

COLORADO RIVER RECOVERY PROGRAM
2018 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER: FR-New

I. Project Title: Evaluation of Green River Flow and Temperature Recommendations

II. Bureau of Reclamation Agreement Number(s): R15PG00159
Western Area Power Administration Agreement Number (s): 100012740-161,
100012740-171

III. Principal Investigator(s):

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IV. Abstract:

Flow and temperature recommendations for endangered fish in the Green River downstream of Flaming Gorge Dam were established by Muth et al. (2000). Since that time, multiple studies have been conducted to evaluate the effects of implementing those recommendations on endangered species and their habitat. The objectives of this project are to provide an overall evaluation and status assessment of the Green River flow and temperature recommendations based on operational, biological, and physical information collected from 2006 through summer 2014. The end product will be a report that summarizes this review, and provides the Recovery Program with clear recommended revisions of Muth et al, should the evaluation suggest that revisions are warranted.

V. Study Schedule:

This project was initiated in FY 2015. The Green River Flow Evaluation and Assessment Team (GREAT) has been meeting regularly since that time. Initially, an 18-month effort was envisioned. However, the extensive modeling and analysis required to evaluate each of the various proposed experimental changes in flows (larval-triggered pulse flows, modified base flows, and early summer flow spikes) has delayed completion of the draft report. A draft report is now projected to be made available for Program technical committee reviews in early 2019.

Following the receipt of comments and suggestions on the draft report from the Program technical committees and other reviewers in early 2019, the team will work toward finalizing the report in 2019.

VI. Relationship to RIPRAP:

General I.A.1 - Review instream flow methodologies and assess the technical adequacy of current flow recommendations.

#FR-New Green River Flow & Temperature Recommendations FY 2018 Ann. Rpt.

Green River I.D.I.h - Integrate and synthesize reports for evaluation and recommended revision of flow and temperature recommendations.

VII. Accomplishment of FY 2018 Tasks and Deliverables, and Discussion of Initial Findings:

The GREAT team met regularly in FY 2018 via conference calls, typically held every two weeks. At those meetings, the team reviewed and refined the chapter-by-chapter organization and content of the report. Various individual writing assignments were completed, incorporated into the draft recommendations document, and collectively reviewed and refined by the team. The team also reviewed the latest hydrologic modeling results as they related to implementation of revised recommendations (see below).

In FY 2018, Heather Patno (USBR) performed additional modeling of the various flow recommendations developed by the GREAT, to help the team evaluate likely impacts on Flaming Gorge operations and storage, and to assess the feasibility of implementing the recommendations under various hydrologic scenarios. The team is using that information to inform its final flow and temperature recommendations, and to better characterize the relevant limitations, considerations, uncertainties, and concerns associated with their implementation.

Drafts of all GREAT report chapters are now written; remaining work to complete this report consists primarily of additional team review and editing of the report to produce a draft of the document suitable for a broader technical review.

VIII. Additional noteworthy observations: N/A

IX. Recommendations: Continue the regular meetings of the GREAT team in 2018 and 2019, with an objective of completing the draft report in early 2019, and the final report in late 2019.

X. Project Status: Ongoing. As mentioned above, the GREAT team hopes to provide a draft flow and temperature recommendations report suitable for technical committee review in early 2019.

XI. Budget Status (from project start in FY15)

Argonne National Laboratory

A. Funds provided:	Reclamation:	\$63,053
	WAPA (non-Program):	\$338,217
B. Funds expended:	Reclamation:	\$63,053
	WAPA (non-Program):	\$285,957
C. Difference:	Reclamation:	\$0
	WAPA (non-Program):	\$52,260

Larval Fish Laboratory (these last of these funds were expended in FY 2016)

A. Funds provided:	Reclamation:	\$66,668
B. Funds expended:	Reclamation:	\$66,668
C. Difference:	Reclamation:	0

XII. Status of Data Submission (Where applicable): N/A

XIII. Signed: Kirk LaGory 01/08/2019
Principal Investigator Date