

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM

FY 2021 ANNUAL REPORT

PROJECT: C-28

Project Title

Green River Canal Fish Screen and Tusher Diversion Dam Fish Passage

Bureau of Reclamation Agreement Number:

17-WC-40-686

Project/Grant Period:

Start date: 10/01/2020

End date: 09/30/2021

Reporting period end date: 09/30/2021

Is this the final report? Yes ___ No X___

Principal Investigator:

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Abstract:

The Green River Canal begins on the west side of the Tusher Wash Diversion Dam, located on the Green River above Green River, Utah (RMI 128.3) and diverts water for the Green River Canal Company & Thayn Hydropower. Entrainment of native fish has been documented in the Green River Canal under multiple studies prior to construction of the fish screen. The fish screen facilities were constructed during the 2018-19 non-irrigation season and consist of a concrete weir wall and inclined overflow screen in the canal with appropriate fish/debris return facilities. The Tusher Diversion Dam fish passage was constructed in 2016 and allows fish access to upstream habitat. An O&M contract was executed with the Green River Canal Company (GRCC) in 2018, in which GRCC accepts O&M responsibility for the fish passage and screen.

Study Schedule:

2016-Ongoing

Relationship to RIPRAP:

Green River Action Plan:

II.B. Restore native fish passage at instream barriers

II.B.1.a. Maintain fish passage at Tusher Wash Diversion

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

II.B.2.d. Operate and maintain

Accomplishment of FY 2021 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

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GRCC has their federal accounts set up successfully and received their first O&M reimbursement from Reclamation in 2021.

Green River Canal Fish Screen

The construction of the fish screen facility was completed prior to the 2019 irrigation season and has now been operational for 3 years. In 2021, only one bonytail tag was detected on the PIT antennas beyond the screens. Two were detected in 2020 and no detections were made in 2019, suggesting the screen has been extremely effective in preventing entrainment in the canal. Occasionally, algae has accumulated on the screens requiring frequent cleaning, but has not impaired water delivery. The Management Committee approved capital funding for a pressure washing station and a track mounted excavator to help with the cleaning efforts. GRCC is expected to make these purchases in 2022.

Tusher Diversion Dam Fish Passage

The Tusher Diversion fish passage has been clogged with debris for much of the time since it was installed in 2016. It is suspected the blockage is impairing the ability of endangered species, especially pikeminnow from accessing upstream habitat. GRCC cleaned the passage a few times in 2021, but O&M continues to be a challenge. The Management Committee approved capital funding to reimburse GRCC for a rail-mounted excavator to allow for safe and more effective cleaning of the passage.

Recommendations:

The installation of a pressure washing station and a rail-mounted excavator will make cleaning and other O&M safer and more effective for GRCC. A plate or screen may want to be installed at the far end of the fish screen to prevent any fish from jumping over the structure into the canal beyond the screen.

Project Status:

The facilities will continue to operate as designed with GRCC providing the necessary O&M as indicated in their statement of work and pursuant to the O&M contract.

FY 2021 Budget Status

Funds Provided: \$30,000

Funds Expended: \$14,599.12

Difference: \$15,400.88

Percent of the FY 2021 work completed, and projected costs to complete: 100%

Status of Data Submission

NA

Signed:

Danielle Hansen

Principal Investigator

December 8, 2021