



November 13, 2020

**VIA ELECTRONIC DELIVERY**

Bureau of Reclamation  
Attention: Ms. KayLee Nelson, LC-6056  
P.O. Box 61470  
Boulder City, NV 89006-1470

**Re: Comments on U.S. Bureau of Reclamation's 7.D. Review Draft Report**

Dear Sirs and Madams:

On behalf of our respective organizations, thank you for the opportunity to comment on the draft report of the Bureau of Reclamation's review ("7.D. Review") of the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead ("2007 Guidelines").

We appreciate the Bureau's review and evaluation of the Guidelines and believe the results of this analysis will greatly inform the post-2026 operational guidelines. We also recognize that it is important to acknowledge that the Guidelines were focused on developing a set of rules to govern low reservoir conditions. However, lessons learned from the past decade indicate that the Basin is likely facing long-term scarcity and that seeking solutions to operate sustainably under such conditions will be essential going forward. The Bureau would thus be well-served to focus the conclusions of its review on how the experience of operating under the 2007 Guidelines can inform the development of operational elements or policy provisions to ensure that the Colorado River system functions effectively in perpetually low reservoir conditions, drought, and with climate change. Our initial comments were, and these comments are informed by this perspective, although we recognize that the scope of the 7.D. Review is limited.

In our May 6, 2020 comment letter<sup>1</sup> on the proposed scope and approach of the 7.D. Review, we suggested that five items and questions should be addressed, as they are inextricably linked to an assessment of the Guidelines' relative level of effectiveness with respect to (1) the three stated purposes of the Guidelines, (2) the adherence to common themes in the Guidelines, (3) the evaluation of the four operational elements identified by the Bureau, and (4) the Bureau's objective documentation of annual operations since 2008. Those five items are:

1. How effectively did the process used to develop and implement the Guidelines (and other subsequent actions) encourage the submission and evaluation of relevant information from a diverse range of stakeholders?
2. Did the Guidelines' development process (and other subsequent actions) consider and model a sufficient range of climate, water demand, water risk, and other scenarios?
3. How well did the Guidelines' development process (and other subsequent actions) consider and model scenarios for use of the operating Guidelines?
4. How did the Guidelines (and other subsequent actions) enable flexible supporting governance and decision-making frameworks to allow for operations to adapt to changing conditions, including through the "mid-year review"?; and
5. How well did the development process for the Guidelines (and other subsequent actions) and the models used to guide implementation of the same provide information to decisionmakers?

Under the first item, we referenced the role of Mexico in shortage management and tribal and NGO participation in the Guidelines and subsequent processes. While the draft report acknowledges the important agreements reached with Mexico, we think it would benefit the report to review in greater depth specifically how the agreements reached with Mexico in Minutes 316, 319, and 323, Mexico's concerns with modeled shortage sharing, and later binational technical collaboration and modeling resulted in operational value gains/increased effectiveness. Would the Guidelines have functioned effectively without these additional agreements with Mexico and its ability to store water in Lake Mead, for example? In this regard, we would note that one apparent shortcoming of the Guidelines was that, since discussions with Mexico related to Colorado River shortages had not yet occurred, the Guidelines simply assumed Mexico's participation in shortage sharing – at levels and in amounts that proved highly controversial in subsequent binational discussions. Had subsequent negotiations failed to result in Mexico's agreement to share in shortages at those approximate levels, this would likely have undermined the effectiveness of the Guidelines and the substance of the agreement among the Basin states that supported them. And, because those assumptions were incorporated into the Guidelines, those subsequent Minutes are more appropriately reviewed as essential components of Guidelines implementation rather than as complimentary activities.

Additionally, while the report does note the important contributions of tribal entities to the ICS program, we suggest that it would benefit the report to review more fully how the tribal entities' contributions to system conservation and the ICS program influenced the effectiveness of the Guidelines.

We appreciate that the report acknowledges the value of the NGOs in binational negotiations and technical expertise and resources provided. We also think the report should examine whether/how the Conservation Before Shortage alternative, in terms of the operational provisions ultimately

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<sup>1</sup> The comment letter may be accessed on the Bureau of Reclamation's website here: [https://www.usbr.gov/lc/region/programs/strategies/7Dcomments/7Dcomments\\_NGOConsortium.pdf](https://www.usbr.gov/lc/region/programs/strategies/7Dcomments/7Dcomments_NGOConsortium.pdf).

implemented, may have influenced or anticipated approaches that were subsequently adopted in complimentary activities, including the DCP.

We appreciate that the report highlights how the engagement of tribes, Mexico, and NGOs was crucial to the success of key operational decisions and studies and that their support will be needed again for post 2026-operations. We recognize that Reclamation has acknowledged the need to gather input from a diverse range of stakeholders, and we look forward to hearing the details regarding how that will be accomplished.

In the second item, we referenced the adherence/effectiveness of the process of Guidelines development with regard to a range of (1) modeled climate scenarios, (2) evaluated demand schedules/scenarios, (3) evaluated and modeled risk factors, and (4) ongoing model refinements. We appreciate that the report recognizes the differences in the Final EIS projections versus observed hydrology and the importance of considering a wider range of hydrology and demand assumptions. However, we think it would benefit the report to review issues we previously referenced in the comment letter, including:

- whether the policies/actions that were developed based on modeled scenarios of hydrologic risk sufficiently anticipated and considered trade-offs between water deliveries and effects on water storage, power production, recreation and environmental resources;
- how the difference in actual demands from the modeled demands in the 2007 Guidelines impacted Reclamation's planning and operations;
- how the difference between actual demands and modeled demands impacted operations with regard to equalization tier releases in comparison to what had been expected during the development of the Guidelines;
- whether the CRSS-based probabilistic analysis in the Guidelines provided a sufficient mechanism to assess the trade-offs between water deliveries and risks/effects on water storage, power production, recreation, and environmental resources;
- how the resources available for improving the CRSS model, MTOM model, and other operational models allowed Reclamation to address risk assessment needs; and
- to what extent model refinements have improved Reclamation's ability to assess environmental flow vulnerability since the 2012 Colorado River Basin Supply and Demand Study.

Furthermore, while the geographic scope of the Guidelines only spanned from Lake Powell to the U.S. border with Mexico, the report notes that the Upper Basin hydrology accounts for 92 percent of the total inflow in the Basin. We believe the report should consider the effectiveness of the Guidelines with respect to the Upper Basin, home to important multi-stakeholder processes like the Upper Colorado River Endangered Fish Recovery Program. As the report notes, part of Guidelines' operational purpose was to coordinate reservoir operations, including avoiding curtailment of uses in the Upper Basin, and not to affect available yield in the Upper Basin adversely — issues that seem likely to occupy a central position in conversations about future river management policies.

Under the third item, we referenced impacts from actual creation, storage, and delivery of ICS and the impacts of changes in delivery volumes year-to-year. The report notes that actual ICS activity was larger than anticipated and that there were some challenges related to ICS delivery. As referenced in our prior comment letter, we suggest that it would benefit the report to examine how the shortage

risk estimates in the Guidelines compared to the shortage risk estimates provided during the DCP negotiations, and how those estimates might have differed based on a range of ICS creation/delivery scenarios.

For the fourth item, we referenced the adherence/effectiveness of the Guidelines' development effort with regard to its associated consultation measures and decision-making process. We appreciate that the report acknowledges the ongoing importance of a collaborative stakeholder process in consultation and decision-making processes, and that inclusivity will be critical for the challenges ahead. As referenced in our prior comment letter, in addition to including a diverse range of stakeholders in the decision-making process, we believe it would benefit the report to analyze as well whether the Guidelines and subsequent actions allowed flexibility to base decisions on improved data obtained from subsequent advances in technology tools, such as Lidar (light detection and ranging) measurements of snow pack water content. The ability to learn and adapt to changing conditions rapidly will likely be a critical element of operations in the Basin going forward.

Lastly, for the fifth item, we referenced the impact of the limited resolution above CRSS nodes on the evaluation of potential benefits and costs associated with the Guidelines, and the similar impacts of not modeling interconnected resources management. We believe that it would benefit the report to consider whether the resolution of the CRSS nodes and model results used to develop and administer the Guidelines and subsequent actions provided an adequate range of outcomes to assess risks and consider trade-offs, particularly under low-flow scenarios, and whether the current CRSS model provides sufficient information to analyze the benefits and costs of conservation efforts undertaken in the Upper Basin (such as those through the PSCP/SCPP).

Additionally, while the report acknowledges the importance of a future resource analysis (which is beyond its stated scope), we believe that it would benefit the report to at least outline the types of effects that the Guidelines may have had on environmental resources, reservoir storage, power production, and recreation. For example, how did the various operational provisions and incentives in the Guidelines impact water delivery and storage decisions made in connection to resources such as the Salton Sea or the Cienega de Santa Clara? Similarly, how did operational provisions in the Guidelines impact mitigation required under the Grand Canyon Protection Act and in the GCDAMP/LTEMP ROD, and in particular how did reduced flows in the Colorado River system impact ecological function and other dam operations in the Canyon (e.g. limiting the ability to do High Flow Experiments as described in the LTEMP ROD)? We note that the report states that "Reclamation anticipates that future efforts to analyze resource impacts will be built on improved modeling capabilities, data and information gained through resource monitoring, operational experience, and expanded stakeholder involvement." What authorities will Reclamation use to analyze resource impacts and when will Reclamation conduct this analysis? In analyzing impacts, we encourage Reclamation to use resources like the Grand Canyon Research and Monitoring Center, which can help develop and publish modeling in support of future decisions related to Grand Canyon ecological health. Some of the scientific research within the center spans more than thirty (30) years and could greatly inform future climate and low flow related impacts to the ecological and cultural resources in the Park.

We believe that, even in light of the report's limited scope, Reclamation's analysis of these questions and elements are an important component of documenting the effectiveness and operational experience of the Guidelines to aid stakeholders by providing a range of information as we begin to evaluate collectively the potential operational provisions for subsequent guidelines. Based on our own

evaluation of these items and questions, we would suggest that they collectively point to a few key lessons learned that should inform the process for the next guidelines, including the importance and value of: encouraging the submission and evaluation of information from a diverse range of stakeholders; analyzing the costs and benefits of conservation efforts in the Upper and Lower Basins; analyzing the impacts of operational decisions on specific environmental, biological, recreational, and hydropower resources; considering and modeling a broad range of climate, water demand, water risk, and other scenarios; considering and modeling a broad range of water use and delivery scenarios, including ICS deliveries; and creating flexible supporting governance and decision-making frameworks to allow for operations to adapt to rapidly changing conditions.

Again, thank you for the notable efforts of Reclamation staff in preparing this report and continuing their stakeholder outreach efforts, particularly amidst the challenges and circumstances of the COVID-19 pandemic. We greatly appreciate the opportunity to comment on the draft report for the 7.D. Review, and we look forward to continuing to work with the Bureau on these crucial issues for sustainably managing Colorado River resources.

Sincerely,

American Rivers

Environmental Defense Fund

National Audubon Society

The Nature Conservancy

Theodore Roosevelt Conservation Partnership

Trout Unlimited

Western Resource Advocates