

COLORADO RIVER RECOVERY PROGRAM
FY 2019 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER: C29a/138

I. Project Title: GRCC Canal Salvage

II. Bureau of Reclamation Agreement Numbers

USFWS Vernal: R15PG00083

Project/Grant Period: Start date: 10/01/2014
End date: 09/30/2019

UDWR Moab: R19AP00059

Project/Grant Period: Start date: 05/01/2014
End date: 09/30/2019
Reporting period end date: 09/30/2019
Is this the final report? Yes X No

III. Principal Investigators:

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IV. Abstract:

In an effort to salvage native fishes entrained in the Green River Canal, personnel from the Utah Division of Wildlife Resources and the United States Fish and Wildlife Service captured and translocated five humpback chub (*Gila cypha*), one bonytail chub (*Gila elegans*), six unidentified native chubs (*Gila spp.*), one razorback sucker (*Xyrauchen texanus*), 142 flannelmouth suckers (*Catostomus latipinnis*), seven bluehead suckers (*Catostomus discobolus*), and 170 speckled dace (*Rhinichthys osculus*) during November 2018. These fish were translocated and released alive into the mainstem Green River, downstream of the Tusher Diversion. Additionally, due to reconstruction, three humpback chub, three native chubs, and four flannelmouth suckers were captured and translocated from the raceway leading into the canal system.

V. Study Schedule: 2014-2018

VI. Relationship to RIPRAP:

GREEN RIVER ACTION PLAN: MAINSTEM

II.B.2. Screen Green River Canal to prevent endangered fish entrapment

II.B.2.a. Assess need

VII. Accomplishment of FY 2019 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

With permission from landowners and assistance from canal company staff, UDWR Moab and USFWS Vernal crews accessed the canal via the canal company right-of-way on either side of the canal. Sampling was conducted by means of a single backpack electrofishing unit from 5-7 November 2018. Electrofishing effort was not recorded, due to the timer malfunctioning. Sampling was timed to coincide with annual de-watering and canal reconstruction efforts.

Eight endangered fish were captured and translocated from the canal system. One razorback sucker was captured (TL=378 mm), which was previously marked with a PIT tag. One previously marked bonytail (TL=308 mm) was captured. Six humpback chub were also captured (61 to 151 mm TL). One of these fish was of appropriate size to receive a PIT tag, and this fish was not previously marked.

Other native fish encountered were six age-0 native chubs (median TL=59 mm), however all of these fish were too small to be marked with a PIT tag before being translocated to the Green River. One hundred forty-two flannelmouth suckers (median TL=97 mm, Figure 1), seven bluehead suckers (median TL=77 mm), and 170 speckled dace (median TL=55 mm) were all captured and translocated into the mainstem Green River.

VIII. Additional noteworthy observations:

Eight nonnative fish species were encountered during sampling (Table 1). These species were not quantified in order to allow for timely completion of the primary objective. Green sunfish (*Lepomis cyanellus*) and black bullhead (*Ameiurus melas*) were euthanized and removed from the canal.

For the first time during canal sampling, crews pumped water from the siphon between the PIT tag interrogation arrays as well as the pool leading into the siphon, in order to effectively electrofish this area. One adult razorback sucker, as well as four flannelmouth suckers, were captured in the pool leading into the siphon. A single speckled dace was salvaged from the interior of the siphon itself.

In preparation for construction of the fish barrier, a coffer dam was set in place upstream of the raceway leading into the canal system. As this area was being de-watered, crews were able to effectively sample fish in the raceway. Three humpback chub were captured (92 to 192 mm TL) and translocated to the Green River. None of these fish were previously marked, but one (TL=192 mm) received a PIT tag before being released. Three other native chubs (63 to 69 mm TL), as well as four flannelmouth suckers (92 to 259 mm TL), were also captured and translocated.

In the interest of completing the primary objective before the canal was completely de-watered, submersible PIT antennas were not deployed during this sampling period.

IX. Recommendations: None

X. Project Status: Complete

Table 1. Green River Canal fish captures, November 2018. Fish which were captured, but not enumerated are denoted as “NA”.

Species	Number of fish
bonytail (<i>Gila elegans</i>)	1
humpback chub (<i>Gila cypha</i>)	6
razorback sucker (<i>Xyrauchen texanus</i>)	1
bluehead sucker (<i>Catostomus discobolus</i>)	7
flannelmouth sucker (<i>Catostomus latipinnis</i>)	142
speckled dace (<i>Rhinichthys osculus</i>)	170
unidentified native chub (<i>Gila spp.</i>)	6
common carp (<i>Cyprinus carpio</i>)	NA
gizzard shad (<i>Dorosoma cepedianum</i>)	NA
sand shiner (<i>Notropis stramineus</i>)	NA
red shiner (<i>Cyprinella lutrensis</i>)	NA
fathead minnow (<i>Pimephales promelas</i>)	NA
green sunfish (<i>Lepomis cyanellus</i>)	NA
black bullhead (<i>Ameiurus melas</i>)	NA
channel catfish (<i>Ictalurus punctatus</i>)	NA

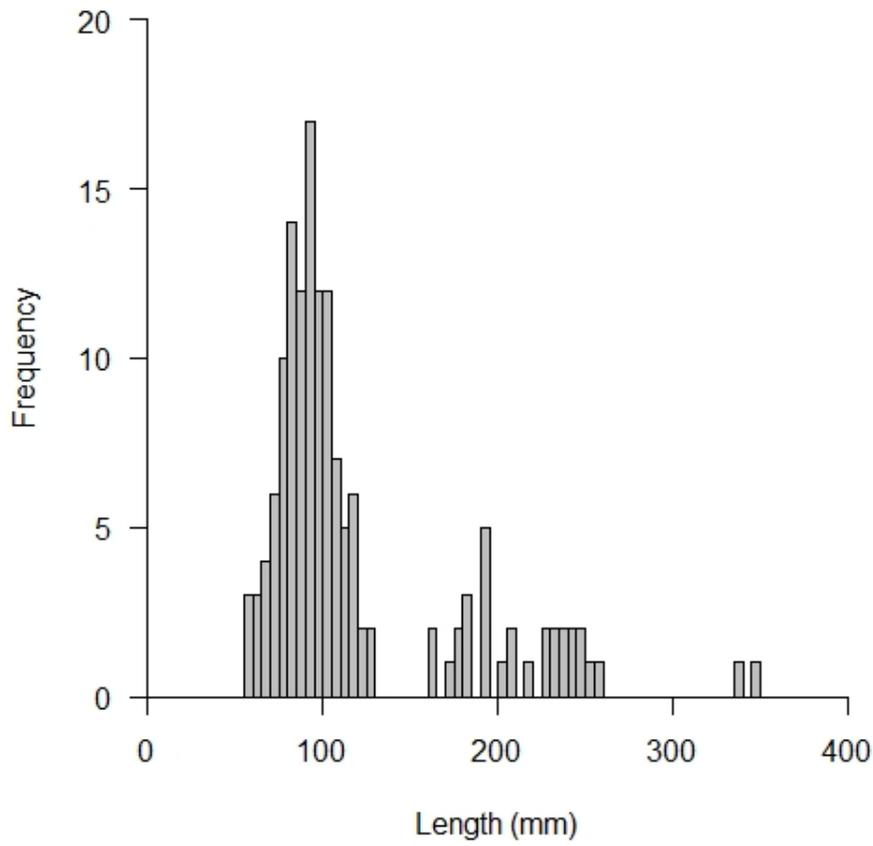


Figure 1. Length frequency distribution of flannelmouth suckers captured in the Green River canal system, November 2018.

ANNUAL PERFORMANCE PROGRESS REPORT (PPR)

BUREAU OF RECLAMATION AGREEMENT NUMBER: R14AP00007

UPPER COLORADO RIVER RECOVERY PROGRAM PROJECT NUMBER: 138

Project Title: GRCC Canal Salvage

Principal Investigators:

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Project/Grant Periods:

Start date 5/01/2014

End date: 09/30/2019

Reporting period end date: 09/30/2019

Is this the final report? Yes X No

Performance: During November 2018 electrofishing of the Green River canal system, Utah Division of Wildlife Resources and United States Fish and Wildlife personnel salvaged five endangered humpback chub (*Gila cypha*), one bonytail (*Gila elegans*), one razorback sucker (*Xyrauchen texanus*), six native chubs (*Gila spp.*), seven bluehead suckers (*Catostomus discobolus*) and 142 flannelmouth suckers (*Catostomus latipinnis*). These fish were released alive into the Green River mainstem. Data were submitted to the database manager in April 2019 and an annual report was provided in April 2019.

ANNUAL PERFORMANCE PROGRESS REPORT (PPR)

BUREAU OF RECLAMATION AGREEMENT NUMBER: R15PG00083

UPPER COLORADO RIVER RECOVERY PROGRAM PROJECT NUMBER: C29a

Project Title: Green River Canal Company (GRCC) Canal Salvage

Principal Investigators: Chris Smith

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Project/Grant Periods: 10/01/2014

End date: 09/30/2019

Reporting period end date: 09/30/2019

Is this the final report? Yes No

Performance: During November 2018 electrofishing of the Green River canal system, Utah Division of Wildlife Resources and United States Fish and Wildlife personnel salvaged five endangered humpback chub (*Gila cypha*), one bonytail (*Gila elegans*), one razorback sucker (*Xyrauchen texanus*), six native chubs (*Gila spp.*), seven bluehead suckers (*Catostomus discobolus*) and 142 flannelmouth suckers (*Catostomus latipinnis*). These fish were released alive into the Green River mainstem. Data were submitted to the database manager in April 2019 and an annual report was provided in April 2019.