

- I. Project Title: **Green River Canal Fish Screen and Weir Wall**
- II. Bureau of Reclamation Agreement Number: NA
- III. Principal Investigator: Ryan K. Christianson
Bureau of Reclamation
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- IV. 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 and diverts water for the Green River Canal Company and Thayn Hydropower. Entrainment of native fish has been documented in the Green River Canal under multiple studies. This project consists of constructing a fish entrainment solution in the Green River Canal Company main canal to minimize entrainment of fish. The facilities are scheduled for construction during the 2018-19 non-irrigation season and will consist of a concrete weir wall and inclined overflow screen in the canal with appropriate fish/debris return facilities. With this facility in place, water entering the canal would flow over the top of the weir. The weir wall would be designed so that the depth of water flowing over the wall would be approximately 0.5 feet. Flows passing over the weir wall would then pass through an inclined screen. The remainder of the water column in front of the weir wall would be returned to the Green River, along with any fish and debris in the water column below the top of the weir wall.
- V. Study Schedule: This project has been deferred for a number of years, initially due to water right litigation between the Green River Canal Company and Thayn Hydropower, which was ultimately resolved in the Utah Supreme Court. Additionally, the State of Utah and the Green River Canal Company were evaluating the feasibility of rehabilitating the diversion dam to address needed repairs and improve operations. In FY 2012 a partnership was developed between the many local water users, the State of Utah, and the NRCS to design, permit, and construct the diversion dam rehabilitation. A Final ROD and EIS were completed in 2015. Construction of the dam rehabilitation was completed in 2016. An O&M contract was executed with the Green River Canal Company on April 24, 2018. Construction began after the 2018 irrigation season and is scheduled to be completed before the 2019 irrigation season begins.
- VI. Relationship to RIPRAP: Green River Action Plan: Mainstem II.B.2 Screen at Tusher Wash diversion to prevent endangered fish entrainment.
- VII. Accomplishment of FY 2018 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings: A team of MC participants, Reclamation Engineers, and Program Directors Office staff negotiated an O&M contract with Green River Canal Company, which was executed on April 24, 2018. Final designs were completed, and a

construction contract was awarded to NW Construction of Bozeman, Montana on September 21, 2018 for an award amount of \$3,807,350. Thayn Hydropower decided to take advantage of a dewatered raceway to rehabilitate the 8-Gate Structure at the head of the canal. The MC approved funding \$400,000 of the approximately \$2 million-dollar project, which will be constructed concurrently with the fish screen and barrier.

VIII. Additional noteworthy observations: None

IX. Recommendations: None

X. Project Status: Construction has begun and expected to be complete in the spring of 2019

XI. FY 2018 Budget Status

A. Funds Provided: \$2,855,955 FY 2018, remainder of contract from FY 2019

B. Funds Expended: \$2,855,955

C. Difference: \$0

D. Percent of the FY 2018 work completed, and projected costs to complete: 100% of FY 2018 work is complete, \$2,119,000 is scheduled to be funded in FY 2019 to complete the project

E. Recovery Program funds spent for publication charges: \$0

XII. Status of Data Submission: N/A

XIII. Signed: Ryan Christianson November 15, 2018
Principal Investigator Date