

Grand Junction *Fish and Wildlife Conservation Office*

Interior Region 7



Grand Junction FWCO biologist Tyler Sexton preparing to release an endangered Colorado Pikeminnow, captured while electrofishing the banks of the Colorado River near Salt Creek, Colorado while conducting Colorado Pikeminnow population estimates. June, 2020. Photo by Andrew Disch USFWS.

Highlights - June, 2020

- **Grand Junction Fish and Wildlife Conservation Office (FWCO)**
 - June Activities
 - Colorado Pikeminnow field sampling concludes on the Upper Colorado and Gunnison rivers
 - First Colorado Pikeminnow of 2020 passes through Redlands Diversion Dam Fish Passage
 - Grand Junction FWCO coordination with partners update
- **Ouray National Fish Hatchery, Grand Valley Unit (Ouray NFH-GVU)**
 - June Activities:
 - Palisade High School Fish Hatchery filled in preparation for the first crop of Razorback Sucker
 - Grading 2020 year class Razorback Sucker at 24 Road Hatchery
 - Maintaining endangered fish at Horsethief Canyon Native Fish Facility (HCNFF)

June, 2020

Grand Junction Fish and Wildlife Conservation Office June Activities: Colorado Pikeminnow field sampling concludes on the Upper Colorado and Gunnison rivers



Grand Junction Fish and Wildlife Conservation Office (Grand Junction FWCO) biologists wrapped up Colorado Pikeminnow sampling June 23, revealing some large, healthy individuals navigating the Upper Colorado River. Listed as endangered in 1967, Colorado Pikeminnow (*Ptychocheilus lucius*) is the largest cyprinid (minnow family) in North America and one of the largest found on earth historically reaching sizes upwards of six feet long and 80 pounds, living up to 40 years old. In recent decades stream alteration and habitat fragmentation caused by dam diversions, dewatering from irrigation, channelization, a plethora of competitive and predatory nonnative fishes and various other hurdles have led to a decline in Colorado Pikeminnow populations with a 2015 population estimate of 429 adults in the Upper Colorado River.



Tristan Francis, a volunteer from Fruita 8/9 School preparing to release a large adult Colorado Pikeminnow he captured while electrofishing with Grand Junction FWCO biologists.



Grand Junction FWCO biologist Travis Francis with a large Colorado Pikeminnow captured below Loma, Colorado.



Colorado Pikeminnow are the apex native fish predator on the Upper Colorado River system. Colorado Pikeminnow have no teeth in their jaws. Instead, they feed by gulping their prey into their large mouth, after which pharyngeal teeth (which are located on the pharyngeal arch of the throat) grasps the prey item, helping secure it while it is consumed.

June, 2020

*Grand Junction Fish and Wildlife Conservation Office
June Activities: First Colorado Pikeminnow of 2020
passes through Redlands Diversion Dam Fish Passage*



June 30- As river levels were dropping on the Gunnison River, the first migrating Colorado Pikeminnow of 2020 passed through for the Redlands Diversion Dam (RDD) Fish Passage. This highly endangered fish was 508 millimeters total length and had been previously tagged with a Passive Integrated Transponder (PIT) tag this past spring while Grand Junction FWCO biologists were conducting Colorado Pikeminnow population estimates on the Upper Colorado River. The fish swam through the RDD fish passage which provides access to 50 river miles of designated endangered fish Critical Habitat on the Gunnison River and has passed roughly 163,750 native fish since conception in 1996.



Photo by Ben Schleicher USFWS



Photo by Mike Gross USFWS

Photo Left: Grand Junction FWCO biologist Travis Francis displaying the migrating Colorado Pikeminnow before releasing it into the Gunnison River above Redlands Diversion Dam.

Photo Above: Redlands Diversion Dam on the Gunnison River in Orchard Mesa, Colorado was built in 1918.

Photo Below: Until the Redlands Diversion Dam fish passage was constructed in 1996 (a time span of nearly 80 years), native fish were unable to continue up river past this point, leading to the decline of native fish populations on the Gunnison River.

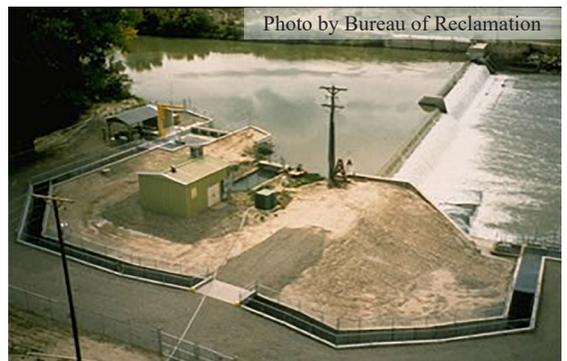


Photo by Bureau of Reclamation

June, 2020

*Ouray National Fish Hatchery, Grand Valley Unit
June Activities: Palisade High School Fish Hatchery filled in
preparation for the first crop of Razorback Sucker*



The Palisade High School Fish Hatchery, in partnership with Ouray National Fish Hatchery-Grand Valley Unit (Ouray NFH-GVU), filled the newly constructed on-campus recirculating aquaculture system in June 2020 with plans to bring in 250 Razorback Sucker mid-July. These endangered fish will be raised by students and released into the Upper Colorado River in late spring 2021, helping boost populations of this endangered fish species, all while giving young science-minded high school students the opportunity to practice hands-on fish culture, and directly contribute to the recovery of these animals.

Beginning in 2018, Palisade High School students raised an impressive \$40,000 through various fundraising and a slew of community donations which was used to upgrade an old storage building at the edge of campus, equipping it with all the essentials needed to facilitate the indoor aquaculture operation. The aquaculture system itself was purchased by the Upper Colorado River Endangered Fish Recovery Program and Bureau of Reclamation, and consists of three 235 gallon circular tanks, dual bag filters, ultraviolet filter, auxiliary biofilter and a 150 gallon sump tank.

Palisade High School students will operate the facility with guidance from Ouray NFH-GVU personnel. This project will give students the opportunity to learn a wide array of topics including: raising endangered fish, recirculating aquaculture, ichthyology, basic biology and much more, helping to foster the next generation of fisheries scientists and aquaculturists. Congratulations to the Palisade High School students, School District 51 and the Grand Valley community for all of the incredible support to make this happen.

Photos by Dale Ryden and Mike Gross USFWS.



Top Left: Palisade High School junior Kyle Roten standing in the tank, connecting the final piece of piping on the new recirculating aquaculture system with Dale Ryden USFWS and Pat Steele, Palisade High School. **Top Middle:** Eager members of the Palisade High School Fish Hatchery Leadership Council ready to fill the newly constructed system. Left to right: Kyle Roten, Addie Steele, Katlyn, Erwin, Jack Perrin, Pat Steele-teacher. **Top Right:** The 235 gallon circular culture tanks were upgraded with plexiglass observation windows by a local Grand Valley business.



Bottom Left and Bottom Middle: The recirculating system consists of dual bag filters, ultraviolet light filter, auxiliary moving bed bioreactor biofilter, and three 235 gallon circular culture tanks. In photo Mike Gross USFWS. **Bottom Right:** Excited Palisade High School science teacher/hatchery manager Pat Steele plugging in the system for the first time...Go Bulldogs.

June, 2020

Ouray National Fish Hatchery, Grand Valley Unit June Activities: Grading 2020 Razorback Sucker at 24 Road Hatchery



Just like humans, fish grow at different rates. Some grow fast and some grow slow. Periodically, Ouray National Fish Hatchery - Grand Valley Unit (Ouray NFH-GVU) will grade the Razorback Sucker and Bonytail, separating them into similar sizes. Grading fish is necessary to acquire optimum growth, reduce cannibalism, prevent competition between large and small fish, and meet management requirements. These 2020 year class Razorback Sucker were hatched April 28 and have grown significantly, necessitating another trip through the bar grader. They are currently 35- 40 millimeters, but will closer to 350-400 millimeters before they are released into the Upper Colorado River fall 2021. Photos by Brian Scheer USFWS.



Photos Left: Razorback Sucker are graded at Ouray NFH-GVU by gently gathering them and placing them into a bar grader which allows small fish to pass through the bars, leaving the larger ones within the grader. The bars can be separated at different intervals allowing for different size fish gradings.

Photos Right: Once separated into different sizes, the average weight per/fish is calculated and the fish are then counted back into the culture tank, hopefully free of food competition from oversized fish.

In Photo Brandee Keuer.

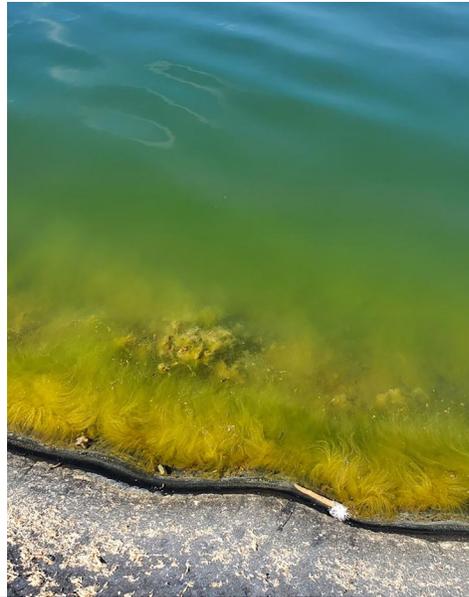
June, 2020

Ouray National Fish Hatchery, Grand Valley Unit

June Activities: Maintaining endangered fish at Horsethief Canyon Native Fish Facility (HCNFF)



Summer mode is in full swing at Horsethief Canyon Native Fish Facility (HCNFF). Once the weather starts to warm and pond temperatures rise, biologists typically have their hands full with the vigorous feeding, rapidly growing fish. The pond water becomes very nutrient rich and maintaining proper water quality becomes paramount. Photos by Brandee Keuer USFWS.



Top Left: Haden VanWinkle USFWS feeding vitamin enriched fish food pellets to one of 22 ponds at HCNFF. The fish typically get two feedings per day (morning and afternoon) **Top Middle:** The heavy food load and warm summer pond temperatures cause dynamic algae blooms which add dissolved oxygen to the water as photosynthesis occurs. **Top Right:** Because the algae blooms at HCNFF have a direct correlation with dissolved oxygen and other water chemistry variables, numerous water quality parameters are checked daily at dawn.



Bottom Left and Bottom Middle: Biologists add paddle aerators and surface aerators to the ponds to further help ensure water chemistry stays adequate for the residing fish during summer and that the algae blooms remain healthy. **Bottom Right:** Grow-out ponds at HCNFF in Fruita, Colorado.

June, 2020

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

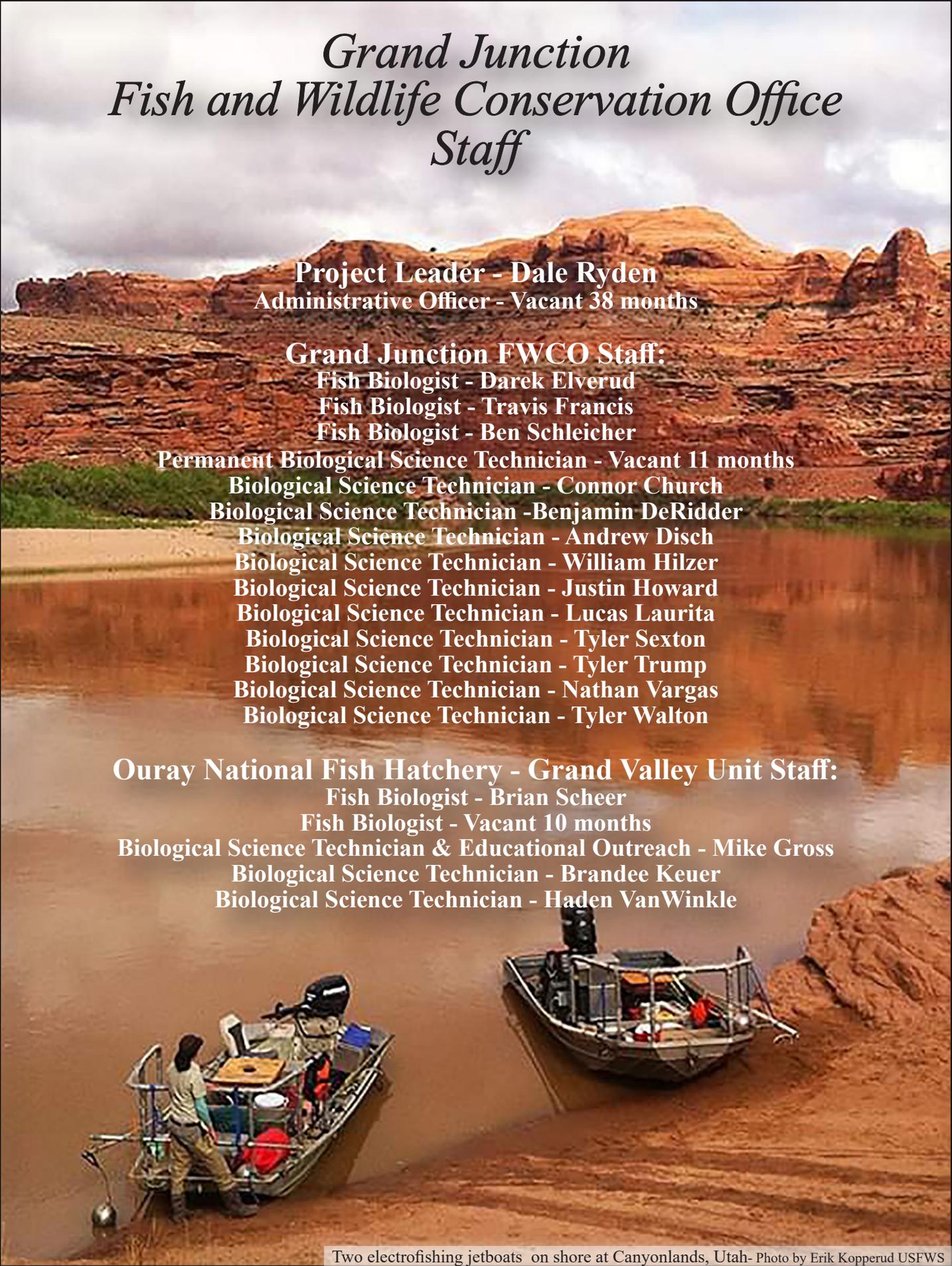


6/16/2020:

Grand Junction FWCO (Dale Ryden) met with representatives from Colorado Mesa University (Joel Sholtes), River's Edge West (Shannon Wadas and Rusty Lloyd), Colorado West Land Trust (Libby Collins), Bureau of Reclamation (Melissa Werkmeister) and USFWS-Ecological Services (Ann Timberman) to discuss the preliminary development of a Colorado River Corridor Plan. The goal of this proposed plan is to build a stakeholder group that brings together perspectives on uses and management of the Colorado River here in the Grand Valley.

6/26/2020:

Grand Junction FWCO (Dale Ryden) met with representatives from the Colorado River District (Ray Tenney), Chevron (Rick Cross and Dean Derby) and the Bureau of Reclamation (Ryan Christiansen and Dave Speas) to discuss the potential for a future endangered fish hatchery site near the town of DeBeque, CO.



Grand Junction Fish and Wildlife Conservation Office Staff

Project Leader - Dale Ryden
Administrative Officer - Vacant 38 months

Grand Junction FWCO Staff:

Fish Biologist - Darek Elverud
Fish Biologist - Travis Francis
Fish Biologist - Ben Schleicher

Permanent Biological Science Technician - Vacant 11 months

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

Fish Biologist - Vacant 10 months

Biological Science Technician & Educational Outreach - Mike Gross

Biological Science Technician - Brandee Keuer

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:

Razorback Sucker 11,400 (200mm-250mm)

Razorback Sucker 17,000 (35mm-70mm)

Bonytail 10,300 (125mm-225mm)

Bonytail 15,000 (35mm-50mm)