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.

Bureau of Reclamation Agreement Number:
R20PG00024

Project/Grant Period:
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Reporting period end date: 09/30/2024
Is this the final report? Yes ☐ No ☒

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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 (24Rd), and three other "lease-free" grow-out ponds (CDOT Pond, Beswick's Pond, and Butch Craig Pond).

Ouray NFH-GVU produces and rears razorback sucker for stocking into the Colorado and Gunnison rivers. In addition, Ouray NFH-GVU rears bonytail chub obtained as larvae from the U.S. Fish and Wildlife Service (USFWS)'s Southwest Native Aquatic Resources and Recovery Center (SNARRC) in Dexter, NM, for stocking into the Colorado River. All stockings of these two endangered fishes are in accordance with the approved Integrated Stocking Plan (ISP; Integrated Stocking Plan Revision Committee 2015, https://coloradoriverrecovery.org/uc/science/technical-reports/propagation-stocking/).

Study Schedule:
1996-Ongoing

Relationship to RIPRAP:

General Recovery Program Support Action Plan: 2024 RIPRAP

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

IV.A. Genetics Management

IV.A.2. Develop and implement Genetics Management Plan for all species and update as Needed. Czapla 1999

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.B. Conduct annual fish propagation activities

IV.B.2. Implement revised integrated stocking plan (Integrated Stocking Plan Revision Committee 2015); supersedes all earlier stocking plans, including species-specific and individual basin plans.

IV.C. Operate and maintain facilities

IV.C.2. Ouray NFH: Grand Valley Unit

Accomplishment of FY 2024 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Facility Inspections & Fish Health

Ouray NFH-GVU routinely participates in annual inspections to ensure our facilities, as well as the fish we grow, are free from problematic diseases and Aquatic Invasive Species (AIS). On 10 April 2024 personnel from USFWS's Bozeman Fish Health Center (Bozeman FHC) travelled to Ouray NFH-GVU and collected samples for bacteriology and virology. Bacteriology and virology tests were negative for any problematic/reportable fish health diseases. However, adult Asian tapeworm(s), a non-reportable pathogen, were observed in one of the bonytail chub sampled.

Due to time constraints and lack of personnel, our annual AIS inspection and collection of veligers for this year were again allowed to be self-inspected/collected. On 06 August 2024, Ouray NFH-GVU personnel gathered the appropriate plankton samples and sent them to the Montana Fish, Wildlife & Parks in Helena, MT to be tested for the presence or absence of zebra and/or quagga mussel veligers. A walk-through, hands-on, visual inspection of both our hatchery building and ponds was also conducted by Ouray NFH-GVU personnel. The results of the walk-through inspection were negative for any problematic or reportable AIS (i.e., zebra mussels, quagga mussels, or Asian clams). The water and plankton samples were processed by Montana Fish, Wildlife & Parks on 19 August 2024. Our facility was declared negative for the presence of mussel veligers.

Health Condition Profile (HCP) necropsies were performed for both bonytail and razorback sucker (20 fish per species) on 22 August (for bonytail) and 19 September (for razorback sucker) 2024 by Ouray NFH-GVU staff. All metrics were within normally observed ranges. Results were submitted to the recovery program propagation coordinator on 30 October 2024.

Education and Public Outreach Activities

See Project 12 annual report for a summary of outreach activities undertaken by ONFH-GVU staff.

Hatchery Maintenance Activities

In FY 2024, Ouray NFH-GVU staff continued to perform annual maintenance of propagation buildings, storage buildings, mechanical systems, water piping and air delivery systems at both 24Rd and HCNFF facilities. In addition to the annual maintenance tasks, Ouray NFH-GVU staff were able to complete the construction of two 10'x15" carports at HCNFF that are used for the storage of surface aerators and other miscellaneous equipment. The Ouray NFH-GVU managed to procure available AIS funding to purchase a 20'x29' carport that staff constructed at the 24 Road Hatchery. This carport provides storage for the hatcheries portable AIS pressure washer and distribution truck.
Along with the addition of the carports, ONFH-GVU purchased a 10'x16' storage building where staff assisted with converting the storage building into an office for the hatchery manager. Not only did this provide a private office for the hatchery manager it allowed more shared office space for staff.
In November 2023, USFWS and U.S. Bureau of Reclamation (USBR) personnel successfully jetted all infiltration gallery PVC lines that collect water and direct it to the pump station at HCNFF.

Several projects are still ongoing at the Ouray NFH-GVU and are listed in order of priority. They include:

1. The HVAC/Dehumidifier units at the 24 Road Hatchery have been in operation since 2010 and are needing to be replaced. In FY 2023, BIL funding was obtained to fund the replacement of HVAC/Dehumidifier systems for 24 Road Hatchery. On August 2, 2024, this project was advertised for bid amongst all firms that have agreed to do work on projects in Colorado on the USFWS Multiple Award Task Order Contract (MATOC). Unfortunately, not one contractor showed up for the site visit nor bid on the project. This project will now be solicited Open Market for Small Business in late November to mid-December 2024 with a completion month of September 2025.
2. Due to sun exposure and product defects, current pond liners (manufactured by Firestone and installed in 2012) at HCNFF continue to delaminate. In July 2023, Ouray NGVU staff met with USBR, H&H Lining, and Colorado Lining International (formerly Firestone, manufacturer of the pond liners) at HCNFF for a site visit to evaluate the condition of the pond liners and to establish a plan to come up with a cost estimate and reasonable timeline for possibly replacing or mending the delaminated pond liner. It was also discussed to have USBR staff communicate with Colorado Lining International to see what kind of warranty they can give us for the original product (original liners were installed in 2012 and had a prorated warranty on materials only, for 20 years). Unfortunately, there has not been any conclusions made in order for this project to move forward. It is critical for future years of fish production that a decision and course of action be established as the magnitude of this project will require considerable collaboration between all partners involved and will more than likely prevent up to a year of fish production.

3. There has been some subsidence under the north side floor of the 24 Road hatchery building (i.e., Hatchery # 2). The Ouray NFH-GVU personnel have not been successful with finding a contractor to provide bids to have the voided space under the floor filled and stabilized. This project will continue to be pursued in FY 2025.
4. The water valve operators that were originally installed on the HCNFF ponds were not the proper model (i.e., they were not engineered to be buried and then exposed to ground water moisture). As a result, we have been replacing these valve operators with a different model (that can be buried and then exposed to ground moisture) as they have been breaking. This year USFWS personnel replaced four, leaving approximately 10 valve operators that have not been replaced.

Future imperative or beneficial projects at ONFH-GVU listed in order of priority include:

1. At HCNFF (Snook's Ponds) it is imperative that an isolated system or modifications to the existing system be developed for treatment of fish, specifically praziquantel treatments for Asian Tapeworm. This could include the addition of a large circular tank or raceway that is separate from the ponds and the addition of an in-line drum filter or carbon filter that would filter and neutralize effluent water before returning to the river. Currently, Ouray NFH-GVU staff are in conversation with Jake Veilleux (Veterinary Medical Officer at the Bozeman Fish Health Center) in an effort to realistically and economically modify the existing system allowing for treatment of effluent water.
2. The 18" effluent drain line that spills into a side-channel of the Colorado River typically sits above water, except during peak run off flows. Over time the side channel has silted in and has become inundated by vegetation. This does not allow the effluent water at HCNFF to drain into the river, thus the side channel becomes a stagnant pool of water. As a result, the 18" drain line is continuously submerged under water. This causes water to back fill up the drain line, creating a biosecurity risk due to the stagnant water that can harbor and encourage disease and AIS. Ouray NFH-GVU staff will coordinate with the USBR to mitigate this issue.
3. The access road into HCNFF has 2 areas that cross the Devils Canyon flash flood stream bed. The first (upper) crossing is fitted with a 36-inch culvert and the second (lower) crossing is simply a natural graded low-water crossing. Directly upstream from the upper crossing where Horsethief Canyon Road crosses the Devils Canyon flash flood stream bed, Mesa County installed a 60" concrete culvert. During flash flood events the new 60-inch culvert does not impede or slow the water that enters our 36-inch culvert. The 36-inch culvert cannot handle the amount of water and as a result the road/culvert has been significantly eroded over time. This has created many instances to where travel into HCNFF was impossible and not safe. Secondly, the flow of a flash flood event has naturally flowed around the entrance into HCNFF and to the Colorado River. The amount of sediment that has been deposited from such events has prevented flood events from taking the natural path to the river. As a result, the entrance to HCNFF becomes silted in. For the past 10 years, Ouray NFH-GVU staff and CPW staff have temporarily been able to fix the crossing and entrance into HCNFF using their own equipment. This has been a "band-aid" fix and is now

imperative that the upper crossing be fit with a larger culvert or returned to a natural low-water crossing and, the natural flow to the Colorado River be re-established to prevent flooding into the entrance of HCNFF. This will require the use of larger equipment and coordination with USBR and CPW staff.

4. The current filtration systems at the 24 Road RAS have been in operation for 22+ years. Specifically, the bead filter in hatchery 1 and both U.V. filters need to be updated to more efficient systems. The U.V. filters are critical for biosecurity and pathogen isolation and management. Also, the addition of foam fractionators or radial flow separators would be beneficial to the overall water quality, fish health and management of the RAS.
5. The current lighting system at the 24 Road RAS needs to be replaced or retrofitted with a lighting system (Once Lighting Solutions) that mimics the natural photoperiod. Currently our lights are manually turned on each morning and are programmed to stay on for 12 hours. When the lights are turned on and off, it is immediate with no transition from dark to light or light to dark. The new system would allow lights to auto dim on and off and significantly reduce the stress response to fish when lights are just turned on and off.
6. All circular rearing tanks at the 24 Road RAS are 23 to 28 years old and are needing to be replaced and updated with new modern tanks. Many tanks are starting to crack and leak. This includes 75 – 4' diameter and 14 – 8' diameter tanks. The replacement of tanks would potentially allow for customization for rearing of future species of concern.

2024 Rearing Summary

Razorback sucker: In March 2024 approximately 10,173 age-1 razorback sucker were being held indoors at the 24 Road Hatchery building. These fish represented young from 12 different paired matings of brood stock performed in April 2023. From early April to mid-May 2024 approximately 6,680 of these age-1 razorback sucker were stocked into the grow-out ponds at HCNFF. Ponds were stocked with a mixture of fish from 12 different family lots. Equal numbers from each represented family lot were combined and stocked at a density of 835 fish per ¼ acre pond in eight ponds. These fish were all PIT tagged in the 24 Road Hatchery building several weeks prior to being stocked into grow-out ponds. The remaining age-1 razorback sucker (approximately 3,493 fish) continued to be held at the 24 Road Hatchery building until bonytail were harvested from four ponds at HCNFF (in mid-July through August 2024). Those four ponds were then available to be stocked with the razorback sucker that remained at 24 Road Hatchery.

Spawning, rearing, tagging, harvest, and stocking procedures used for razorback sucker in FY 2024 followed standard protocols used in previous years for these tasks. While razorback sucker are in the hatchery, they are reared in circular tanks where a constant current exists. As water enters the circular tank from above, on the outside perimeter of the tank, it circulates around the tank. and exits via vertical slots in a standpipe, in the bottom center of the tank. This has always been standard protocol and is necessary to help circulate/oxygenate the water, distribute food throughout the tank, and flush/eliminate waste products. Over the years, it has been debated within the Biology Committee, whether this constant

water flow within circular tanks constitutes flow training or not. However, no specific "flow training" experiments were done outside of this normal operating procedure. When razorback sucker are in the larger grow-out ponds, a small amount of current still exists, due to wind, water flowing into and out of the pond, etc., but the current in grow-out ponds is less than what these fish experience in hatchery tanks. For razorback sucker, there were no feed changes, predator exposure experiments, etc. in FY 2024.

Despite staffing shortage in April 2024, Ouray NFH-GVU staff were once again able to successfully spawn razorback sucker broodstock held at HCNFF. Students from Palisade High School assisted with spawning operations in addition to spawning their own family lot contributing to the overall success of FY 2024 razorback spawn. All eggs produced from this spawning effort were transferred to the 24 Road Hatchery building. In 2024, approximately 56% of all razorback sucker eggs successfully hatched into fry. The hatchery is currently holding 10,675 2024 year-class razorback sucker for UCREFRP 2025 production purposes.

In FY-2024, we had a 95% average return rate for FY-2023 razorback sucker, for all fish stocked from the hatchery into grow-out ponds versus the number that were harvested and stocked into the river. Any "excess" age-0 razorback sucker (i.e., fish above and beyond numbers required to meet Recovery Program annual stocking goals) were stocked into our "lease-free" grow-out ponds for later opportunistic harvest and stocking.

Our three "lease-free" grow-out ponds (CDOT, Beswick's, and Butch Craig ponds) will continue to be used as necessary in future years to provide redundancy and as we continue to evaluate management options to improve the survival and growth of razorback sucker for augmentation.

In addition to the excess fish that were stocked into our lease free grow out ponds, Ouray NFH-GVU provided 12,000 excess 2024 young-of-year razorback sucker averaging 40-100 mm TL to David Ward for predation studies in October of FY 2025.

Bonytail: Bonytail stocked in the summer of 2024 were received from SNARRC in spring 2023 (approximately 15,000 larval bonytail). These fish were stocked into one, ½-acre grow-out pond at HCNFF. In October 2023 these bonytail were harvested from HCNFF and brought into the 24 Road Hatchery to overwinter. In early to mid-April 2024 these bonytail were transferred to HCNFF to maximize growth until being stocked in summer 2024. These fish were all PIT tagged in the 24 Road Hatchery building, several months prior to being stocked into the grow-out ponds.

Bonytail to be stocked in the summer of 2025 were received from SNARRC in spring 2024 (approximately 10,000 larval bonytail). **NEW IN 2024:** The reduction in larval bonytail received in spring 2024 was approved by the biological committee to allow Ouray NFH-GVU to propagate at lower densities in effort to increase total length at stocking. These fish were stocked into one, ½-acre pond at HCNFF. In October 2024 6630 bonytail were harvested from HCNFF and brought into the 24 Road Hatchery to be grown overwinter. In spring 2025 the 6630 bonytail in the 24 Road Hatchery will be stocked back into grow-out ponds at HCNFF, where they will be reared until being stocked in summer 2025 at various locations in the Colorado River.

During a production year, while bonytail are in the hatchery, they are reared in circular tanks where a constant current exists. As water enters the circular tank from above, on the outside perimeter of the tank, it circulates around the tank. and exits via vertical slots in a standpipe, in the bottom center of the tank. This has always been standard protocol and is necessary to help circulate/oxygenate the water, distribute food throughout the tank, and flush/eliminate waste products. Over the years, it has been debated within the Biology Committee, whether this constant water flow within circular tanks constitutes flow training or not. However, no specific "flow training" experiments were done outside of this normal operating procedure. When bonytail are in the larger grow-out ponds, a small amount of current still exists, due to wind, water flowing into and out of the pond, etc., but the current in grow-out ponds is less than what these fish experience in hatchery tanks. For bonytail, there were no feed changes, predator exposure experiments, etc.

There were no significant changes in rearing and tagging procedures for YC 2023 bonytail that were stocked in FY 2024. However, harvest and stocking standard procedures were changed due to the detection of Asian tapeworm (ATW), a non-reportable pathogen. These changes were implemented to include treating the bonytail with praziquantel using Utah Department of Agriculture and Food (UDAF) guidelines to accommodate pre stocking eradication of ATW required by Colorado Parks and Wildlife in FY2023.

We typically observe a 10% - 20% loss of larval bonytail to stockable age-1 fish, with the greatest losses typically occurring immediately after larval fish are received via FedEx from SNARRC and after stocking into grow-out ponds due to avian predation. Any "self-spawned" bonytail were culled and disposed of.

2024 Stocking Summary

Razorback sucker: A total of 7,230 razorback sucker (120.5% of the target stocking number {n =6,000}) were stocked into the Colorado and Gunnison rivers in 2024 (Table 1). Of these, 6,570 were from the HCNFF grow-out ponds. The other 660 were from Palisade High School (PHS), gravel pit ponds, oldest year class (retired fish ≥ 5 years of age) razorback sucker broodstock. Palisade High School received 362 razorback suckers for production in their facility. Those 362 fish were stocked into the river by PHS staff and students at the Riverbend Park boat launch in May 2024. An additional 196 razorback sucker were harvested from gravel pit ponds and old retired broodstock. These fish were stocked into the Colorado River downstream of the 15 Mile Reach. All other production razorback sucker stocked in 2024 were stocked downstream of the 15 Mile Reach. Excessively low in-river flows in the 15 Mile Reach throughout the latter portion of the 2024 water year (i.e., after June) made stocking razorback sucker in the 15 Mile Reach in 2024 unsuitable. Likewise, the few off-channel, wetland type habitats located in the Grand Valley outside of the 15 Mile Reach were unavailable for stocking, due to low water levels in the mainstem river. After transport to the river and an appropriate tempering/water exchange period (minimum of 1-2 hours, to acclimate fish to riverine water chemistry and temperatures), all razorback suckers were stocked into low velocity main channel habitats, during daylight hours. Due to the detection of zebra mussel veligers in the Colorado River, stocking locations were all downstream of the detection at Redlands Parkway and Fruita State Park. Total Number and Mean TL of fish stocked in each location in 2024 can be found in Table 1. Weights were taken for approximately 10% of stocked fish.

Bonytail: A total of 11,384 bonytail (113.83% of the target stocking number {n = 10,000}) were stocked into the Colorado River in 2024 (Table 2). Most were from the HCNFF grow-out ponds with a small number coming from CDOT/Beswick ponds. The mean TL for all bonytail stocked in 2024 from HCNFF was 245 mm. The mean TL for all bonytail stocked from gravel pit ponds in 2024 was 277 mm. The mean TL fell short of the target mean stocking size identified in the ISP ($\geq$ 250 mm TL) by 5 mm TL. In Fall 2023 (i.e., the beginning of FY 2024) prior to bringing bonytail into the 24 Road Hatchery, the bonytail were graded at HCNFF which resulted in two different size groups of fish ("Tops" and "Bottoms"). The goal of grading was to eliminate feeding competition in the rearing tanks at the 24 Road Hatchery and to produce more consistent size (i.e., Total Length) groups for stocking into the grow-out ponds at HCNFF in spring of 2024. Numbers of fish stocked in each location in FY 2024 can be found in Table 2. Weights were taken for approximately 10% of stocked fish.

Like most razorback sucker, bonytail were stocked after precipitous in-river drops in flow that occurred in 2024. The length of our "normal" stocking timeline was also significantly increased due to the amount of time it took to administer praziquantel treatments for Asian Tapeworm. Thus, stockings were made in areas that would avoid the 15 Mile Reach, which had become unsuitable for stocking fish by the end of August 2024. Likewise, the few off-channel, wetland type habitats that are in the Grand Valley outside of the 15 Mile Reach were unavailable for stocking, due to low water levels in the mainstem river. After transport to the river and an appropriate tempering/water exchange period (minimum of 1-2 hours, to acclimate fish to riverine water chemistry and temperatures), all bonytail were stocked into low velocity main channel habitats, during daylight hours. Stocking locations were the same as those used for razorback sucker in FY2024 due to the detection of zebra mussel veligers (i.e., downstream of veliger detection location), except for one stocking event that occurred prior to veliger detetcion.

Challenges

As in FY 2023, due to the addition of having to treat all bonytail for Asian tapeworm, significant but improved (compared to that of FY2023) changes to our harvest, treatment and stocking protocols were accomplished. In previous years, harvest and stocking of bonytail began in mid-July and was completed within a 2-week time frame. This allowed time for maintenance projects during the month of August. In FY 2023 to successfully treat all bonytail with praziquantel, individual pond treatments were set up and administered in each pond kettle. In FY 2024, in an attempt to increase efficiency and reduce fish stress, ONFH-GVU staff made modifications to the 4'-fiberglass tanks inside the spawning building allowing OHFH staff to treat 2- ¼ acre ponds in 1 week and 1- ½ acre pond per week. There were 8 ponds of bonytail which resulted in treatments taking 6 weeks (2 weeks shorter than FY 2023) to complete.

In previous years, there has been approximately a 77% return rate of bonytail from initial stocking of larval fish into HCNFF to harvest and transport to 24rd, 4 months later. This year ONFH-GVU staff observed a 66% return rate. Although it is difficult to know exactly why the return rates were lower, potential reasons as to why could include but are not limited to; requested number of larval fish received could be inadvertently less from what was requested, predation, disease, abiotic conditions or escape through effluent screens and valve structures. The lower return rate ultimately decreased the density within the pond even further than intended by the lower larval order, resulting in a higher daily and monthly growth rate.

Recommendations

1. Address and establish a plan of action for prioritized maintenance-related issues and future projects (listed above) in FY 2025. The top 3 priorities from each section
    a. Ongoing: HVAC, pond liners, subsidence
    b. Future: treatment facility at ponds, river effluent drain, pond access road

   need addressed sooner than later as the future operation of HCNFF is dependent upon solutions to these issues. Some of these maintenance-related activities will require financial, engineering and staffing support from the UCREFRP and/or USBR to accomplish.

2. Work with CPW, USFWS and neighboring states to identify and establish AIS monitoring and treatment protocols for application and approval of importation permits.

Project Status:
Project is on track and ongoing.

FY2024 Budget Status
Funds Provided: $606,325
Funds Expended: $606,325
Difference: -0-
Percent of the FY 2024 work completed, and projected costs to complete: 100%
Recovery Program funds spent for publication charges: -0-

Status of Data Submission
All PIT tag data was submitted to the UCREFRP database manager and STReaMS database system in October 2024 for Project 29a

Signed:
Brian Scheer
Haden VanWinkle
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Michael Gross

18 December 2024

Table 1. Locations, dates, and numbers of razorback suckers stocked into the Upper Colorado River Basin by Ouray National Fish Hatchery – Grand Valley Unit in FY 2024. Production fish from HCNFF were year class 2023. Retired were year class 2017 and fish from Beswick and CDOT ponds were a mixed age class of fish. CO = Colorado River.

River	Stocking Location	River Mile	Number Stocked	TL Range (in mm)	TL Mean (in mm)	Stocking Date	Source
CO	Colorado River State Park: Fruita, CO	157.1	798	NA	NA	27-Oct	Excess SJ Production Fish – YC 2022 - HCNFF
CO	Colorado River State Park: Fruita, CO	157.1	102	451-596	507	19-April	Retired Broodstock-HCNFF
CO	Palisade High School	183.6	362	210-285	220	3-May	PHS
CO	Colorado River State Park: Fruita, CO	157.1	758	285-387	347	3-Sep	Production - HCNFF
CO	Redlands Parkway Boat Ramp: Grand Jct., CO	166.7	783	312-387	350	5-Sep	Production - HCNFF
CO	Colorado River State Park: Fruita, CO	157.1	803	303-397	347	10-Sep	Production - HCNFF
CO	Colorado River State Park: Fruita, CO	157.1	682	227-390	343	12-Sep	Production - HCNFF
CO	Redlands Parkway Boat Ramp: Grand Jct., CO	166.7	803	318-420	363	12-Sep	Production - HCNFF
CO	Redlands Parkway Boat Ramp: Grand Junction, CO	166.7	1150	268-425	353	17-Sep	Production - HCNFF
CO	Colorado River State Park: Fruita, CO	157.1	793	308-412	370	18-Sep	Production - HCNFF
CO	CO River adjacent to Beswick Pond: Grand Jct., CO	174.9	90	321-485	416	17 April - 25 Oct	Beswick Pond
CO	CO River adjacent to CDOT Pond: Grand Jct., CO	205.6	106	308-551	456	1 June - 28 Sep	CDOT Pond
Total Fish Stocked			7,230				

Table 2. Locations, dates, and numbers of bonytail stocked into the Upper Colorado River Basin by Ouray National Fish Hatchery – Grand Valley Unit in FY 2024. Production fish from HCNFF were year class 2023. Fish from CDOT ponds were a mixed age class of fish. For the stocking locations and dates that have 2 entries, each entry represents a specific pond the fish were harvested from. These were not combined as 1stocking event due to the differences in Total Length (TL) range. CO = Colorado River.

River	Stocking Location	River Mile	Number Stocked	TL Range (in mm)	TL Mean (in mm)	Stocking Date	Source & Stocking Period
CO	CO River adjacent to CDOT Pond: Grand Jct., CO	205.6	1	276	276	1 June – 19 July	CDOT POND Daytime Stocking
CO	Rifle Boat Ramp: Rifle, CO	240.7	2,104	152-362	225	11 Jul	HCNFF Daytime Stocking
CO	Colorado River State Park: Fruita, CO	157.1	2,066	154-307	225	18 Jul	HCNFF Daytime Stocking
CO	Redlands Parkway Boat Ramp: Grand Jct., CO	166.7	1,216	134-347	225	8 Aug	HCNFF Daytime Stocking
CO	Redlands Parkway Boat Ramp: Grand Jct., CO	166.7	1,210	144-339	218	8 Aug	HCNFF Daytime Stocking
CO	Colorado River State Park: Fruita, CO	157.1	1,174	166-371	259	15 Aug	HCNFF Daytime Stocking
CO	Colorado River State Park: Fruita, CO	157.1	1,219	80-374	262	15 Aug	HCNFF Daytime Stocking
CO	Colorado River State Park: Fruita, CO	157.1	1,197	173-370	277	22 Aug	HCNFF Daytime Stocking
CO	Colorado River State Park: Fruita, CO	157.1	1,197	171-384	263	22 Aug	HCNFF Daytime Stocking
Total Fish Stocked			11,384				