Peer Review Plan

Batch Peer Review Plan for Colorado River Simulation System (CRSS) Modeling of Post-2026 Alternatives

Date:
September 24, 2025

Originating Office:
Research and Modeling Team, Lower Colorado Basin Region, Bureau of Reclamation
UCB 421
Boulder, CO 80309

Reclamation Roles:
Director or delegated manager: Genevieve Johnson, Acting Regional Director, Lower Colorado Basin Region, Bureau of Reclamation

Peer Review Lead: Alan Butler, Research and Modeling Group Manager, Lower Colorado Basin Region, Bureau of Reclamation

Subject and Purpose:
The Colorado River Basin Post-2026 National Environmental Policy Act (NEPA) process is being carried out to identify successor operating guidelines for Lakes Powell and Mead. The current guidelines, comprised of the 2007 Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (2007 Interim Guidelines), the 2019 Drought Contingency Plan, and Minute 330 to the 1944 Treaty with Mexico, which work in conjunction to define operating criteria for the reservoirs, are expiring at the end of water year 2026. The Secretary of the Interior must adopt new guidelines before October 2026 to provide an orderly transition to new long-term operations, which will be in place starting in 2027 and continue for up to 20 years into the future. The Research and Modeling Teams within Reclamation's Upper and Lower Colorado Basin Regions created a model for each alternative being analyzed in the NEPA process using the Colorado River Simulation System (CRSS) modeling platform. Each of the models takes a different approach to the criteria and volumes for releases from Lake Powell and Lake Mead, distribution of shortages and provisions for the storage and delivery of conserved water. The purpose of this peer review plan is to facilitate expert review of whether the models reasonably capture the alternatives' respective operational assumptions.

Impact of Dissemination:
CRSS has been established for decades as a reasonable representation of Reclamation's major reservoirs in the Colorado River Basin and as a trusted source of long-term projections for the operation of Lake Powell and Lake Mead. Varying the operating criteria within the model to represent different guidelines is within the accepted uses of CRSS. Because the models of alternatives are being used in a critical NEPA process, Reclamation has determined that the approach to modeling each alternative is considered influential scientific information and is submitting the models for peer review.

Peer Review Scope:
The subject of this review is whether the model for each NEPA alternative is a reasonable representation of the operational assumptions included in each alternative. The resource impacts associated with the modeling output are outside the scope of this review. This review is focused

solely on whether the modeling approaches align with the alternatives' respective descriptions, and the reviewer should not provide advice or comment on a policy or decision. Specifically, the reviewer will respond to the following questions for each model:

Question 1: Did the modeling approach fully capture the set of operating assumptions associated with the alternative?

Question 2: Are there operating assumptions identified in the review that are incompletely or incorrectly modeled in a way that substantively affects model output?

Timing of Review:

The review period is expected to be September 1- October 15, 2025. 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 January 15, 2025. No time deferrals are involved.

Methodology of Review:

The review will be conducted by one individual. The identity of the reviewer will be disclosed in the final Peer Review Report. Public comments will not be provided to the peer reviewer prior to the review. The peer review process will not provide opportunities for public participation, but the final report and Reclamation's response to findings will be published as an appendix in the Post-2026 Draft Environmental Impact Statement (EIS), which will provide an opportunity for the public to review and provide feedback.

Number of Peer Reviewers:

One expert external peer reviewer will be used.

Reviewer Selection Process:

The reviewer will be selected by Reclamation staff and the public will not be asked to nominate reviewers. The reviewer will have at least 10 years' experience with Colorado River Basin hydrologic modeling and at least 10 years' experience with the RiverWare modeling software.

Delivery of Findings:

The reviewer will submit three products to the Peer Review Lead: a report of findings with details of issues of concern, a 2–3-page summary of the report, and a matrix with technical detail to support further model investigation by Reclamation staff. The products will be provided digitally to the Peer Review Lead.

Response to Peer Review:

At the conclusion of receiving peer review comments, the Peer Review Lead will submit a final Peer Review Report to Reclamation for publication as an appendix in the Post-2026 Draft EIS and posted to the U.S. Bureau of Reclamation Peer Review public website at http://www.usbr.gov/main/qoi/peeragenda.html. The report will summarize the findings of the peer review, describe Reclamation's response to the findings, actions the agency will undertake regarding the findings, and reasons the agency believes those actions will satisfy any key concerns or recommendations.

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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