Peer Review Plan

Klamath Basin Hydro-Economic Model Development and Application for 2027 Klamath Project Long-Term Operations Environmental Compliance

Date: October 20, 2026

Originating office: Klamath Basin Area Office, Bureau of Reclamation, California Great Basin Region, 6600 Washburn Way, Klamath Falls, Oregon, 97603

Reclamation roles:
Director or delegated manager: Adam Nickels, Acting Regional Director, California Great Region, Bureau of Reclamation

Peer Review Lead: Amanda Babcock, Natural Resources Specialist, Klamath Basin Area Office, Bureau of Reclamation

Subject and Purpose:

The Klamath Basin Hydro-Economic Model (KB-HEM) is a Positive Mathematical Programming (PMP) application written in the higher-level programming language provided by the General Algebraic Modeling System (GAMS) and developed to represent socioeconomic conditions in the Klamath Basin linked to Klamath Project operations. The model was developed with intent and purpose to support long-term planning and environmental compliance regarding Klamath Project operations. This Peer Review Plan is intended to document review of the KB-HEM assumptions and results describing Klamath Basin conditions. Prior to this peer review of KB-HEM development and application, GAMS software has been widely tested and documented.

Impact of Dissemination:

Reclamation's Klamath Basin Area Office (KBAO) anticipates using the KB-HEM model and output to inform the 2027 National Environmental Policy Act analysis on the Klamath Project Long-Term Operations (LTO) and subsequent decision-making on operating criteria. As such, the KB-HEM meets the definition of influential scientific information requiring peer review by experts internal or external to Reclamation, as defined by the Office of Management and Budget Final Information Quality Bulletin for Peer Review and Reclamation Manual Peer Review of Scientific Information and Assessments Policy (CMP P14).

Peer Review Scope:

The KB-HEM's simulation code written in GAMS language, simulation input data, and simulation output data describing hydroeconomic conditions informing the subject long-term planning and environmental compliance documentation are the subject of this peer review. Peer reviewers will be asked to respond to the following questions:

1. To what extent are assumptions tolerable and clearly explained in KB-HEM documentation?
2. Where modeled baseline conditions are meant to reflect recent historical conditions, to what extent are modeled and actual historical differences adequately characterized?

To what extent do modeled hydroeconomics of the Klamath Project operations adequately reflect real conditions and how clearly documented are deviations in assumptions and output? .

Timing of Review:

Review for the model is anticipated to be completed by Winter 2027.

Methodology of Review:

Reviews will be conducted by one or more individuals. The identities of the reviewers will be disclosed in the final Peer Review Summary. The peer review process will not provide opportunities for public participation.

Each reviewer will be an expert in hydroeconomics, be familiar with water management situations like those found in the Klamath Basin and be an expert in interpreting model results like those produced by KB-HEM. Reviewers will be selected from within or outside of Reclamation and have independence from the scientific information subjected to this peer review.

Number of Peer Reviewers:

As many as three reviewers will be used from the groups described in the Methodology of Review.

Reviewer Selection Process:

Each reviewer will be selected based on their knowledge of hydroeconomics modeling and the Klamath Basin. Each reviewer will have ample experience working in the basin and/or in hydroeconomics analysis.

Delivery of findings:

Reviewers will deliver findings in a provided Excel spreadsheet. Each reviewer will also provide a summary paragraph with any major findings to be included in the review report. Response to Peer Review: A summary paragraph from each reviewer will be published on the Reclamation's peer review website (http://www.usbr.gov/main/qoi/peeragenda.html) along with a response to comments if there were any major concerns.

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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