

# Grand Junction *Fish and Wildlife Conservation Office*

Interior Region 7



Photo by Mike Gross USFWS

Palisade High School Fish Hatchery manager/science teacher Pat Steele observes the first batch of Razorback Sucker being transferred into the newly constructed on-campus fish hatchery with students (left to right) Jack Terrin, Addie Steele, and Kyle Roten. August 20, 2020

## ***Highlights - August 2020***

- **Ouray National Fish Hatchery, Grand Valley Unit (Ouray NFH-GVU)**
  - August Activities:
    - Palisade High School Fish Hatchery begins cultivation of Razorback Sucker.
    - Maintenance season at 24 Road Hatchery.
- **Grand Junction Fish and Wildlife Conservation Office (FWCO)**
  - August Activities:
    - Upper Colorado and Gunnison rivers non-native fish removal mid-season update.
    - Young-of-Year *Gila* genus sampling shows promise on the Colorado River.
    - Redlands Diversion Dam fish passage nearing season record number of Colorado Pikeminnow.
    - Grand Junction FWCO coordination with partners update.

# August 2020

## Ouray National Fish Hatchery, Grand Valley Unit

### August Activities: Palisade High School Fish Hatchery begins cultivation of endangered Razorback Sucker



The Palisade High School Fish Hatchery, in partnership with Ouray National Fish Hatchery-Grand Valley Unit (Ouray NFH-GVU), received their first batch of nearly 200 endangered Razorback Sucker (*Xyrauchen texanus*) August 20. These rare omnivorous bottom dwellers are currently two inches long and will be roughly 10-12 inches long when released by students into the upper Colorado River in Palisade, Colorado spring of 2021. Students will insert permanent internal Passive Integrated Transponder (PIT) tags into the fish before being released which will allow biologists (and future biologists) the ability to track their movement as they are encountered in various locations throughout the upper Colorado River basin via electrofishing projects, or as they pass near antennas scattered throughout the basin. The fish will be raised by students and integrated into numerous high school courses at Palisade High School.

While this isn't the only endangered fish hatchery operated by high school students, it is one of a very small handful in the United States and potentially the only non-salmonid endangered fish project of its kind. This partnership will give the Upper Colorado River Endangered Fish Recovery Program a unique opportunity to interact with local community stakeholders all the while helping to inspire the next generation of potential fisheries scientists, as well as boost populations of these very rare fish in the upper Colorado River. Palisade High School students will operate the facility with guidance from Ouray NFH-GVU personnel, giving students the opportunity to learn a wide array of topics including: raising endangered fish, recirculating aquaculture, ichthyology, fish biology, water chemistry and so much more. There are plans for an official opening ceremony once social distancing concerns lessen. Stay tuned! Photos by Mike Gross USFWS unless otherwise stated.



Photo by Jim Cox, Palisade, Colorado

**Top Left:** Palisade H.S. students arrived at Ouray National Fish Hatchery-Grand Valley Unit where they hand sorted the first crop of Razorback Sucker before transporting them to Palisade H.S. **Top Middle and Top Right:** Once at the high school hatchery, students acclimated the fish before unloading them into the new aquaculture tanks.



**Middle Left:** Palisade H.S. student Jack Terrin honing his public relations skills while conducting an interview with the local news. **Middle Center and Right:** Members of the PHS Fish Hatchery Student Leadership Council celebrating and showing off their cool "I'm A Sucker For Razorbacks" T shirts.

[Click here to view local news story about Palisade High School Fish Hatchery](#)



In photos: Palisade High School students Elle Steele, Addie Steele, Jack Terrin, Kaitlyn Erwin, Bella Savage, Kyle Roten, Palisade High School science teacher/hatchery manager Pat Steele and Mike Gross U.S. Fish and Wildlife Service.

August 2020

Ouray National Fish Hatchery, Grand Valley Unit

August Activities: The Palisade High School Fish Hatchery recirculating aquaculture system



# August 2020

## Ouray National Fish Hatchery, Grand Valley Unit

### August Activities: Maintenance season at 24 Road Hatchery



During summer, most of the fish at 24 Road Hatchery are moved to the warmer outdoor grow-out ponds at Horsethief Canyon Native Fish Facility (HCNFF) where they are able to feed on a natural diet of plankton and invertebrates, while getting accustomed to an outdoor environment. This brief reprieve at 24 Road Hatchery allows biologists the opportunity to accomplish some well deserved maintenance tasks while the hatchery is empty. Throughout August, Ouray NFH-GVU personnel added fresh fluidized silica sand to the sand filters. Nitrifying bacteria (*Nitrosomonas* and *Nitrobacter*) living within the sand filters will use the fresh silica sand as a growing medium. These helpful bacteria will help with the breakdown of ammonia once the fish come back inside for the colder months. Also in August, biologists were able to replace an aging turbin pump before serious problems arose. Photos by Brian Scheer USFWS



Haden VanWinkle and Nathan Vargas changing one of two turbin pumps at 24 Road Hatchery (photo top left).

The new turbin pump was wired with a new thermo protected connector (photo top middle).

The newly installed turbin pump successfully installed and ready to roll (photo top right).

Brandee Keuer adding one of many 50 pound bags of silica sand to the sand filters at 24 Road Hatchery (photo bottom right).



# August 2020

## Grand Junction Fish and Wildlife Conservation Office August Activities: Upper Colorado and Gunnison rivers non-native fish removal mid-season update



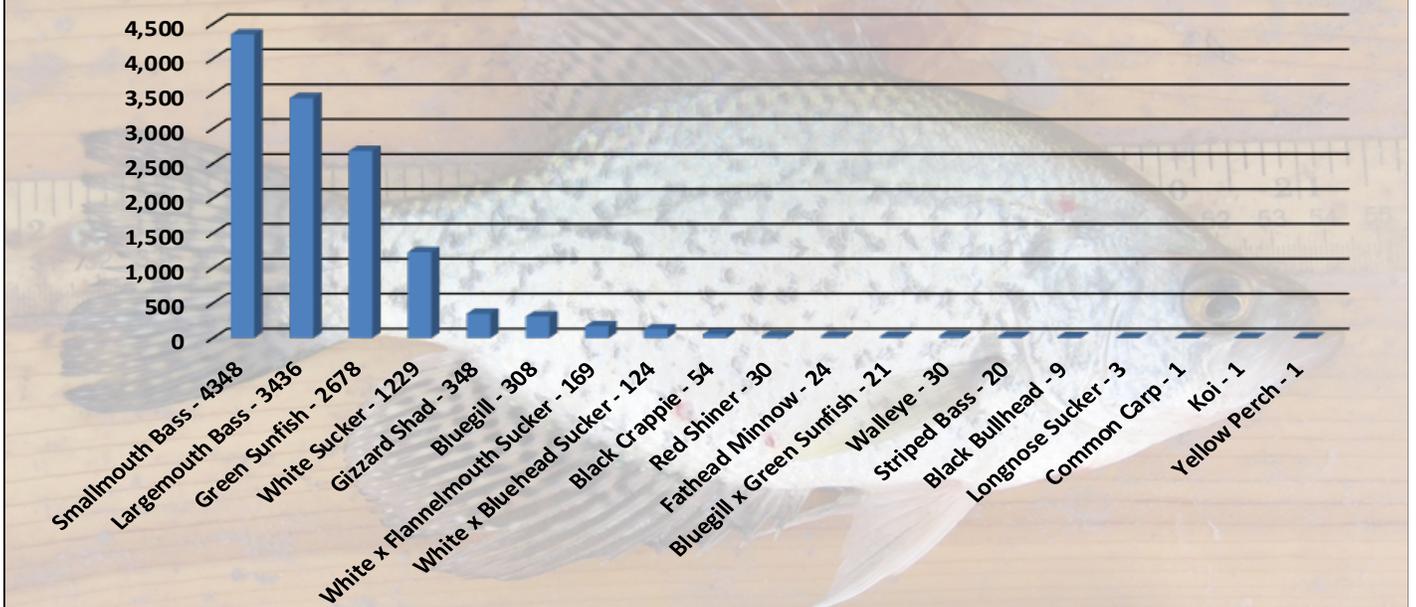
Grand Junction Fish and Wildlife Conservation Office (Grand Junction FWCO) biologists perform two to ten passes of non-native fish removal on the Colorado River (depending on the specific reach of river) from the top of the Grand Valley Colorado, to Potash, Utah, finishing the project for 2020 in October and hoping to remove as many of these aquatic nuisances as possible. Below are the current numbers of non-native fish successfully removed by Grand Junction FWCO biologists from native fish habitat in the upper Colorado River between June 26 and August 27, 2020.



Photo by Shawn Ryden USFWS

Grand Junction FWCO biologist Travis Francis displaying a large Striped Bass (*Morone saxatilis*) captured at Lake Powell, Utah. Benefiting from two record years of their favorite non-native food items in the reservoir, Threadfin and Gizzard Shad, these large predatory Striped Bass are having an explosive year in the upper Colorado River, showing up as far upriver as Grand Junction (more than 220 miles).

**Number of non-native fish captured on the Colorado River by GJ FWCO June 26 - Aug 27, 2020**



## August 2020

### Grand Junction Fish and Wildlife Conservation Office August Activities: Young-of-Year *Gila* genus sampling shows promise on the Colorado River.



Young-of-Year (YOY) (all of the fish younger than one year of age) fish sampling is an important tool for fish biologists as it gives a snapshot of the breeding success (or failure) of the targeted fish species earlier in the year. Grand Junction Fish and Wildlife Conservation Office (Grand Junction FWCO) biologists conducted four YOY fish sampling passes on the Colorado River, between Mee Canyon, Colorado and Westwater Ranger Station, between July 27 and August 25. The data is currently being tallied but preliminary information points toward what looks to be a strong, productive 2020 year class for *Gila* species endemic to the upper Colorado River in the sampled area: Humpback Chub (*Gila cypha*), Bonytail (*Gila elegans*), Roundtail (*Gila robusta*). Photos by USFWS staff



**Left:** Unidentified *Gila* genus captured July, 2020 on Colorado River near Mee Canyon, Colorado. **Right:** An adult Humpback Chub (*Gila cypha*).

### August Activities: Redlands Diversion Dam fish passage nearing season record number of Colorado Pikeminnow.

August 31- The thirty-second Colorado Pikeminnow for the 2020 field season swam through the Redlands Diversion Dam (RDD) fish passage. For the past few seasons, every Colorado Pikeminnow that has passed through the RDD fish passage has been translocated 39 miles upriver to Escalante Canyon in hopes of increasing the retention of these highly endangered fish in upriver habitats on the Gunnison River. The maximum number of Colorado Pikeminnow ever to pass through the RDD fish passage was 39 individuals in 2018. With the RDD fish passage being operated until mid-October, there is still time to hopefully surpass this number. Photo by Mike Gross USFWS



Grand Junction FWCO biologist Darek Elverud at the Escalante Canyon boat ramp on the Gunnison River releasing the thirty-first Colorado Pikeminnow (*Ptychocheilus lucius*) to pass through the Redlands Diversion Dam Fish Passage. - August 21, 2020.

# August 2020

## Grand Junction Fish and Wildlife Conservation Office: Coordination activities with partners



### Grand Junction FWC

**8/7/2020:** F cigr{T { f gp'b et with representatives from the City of Grand Junction, Army Corps of Engineers and USFWS (Ecological Services and FAC) to discuss the status of the recently-constructed Las Colonias side channel/slough. This recreational feature is currently diverting much-needed base flows away from the river's main channel, thus reducing flows available to and necessary for endangered fish use/needs. This group met to pursue solutions (both immediate and long-term) to this issue.

**8/11/2020:** O lej cgrGt qui'j gr gf 'ttock endangered Razorback Sucker from Ouray National Fish Hatchery - Grand Valley Unit into the Palisade High School Fish hatchery. Students will r gthqto 'enmf ckr { 'cum'c'uuqekcvf 'y kj 'j cvej gt { 'qr gt cvkqpu0'Reducf g'J UOy knidgpglw' cet qui'pwo gt qwu'educational f kxkr dpgu'Includlpi Science, Math, Chemistry, Art (fish illustrations), Graphic/Web Design (newsletters and website), Accounting/Finance (funds for hatchery O&M). 'Kpf wut krlCt u' \*d wkf lpi 'eqput wevkqp.'b clpvpgcpeg'c'pf 't qwdng/uj qqv'pi +0'' QPHJ /I XWtwchly knltwr r r { 'r t qhgukqpcnlgzr gt v'kg'c'pf 'twr r qt v0

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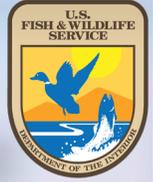
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**8/17/2020:** F cigr{T { f gp'c'pf 'Dgplco kp'Uej n'lej gt 'b gv'y kj 't gr t g'ug'p'cv'kg'u'lt qo 'v'j g'P cxclq'' P cvkqp.'WUHY U'P gy 'O gzleq'HY EQ, Crlws wgt s wg, NM .'W'c'j 'F k'k'k'qp'qh'Y kf r'kg'' Tguqwt egu (Moab, UT) and the San Juan River Basin Recovery Implementation Program to discuss future access to the Navajo Nation to facilitate endangered fish monitoring, management and stocking activities on tribal lands.

**8/27/2020:** Dale Ryden met with representatives from National Park Service, the UCREFRP, and the USFWS's Southwestern Native Aquatic Resource and Recovery Center to continue work on a plan to reintroduce a population of endangered Humpback Chub into the Yampa River within Dinosaur National Park.

**Every Wednesday morning:** Historic User Pool (HUP) conference calls. Attendees include HUP irrigators (among the oldest water rights holders on the Colorado River), other municipal water users groups (e.g., Denver Water), Bureau of Reclamation reservoir operators, National Weather Service, Fish and Wildlife Service, the Upper Colorado River Endangered Fish Recovery Program, Shoshone Power Plant, etc. Purpose is to discuss real-time river flows and water availability needs/solutions for water user groups, reservoir operators and endangered fish species.

# *Grand Junction Fish and Wildlife Conservation Office Staff*



**Project Leader - Dale Ryden**  
**Administrative Officer - Vacant 40 months**

## **Grand Junction FWCO Staff:**

**Fish Biologist - Darek Elverud**  
**Fish Biologist - Travis Francis**  
**Fish Biologist - Ben Schleicher**  
**Biological Science Technician - Michael Berg**  
**Biological Science Technician - Connor Church**  
**Biological Science Technician - Benjamin DeRidder**  
**Biological Science Technician - Andrew Disch**  
**Biological Science Technician - William Hilzer**  
**Biological Science Technician - Justin Howard**  
**Biological Science Technician - Lucas Laurita**  
**Biological Science Technician - Tyler Sexton**  
**Biological Science Technician - Tyler Trump**  
**Biological Science Technician - Nathan Vargas**  
**Biological Science Technician - Tyler Walton**

## **Ouray National Fish Hatchery - Grand Valley Unit Staff:**

**Fish Biologist - Brian Scheer**  
**Biological Science Technician - Aaron Matthews**  
**Biological Science Technician & Educational Outreach - Mike Gross**  
**Biological Science Technician - Haden VanWinkle**



# *Grand Junction Fish and Wildlife Conservation Office About Us*

The Grand Junction Fish and Wildlife Conservation Office in Grand Junction, Colorado (Formerly known as Colorado River Fishery Project, aka CRFP) consists of both a field office (FWCO) and an endangered fish hatchery, known as the Ouray National Fish Hatchery-Grand Valley Unit.

The CRFP field office was established in 1979 to perform research and management actions aimed at helping recover four endangered fish species of the upper Colorado River basin: Razorback Sucker, Colorado Pikeminnow, Humpback Chub, and Bonytail.

Ouray NFH-GVU was established in 1992 as CRFP's endangered fish propagation center and currently produces over 20,000 endangered Bonytail and Razorback Sucker annually.

The Grand Junction Fish and Wildlife Conservation Office works in the Colorado, Gunnison, San Juan and Yampa rivers in Colorado, Utah and New Mexico, as well as in Lake Powell in Utah.

## *Ouray National Fish Hatchery - Grand Valley Unit*

### **Current fish on station:**

#### *Horsethief Canyon Native Fish Facility*

Razorback Sucker 11,400 (200mm-300mm)

Razorback Sucker 14,000 (50mm-100mm)

Bonytail 15,000 (50mm-100mm)

#### *24 Road Hatchery*

Razorback Sucker 13,000 (50mm-100mm)