with 3% added for inflation	<u><\$2,652></u>

Operations (Fish Food, Chemicals and Fertilizer, Hatchery Supplies, Vehicles and Fuel, Electricity)

*** see FY-2014 budget for line item breakdowns	
FY-2014 Budget Cost	<u>\$149,140</u>
FY-2015 cost held at FY-2014 levels	<u>\$149,140</u>

Fish and Wildlife Service CRFP Total	\$485,811
Bureau of Reclamation Utilities for 24 Rd Hatchery (gas, electricity, phone) *** see FY-2014 budget for line item breakdowns	
FY-2014 Budget Cost	<u>\$ 43,000</u>

Subtotal with projected 2% CPI increase	\$43,860
FY-2015 Total	\$529,671

**Out-year budgets for Operation and Maintenance of Ouray
National Fish Hatchery – Grand Valley Unit: 2016-2018**

**THESE BUDGETS ARE ESTIMATES ONLY AND MAY
NOT REPRESENT ACTUAL COSTS**

Fiscal Year 2016 Budget:

(Based on projected FY-2016 costs for Tasks 1-7)

Personnel/Labor Costs (Federal Salary + Benefits)

Fishery Biologist (GS-11 – 1,960 hrs {245 days} @

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\$53.03/hr)	\$103,939
Fishery Biologist (GS-11 – 1,960 hrs {245 days} @	
\$53.03/hr)	\$103,939
Biological Technician (GS-7 – 1,960 hrs {245 days} @	
\$33.70/hr	\$ 66,052
Biological Technicians (Two GS-5 – 600 hrs {75 days} each {1,200 total hrs} @ \$19.51/hr)	\$ 23,412
Overtime:	
Biological Technician Overtime (GS-7): 1 person	
120 total hrs O/T @ \$50.55/hr	
10 weekend days @ 8 hrs O/T per day (80 hrs)	
20 weekdays @ 2 hrs O/T per day (40 hrs)	\$ 6,066
Biological Technicians Overtime (GS-5): 2 people	
80 total hours O/T @ \$29.27/hr	
20 weekdays @ 2 hrs per day X 2 people	<u>\$ 2,342</u>
Sub Total	\$305,750

Permitting; Coordination; Data Input, Analysis, Management & Presentation; Report Writing; Office & Administrative Support (Federal Salary + Benefits)

Project Leader (GS-14 - 320 hrs {40 days} @ \$83.42/hr)	\$ 26,694
Administrative Officer (GS-9 – 320 hrs {40 days} @ \$44.72/hr)	<u>\$ 14,310</u>
Sub Total	\$ 41,004

In-Kind Services

Bozeman Fish Technology Center	
Grind and sift fish food for larval razorback suckers	
*** see FY-2014 budget for line item breakdowns	
FY-2015 Budget Cost	<u><\$2,652></u>
Subtotal with 3% added for inflation	<u><\$2,732></u>

Operations (Fish Food, Chemicals and Fertilizer, Hatchery Supplies, Vehicles and Fuel, Electricity)

*** see FY-2014 budget for line item breakdowns	
FY-2014 Budget Cost	<u>\$149,140</u>
FY-2016 cost held at FY-2014 levels	\$149,140

Fish and Wildlife Service CRFP Total \$495,894

Bureau of Reclamation

Utilities for 24 Rd Hatchery (gas, electricity, phone)	
*** see FY-2014 budget for line item breakdowns	
FY-2015 Budget Cost	<u>\$ 43,860</u>

	Subtotal with projected 2% CPI increase	\$44,737
FY-2016 Total		\$540,631

Fiscal Year 2017 Budget:

(Based on projected FY-2017 costs for Tasks 1-7)

Personnel/Labor Costs (Federal Salary + Benefits)

Fishery Biologist (GS-11 – 1,960 hrs {245 days} @
\$54.63/hr)

\$107,075

Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$54.63/hr)	\$107,075
Biological Technician (GS-7 – 1,960 hrs {245 days} @ \$34.71/hr)	\$ 68,032
Biological Technicians (Two GS-5 – 600 hrs {75 days} each {1,200 total hrs} @ \$20.09/hr)	\$ 24,108
Overtime:	
Biological Technician Overtime (GS-7): 1 person 120 total hrs O/T @ \$52.07/hr	
10 weekend days @ 8 hrs O/T per day (80 hrs)	
20 weekdays @ 2 hrs O/T per day (40 hrs)	\$ 6,248
Biological Technicians Overtime (GS-5): 2 people 80 total hours O/T @ \$30.14/hr	
20 weekdays @ 2 hrs per day X 2 people	\$ 2,411
Sub Total	\$314,949

Permitting; Coordination; Data Input, Analysis, Management & Presentation; Report Writing; Office & Administrative Support (Federal Salary + Benefits)

Project Leader (GS-14 - 320 hrs {40 days} @ \$85.92/hr)	\$ 27,494
Administrative Officer (GS-9 – 320 hrs {40 days} @ \$46.06/hr)	\$ 14,739
Sub Total	\$ 42,233

In-Kind Services

Bozeman Fish Technology Center Grind and sift fish food for larval razorback suckers *** see FY-2014 budget for line item breakdowns	
FY-2016 Budget Cost	<u><\$2,732></u>
Subtotal with 3% added for inflation	<u><\$2,814></u>

Operations (Fish Food, Chemicals and Fertilizer, Hatchery Supplies, Vehicles and Fuel, Electricity)

*** see FY-2014 budget for line item breakdowns	
FY-2014 Budget Cost	<u>\$149,140</u>
FY-2017 cost held at FY-2014 levels	<u>\$149,140</u>

Fish and Wildlife Service CRFP Total \$506,322

Bureau of Reclamation

Utilities for 24 Rd Hatchery (gas, electricity, phone) *** see FY-2014 budget for line item breakdowns	
FY-2016 Budget Cost	<u>\$ 44,737</u>
Subtotal with projected 2% CPI increase	<u>\$45,632</u>

FY-2017 Total

\$551,954

Fiscal Year 2018 Budget:

(Based on projected FY-2018 costs for Tasks 1-7)

Personnel/Labor Costs (Federal Salary + Benefits)

Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$56.27/hr)	\$110,289
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Fishery Biologist (GS-11 – 1,960 hrs {245 days} @ \$56.27/hr)	\$110,289
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Biological Technician (GS-7 – 1,960 hrs {245 days} @ \$35.75/hr	\$ 70,070
Biological Technicians (Two GS-5 – 600 hrs {75 days} each {1,200 total hrs} @ \$20.69/hr)	\$ 24,828
Overtime:	
Biological Technician Overtime (GS-7): 1 person	
120 total hrs O/T @ \$53.63/hr	
10 weekend days @ 8 hrs O/T per day (80 hrs)	
20 weekdays @ 2 hrs O/T per day (40 hrs)	\$ 6,436
Biological Technicians Overtime (GS-5): 2 people	
80 total hours O/T @ \$31.04/hr	
20 weekdays @ 2 hrs per day X 2 people	<u>\$ 2,483</u>
Sub Total	\$324,395

Permitting; Coordination; Data Input, Analysis, Management & Presentation; Report Writing; Office & Administrative Support (Federal Salary + Benefits)

Project Leader (GS-14 - 320 hrs {40 days} @ \$88.50/hr)	\$ 28,320
Administrative Officer (GS-9 – 320 hrs {40 days} @ \$47.44/hr)	<u>\$ 15,181</u>
Sub Total	\$ 43,501

In-Kind Services

Bozeman Fish Technology Center	
Grind and sift fish food for larval razorback suckers	
*** see FY-2014 budget for line item breakdowns	
FY-2017 Budget Cost	<u><\$2,814></u>
Subtotal with 3% added for inflation	<u><\$2,898></u>

Operations (Fish Food, Chemicals and Fertilizer, Hatchery Supplies, Vehicles and Fuel, Electricity)

*** see FY-2014 budget for line item breakdowns	
FY-2014 Budget Cost	<u>\$149,140</u>
FY-2018 cost held at FY-2014 levels	<u>\$149,140</u>

Fish and Wildlife Service CRFP Total \$517,036

Bureau of Reclamation

Utilities for 24 Rd Hatchery (gas, electricity, phone)	
*** see FY-2014 budget for line item breakdowns	
FY-2017 Budget Cost	<u>\$ 45,632</u>
Subtotal with projected 2% CPI increase	<u>\$46,545</u>

FY-2018 Total \$563,581

IX. Budget Summary:

FY-2014

USFWS-GJ	\$475,992
BoR	<u>\$ 43,000</u>
2014 Total	\$518,992

FY-2015

USFWS-GJ	\$485,811
BoR	<u>\$ 43,860</u>
2015 Total	\$529,671

2014-2015 Total = \$1,048,663

Estimated Budget Summary for Fiscal Years 2016-2018:

FY-2016

USFWS-GJ	\$495,894
BoR	<u>\$ 44,737</u>
2016 Total	\$540,631

FY-2017

USFWS-GJ	\$506,322
BoR	<u>\$ 45,632</u>
2017 Total	\$551,954

FY-2018

USFWS-GJ	\$517,036
BoR	<u>\$ 46,545</u>
2018 Total	\$563,581

2016-2018 Total = \$1,656,166

5-Year Total = \$2,704,829

X. Reviewers:

Service and Recovery Program staff.

XI. References:

Czapla, T.E. 1999. Genetics Management Plan. 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.

Nesler, T.P., K. Christopherson, J.M. Hudson, C.W. McAda, F. Pfeifer, and T.E. Czaplá. 2003. An integrated stocking plan for razorback sucker, bonytail and Colorado pikeminnow for the Upper Colorado River Endangered Fish Recovery Program, Addendum to State stocking plans. Upper Colorado River Endangered Fish Recovery Program, 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.