

# Peer Review Plan

## Low-Flow Operations Study at Bighorn Lake

Date: July 14, 2021

Originating office: Bureau of Reclamation, Missouri Basin Arkansas-Rio Grande-Texas Gulf Coast Region, Missouri Basin Regional Office, 2021 4<sup>th</sup> Ave N, Billings, MT 59101

### Reclamation roles:

Director or delegated manager: Brent Esplin, Regional Director, Missouri Basin Region, Bureau of Reclamation

Peer Review Lead: Lauren Allin, Civil Engineer, Missouri Basin Region, Bureau of Reclamation

### Subject and Purpose:

The Low-Flow Operations Study at Bighorn Lake uses RiverWare hydrology modeling to develop and analyze low-flow operational guidance. The study is described in a technical report by the Bureau of Reclamation Missouri Basin Regional Office. Low inflow forecasts at Bighorn Lake result in low-flow reservoir operations during Bighorn Lake runoff season. At the time of this study, the Bighorn Operating Criteria that specifies how to manage the reservoir does not define specific low-flow operational guidance. The purpose of this study is to develop and analyze specific low-flow operational guidance and identify a set of recommended operational policies. Montana Area Office will consider the recommendation for implementation into the Bighorn Operating Criteria. An independent scientific peer review process will be used to review the methods and potential policy scenarios considered in this study.

### Impact of Dissemination:

Reclamation's Policy CMP P14, "Peer Review of Scientific Information and Assessments", requires an evaluation of whether scientific information to be disseminated by Reclamation must be peer reviewed. The models, analyses, and findings produced by Reclamation have the potential to inform operational decision-making and is therefore considered to be "influential" scientific information pursuant to Section 4.A. of CMP P14.

### Peer Review Scope:

The subject of this review is the methods, results, and conclusions of the Low-Flow Operations Study. The scientific information subject to review is included in the Low-Flow Operations Study technical report. This scientific information will be used to inform reservoir operations during low inflow water years. The model files are not subject to review at this time, however information on the Riverware modeling environment and information on the Bighorn system model application's assumptions, inputs and outputs will be provided to reviewers.

1. Are the goals, definitions, methods, and results understandable?
2. Was the evaluation of modeled policy scenarios comprehensive?
3. Are limitations and uncertainties appropriately characterized?
4. Are there any issues, concerns, or suggestions that are not covered by the questions above?

Reviewers are to provide comment solely on the scientific information and process being reviewed, and not on any agency decision or policy.

#### Timing of Review:

The review period is expected to be August 23-31, 2021. The final Peer Review Report is expected to be available on the U.S. Bureau of Reclamation Peer Review public website (<http://www.usbr.gov/main/qoi/peeragenda.html>) by September 30, 2021. No time deferrals are involved.

#### Methodology of Review:

The review will be conducted by one individual. At completion of the review, comments will be compiled by the reviewer in a comment matrix, and Reclamation will coordinate with the reviewer and authors/developers of the scientific information to address comments. When the review is completed, a Peer Review Report will be compiled that identifies the reviewer by name and credentials, the reviewer's individual comments, as well as Reclamation's responses and actions taken to satisfy concerns, if applicable. The Peer Review Report will be posted on Reclamation's peer review website. The peer review process will not provide opportunities for public participation.

#### Number of Peer Reviewers:

It is anticipated that one peer reviewer will be utilized.

#### Reviewer Selection Process:

The peer reviewer will be selected by Reclamation staff considering expertise, independence, and absence of conflict of interest. The peer reviewer will have expertise in hydrology, water resources engineering, and water resources planning and management. Reviewers should be familiar with the model software used for this study (CADSWES RiverWare) or similar hydrology model software.

#### Delivery of findings:

The peer reviewer will each submit their comments to the Peer Review Lead by the end of the review period. The comments will include a response to each of the questions cited under "Peer Review Scope", as well as description of findings in a comment matrix. The comments will be provided digitally to the Peer Review Lead.

#### Response to Peer Review:

After receiving peer review comments, Reclamation will provide a response to each of the comments, including actions the Peer Review Lead will undertake regarding the comment and reasons the Peer Review Lead believes those actions will satisfy any key concerns or recommendations, ensuring that comments are adequately and fairly addressed, as applicable. The Peer Review Lead will submit a final Peer Review Report to Reclamation's peer review website (<http://www.usbr.gov/main/qoi/peeragenda.html>), which will summarize the findings of the peer

review and list comments provided by the reviewers, as well as the Peer Review Lead's response to the comment.

Federal Register Notice:

Federal Register notices will not be provided announcing the formation of a peer review team and completion of the final report.

Applicability of the Federal Advisory Committee Act (FACA):

This peer review is not subject to the Federal Advisory Committee Act (FACA) because the review does not involve open meetings or committee chartering and reviewers are being asked to provide individual reviews on the subject matter. Reclamation is not seeking consensus advice from the reviewers as a group.

Agency contact:

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