I. Project Title: **Tusher Wash Fish Barrier**

II. Bureau of Reclamation Agreement Number(s): NA

III. Principal Investigator(s): Brent R. Uilenberg  
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IV. Abstract:  
The Tusher Wash Diversion Dam, located on the Green River above Green River, UT, diverts water for multiple entities, including the Green River Canal Company & Thayn Hydropower on the western side of the river. 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 current concept for this facility consists of constructing 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 rehabiliting 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. Diversion rebuild, along with the current design concept consisting of the weir wall and inclined overflow screen, allows for the design to be finalized pending negotiations regarding associated project facilities with the Green River Canal Company and Thayn Hydropower. Given the current status of negotiations, the earliest construction start for the Tusher Wash facility is fall of 2017 but most likely fall of 2018.

VI. Relationship to RIPRAP:  
Green River Action Plan: Mainstem II.B.2 Screen Tusher Wash diversion to prevent endangered fish entrainment.

VII. Accomplishment of FY 2016 Tasks and Deliverables, Discussion of Initial Findings and
Shortcomings:
The project was reengineered to integrate the inclined screen concept. This concept was presented to the Biology Committee in September 2016 and was accepted with minor modifications. This feature will address lingering performance concerns about the stand alone weir wall, as this concept has not been fully tested at the Hogback Canal. Draft O&M contracting documents were prepared and negotiations conducted with the Green River Canal Company and Thayne Hydropower. Negotiations are currently focused on the scope of the facilities to be included in the project. Negotiation terms were presented to the Management Committee in December 2016 and the MC decided to empower a team of MC participants, Reclamation Engineers, and Program Directors Office staff to continue negotiations. Project is on hold pending resolution of project scope and execution of O&M contract.

VIII. Additional noteworthy observations: None

IX. Recommendations:
   • Continue negotiations with Green River Canal Company and Thayn Hydropower with the assistance of Management Committee representatives and Program Directors Office.

X. Project Status:
   Negotiations are ongoing; however the project is essentially on hold pending resolution of project scope and execution of O&M contract.

XI. FY 2016 Budget Status
   A. Funds Provided: $149,876
   B. Funds Expended: $149,876
   C. Difference: $0
   D. Percent of the FY 2015 work completed, and projected costs to complete: NA
   E. Recovery Program funds spent for publication charges: $0

XII. Status of Data Submission (Where applicable): NA

XIII. Signed:  Brent R. Uilenberg  December 15, 2016  
   Principal Investigator  Date
   (Just put name and date here, since you will be submitting the report electronically)

APPENDIX: NA