

I. Project Title: **Propagation Facilities in the Grand Valley (Ouray National Fish Hatchery - Grand Valley Unit) for Captive Rearing of Endangered Fishes for the Upper Colorado River Basin.**

II. Bureau of Reclamation Agreement Number(s): R13PG40018

Project/Grant Period: Start date (Mo/Day/Yr): 6/3/2013  
End date: (Mo/Day/Yr): 9/30/2017  
Reporting period end date: 9/30/2014  
Is this the final report? Yes \_\_\_\_\_ No X

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IV. Abstract:

Ouray National Fish Hatchery - Grand Valley Unit (Ouray NFH-GVU) consists of several facilities near Grand Junction, CO. These facilities include the Horsethief Canyon Native Fish Facility (HCNFF), the 24 Road Hatchery building, and several other scattered groups of grow-out ponds.

Ouray NFH-GVU produces and rears razorback sucker [annual stocking target = 6,000 fish  $\geq$  350 millimeters total length (mm TL)] for stocking into the Colorado and Gunnison rivers. In addition, Ouray NFH-GVU also rears bonytail obtained as larvae from the USFWS's Southwest Native Aquatic Resources and Recovery Center (SNARRC) in Dexter, NM (annual stocking target = 10,000 fish  $\geq$  250 mm TL), for stocking into the Colorado and Gunnison rivers. All stocking of these two endangered fishes are in accordance with the approved Integrated Stocking Plan (ISP).

In 2014, humpback chub were brought into the HCNFF ponds from the Black Rocks area of the Colorado River. These fish are being held as a refuge population.

V. Study Schedule: 1996 to end of Recovery Program

VI. Relationship to RIPRAP:

General Recovery Program Support Action Plan

IV.A. Genetic Management

IV.A.1. Augment razorback sucker

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

IV.C. Operate and maintain facilities

VII. Accomplishment of FY 2014 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

#### Razorback Sucker

Prior to spawning in April, 2014, about 11,720 age-1 razorback sucker were stocked into the grow-out ponds at HCNFF. These fish represented young from 15 different paired-matings of broodstock performed in April 2014. Fish were stocked as a mixture of fish from each lot. Fish from the different lots were stocked in equal numbers in each pond. These fish were PIT tagged prior to being stocked into grow-out ponds to help reduce stress later in the year when they would be harvested for stocking.

In April 2014, razorback sucker broodstock held at HCNFF were spawned and the eggs were transferred to the 24 Road Hatchery building. Hatching rates for razorback sucker eggs were good, with 70% of all eggs successfully hatching into fry. The hatchery is currently holding 1,500 200 mm TL razorback sucker, as well as 3,100 350 mm TL razorback sucker which will overwinter in the HCNFF ponds.

In fall 2014, a total of 6,062 razorback sucker were harvested and stocked. These fish were stocked at four locations – 1,750 were stocked into the Colorado River near Rifle, 112 were stocked (from CDOT Pond) into the Colorado River near DeBeque, 2,200 were stocked into the Colorado River in Grand Junction, and 2,000 were stocked into the Gunnison River near Delta.

Morse Pond (whose lease was renewed in 2013), the Peters Ponds, and a small handful of other “lease-free” grow-out ponds (including CDOT Pond) will continue to be used as necessary in future years as we continue to evaluate management options to improve the survival and growth of razorback suckers produced in grow-out ponds.

#### Bonytail

In spring 2013 approximately 20,000 larval bonytail were received from SNARRC. These fish were stocked into grow-out ponds at HCNFF. In October 2013, these

bontytail were harvested from HCNFF and brought into the 24 Road Hatchery to overwinter.

In summer 2014, a total of 9,529 bontytail were harvested and stocked. These fish were stocked at three locations – 2,939 were stocked into the upper Colorado River (near Rifle, CO), 3,729 were stocked into the Colorado River in Grand Junction, and 2,861 were stocked into the Gunnison River near Delta, CO.

In spring 2014 approximately 20,000 larval bontytail were received from SNARRC. These fish were stocked into two ponds at HCNFF. In October 2014, these bontytail were harvested from HCNFF and brought into the 24 Road Hatchery to overwinter. They will be stocked back into grow-out ponds at HCNFF in spring 2015, where they will be held until being stocked at various locations in the Colorado and Gunnison rivers.

### Humpback Chub

In September 2014, an effort was made to collect and bring humpback chub into captivity from the Black Rocks area of the Colorado River. Initially it was hoped that crews could collect young-of-the-year (YOY) chubs. While small chubs are extremely hard to identify to species, it was thought that these small fish could be reared at the HCNFF until they were large enough to be identified to species. At that point, any humpback chub would be retained in the refugia population, while roundtail chub would be returned to the river. This technique would avoid the need to take larger juvenile and adult fish out of the wild population, which is already quite small in numbers (~ 300 fish in Black Rocks).

CRFP crews spent a week collecting fish, but numbers of small fish were very low. Thus the determination was made to collect larger juvenile and small adult humpback chub. To avoid too great an impact on the wild population, it was determined that no more than 10% of the wild population (~ 30 fish) should be collected during this effort. A total of 20 fish (1 of which was a YOY) were collected and transported to the HCNFF. These 20 fish were tempered and stocked directly into a 1/10 acre grow-out pond. After a week waiting period, the pond was treated for any potential diseases these fish may have been carrying. This same effort will be repeated in 2015, with the hopes of obtaining additional humpback chub for this refuge population.

### 2014 Stocking Summary

A total of 6,062 razorback sucker (101% of the target stocking number) were stocked into the Colorado and Gunnison rivers in September and October 2014 from the HCNFF. The mean TL for all razorback sucker stocked in 2014 was 367 mm (target stocking size was 350 mm TL). Numbers of fish stocked in each location in 2014 were as follows:

<u>Location</u>	<u>Number Stocked</u>
Upper Colorado near Rifle	1,750
Upper Colorado near DeBeque	112 (from CDOT Pond)
Colorado River in Grand Valley	2,200
Gunnison River near Delta	2,000
2014 stocking totals for razorback sucker	6,062

A total of 9,529 bonytail (95.3% of the target stocking number) were stocked into the Colorado and Gunnison rivers in early to mid-July 2014 from the HCNFF. The mean TL for all bonytail stocked in 2014 was 254 mm (target stocking size was 250 mm TL). Numbers of fish stocked in each location in 2014 were as follows:

<u>Location</u>	<u>Number Stocked</u>
Upper Colorado near Rifle	2,939
Colorado River in Grand Valley	3,729
Gunnison River near Delta	2,861
2014 stocking totals for bonytail	9,529

VIII. Additional noteworthy observations: None

IX. Recommendations:

- 1) Continue management and operation of Ouray NFH – GVU facilities to serve as a primary refuge facility for endangered fishes of the Upper Colorado Basin.
- 2) Continue production, grow-out, and stocking of razorback sucker and bonytail (and other native, endangered fish species as appropriate) to meet stocking goals set forth in approved stocking plans by the Upper Colorado River Endangered Fish Recovery Program (UCREFRP).

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

XI. FY 2014 Budget Status

- A. Funds Provided: \$518,992
  - a. \$475,992 to Ouray NFH-GVU
  - b. \$43,000 to Bureau of Reclamation (to pay gas, electricity, phone)
- B. Funds Expended: \$518,992
- C. Difference: \$0
- D. Percent of the FY 2013 work completed, and projected costs to complete: 100%
- E. Recovery Program funds spent for publication charges: \$0

XII. Status of Data Submission (Where applicable): All PIT tag data were submitted to the UCREFRP database manager in October 2014

XIII. Signed: Brian Scheer, Thad Bingham & Dale Ryden 11/13/2014  
Principal Investigator(s) Date