Peer Review Plan

Evaluate Operating Criteria and Procedures (OCAP) Performance Under Future Climate Scenarios
Pilot Study (Newlands Project Reservoir Operations Pilot Study)

Date: 5/4/2022

Originating office: Bureau of Reclamation, California Great Basin Region, Lahontan Basin Area Office

Reclamation roles:

Director or delegated manager: Ernest Conant, Regional Director, California-Great Basin Region, Bureau of Reclamation

Peer Review Lead: Laurie Nicholas, Deputy Area Manager, Lahontan Basin Area Office, Bureau of Reclamation

Subject and Purpose:

Reclamation’s Lahontan Basin Area Office (LBAO) is conducting a Reservoir Operations Pilot Study (Pilot Study). The goal of the Pilot Study is to develop a robust climate change hydrology dataset (expanded hydrology) to evaluate the ability of 43 Code of Federal Regulations (CFR) Part 418—Operating Criteria and Procedures (OCAP) for the Newlands Project from 1997, to meet water right demands under a changing hydrologic regime. This pilot study will address water supply variability by developing an expanded hydrology dataset that spans from 1500 to 2099 and will be used to evaluate the adequacy of the existing federal rule to manage water in the Truckee-Carson Basin under changing conditions. This effort directly complements LBAO’s current effort to update the OCAP by allowing Reclamation to study the performance of OCAP under climate variability and discussion of possible alternatives to address changing conditions. The pilot study will not modify the OCAP criteria or evaluate alternatives to the OCAP because modifications to the OCAP must undergo the federal rulemaking process. Reclamation’s Technical Service Center will support the Pilot Study by developing the expanded hydrology development and testing the dataset in the Truckee River Operating Agreement (TROA) Planning Model (Planning Model).

Impact of Dissemination:

The TROA Planning Model is managed by Reclamation and is shared with all the TROA Parties, who regularly use the Planning Model to analyze water management scenarios and plan water management activities. The expanded hydrology dataset will also be available to the TROA parties for use in the TROA Planning Model. Additionally, the expanded hydrology will be used to analyze OCAP’s ability to meet objectives in climate change scenarios. Therefore, the expanded hydrology dataset and accompanying Technical Memorandum (final report) are deemed to be influential scientific information and require peer review per Office of Management and Budget Final Information Quality Bulletin for Peer Review (70 FR 2664-2677) and Reclamation Manual Peer Review of Scientific Information and Assessments Policy (CMP P14).

Peer Review Scope:

The peer review is expected to be completed in three phases: expanded hydrology dataset review, TROA Planning Model review, and final report review. Completing peer reviews at each phase of the project will allow reviewers to identify any potential issues well in advance of project completion. Peer reviews will be asked to respond to the following questions during the phases of the review:
Expanded Hydrology Dataset Review
1. Does the expanded hydrology dataset adequately represent the typical hydrology patterns found in the Truckee-Carson Basin?
2. Was the expanded hydrology dataset developed using a technically defensible approach?

TROA Planning Model Results Review
1. Do the TROA Planning Model results adequately reproduce the historical operations as intended by the current TROA and OCAP policy?
2. Does the TROA Planning Model simulate operations reasonably under extreme conditions that may not have been tested in prior studies (i.e. conditions in the previous untested paleo hydrology period or projected future periods)?

Final Report Review
1. Does the final report sufficiently document the modeling assumptions, data inputs, and results of the expanded hydrology dataset?
2. Does the text of the report match the methods applied in the expanded hydrology dataset development?
3. Are the conclusions of the final report well justified, explained, and supported by text in the report?

Timing of Review:
Anticipated review start dates are listed in the table below.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Anticipated Peer Review Start Date</th>
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<tbody>
<tr>
<td>Expanded Hydrology Dataset</td>
<td>September 2022</td>
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<tr>
<td>TROA Planning Model Results</td>
<td>March 2023</td>
</tr>
<tr>
<td>Final Report</td>
<td>September 2023</td>
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Methodology of Review:
Review will be conducted by Precision Water Resource Engineers (PWRE) with oversight from the Reclamation peer review lead. PWRE has been the lead developers for the TROA Planning Model since the model’s conception; PWRE is also experienced in developing hydrologic datasets for the Planning Model. PWRE will not participate in the development of the expanded hydrology dataset nor its incorporation into the Planning model; therefore, PWRE’s review will be independent of the efforts being completed. The identities of individual reviewers will be disclosed in the final Peer Review Report. There will be no public review in this project.

Number of Peer Reviewers:
It is anticipated that 2 peer reviewers will be utilized.

Reviewer Selection Process:
Peer reviewers will be required to have extensive experience working with the TROA Planning Model, developing hydrology for the Truckee-Carson Basins, and processing downscaled climate change data. The public will not be asked to nominate reviewers.

Delivery of findings:
The peer review team members will each submit a report of their findings to the Peer Review Lead by the end of the review period. At a minimum, their report will include a brief description of their
findings and recommendations in a comment matrix. The report will be provided digitally to the Peer Review Lead.

Response to Peer Review:

PWRE will develop a final Peer Review Report, which will include Reclamation responses to reviewer comments. The final Peer Review Report may be published on Reclamation’s peer review agenda website.

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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