



December 20, 2022

Ms. Genevieve Johnson
Reclamation 2007 Interim Guidelines SEIS Project Manager
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RE: Notice of Intent to Prepare a Supplemental Environmental Impact Statement

Dear Ms. Johnson:

The Department of the Interior (Department) through the Bureau of Reclamation (Reclamation) has initiated a public scoping process for the Supplemental Environmental Impact Statement (SEIS) to supplement the December 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead Record of Decision (2007 Interim Guidelines). *See* 87 Fed. Reg. 69042 (November 17, 2022) (“FR notice”).

The Arizona Department of Water Resources and the Central Arizona Water Conservation District (collectively “the agencies”) appreciate Reclamation actions to expand its environmental coverage through the National Environmental Policy Act (NEPA) to potentially take actions that may be necessary to protect critical elevations in Lake Powell and Lake Mead. The agencies jointly submit the following comments regarding the appropriate scope for the SEIS to the 2007 Interim Guidelines for the Colorado River Basin.

Framework and Priorities

The SEIS should reside in a framework consistent with a reasonable interpretation of the Law of the River and other applicable provisions of federal law, taking into account the impacts of extended drought and climate change on water users and critical infrastructure.

Article III(d) of the 1922 Colorado River Compact (Compact) is the fundamental provision ensuring the supply of 7.5 million acre-feet (maf) per year apportioned to the Lower Basin in Article III(a) of the Compact. Article III(d) states:

The States of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact.

The Compact also assigned responsibility for providing water to satisfy a future treaty with Mexico. Article III(c) provides:

If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River System, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then, the burden of such deficiency shall be equally borne by the Upper Basin and the Lower Basin, and whenever necessary the States of the Upper Division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provided in paragraph (d).

Article III(d) and (c) prohibits the Upper Division States from depleting the flow of the river at Lee Ferry below a rolling 10-year aggregate of 75 maf plus one-half of the Mexico delivery obligation. With reduced releases from Glen Canyon Dam potentially analyzed under the SEIS, if the 10-year rolling aggregate falls below the required aggregate volume¹, the Upper Division States could be subject to a “Compact call” that would require a reduction in consumptive use in the Upper Basin.

Scope of SEIS

The FR notice states that the Department currently lacks analyzed alternatives and measures that may be necessary to address projected low run off conditions for 2023. The Department recognizes that the immediate development of additional operational alternatives and measures for Lakes Powell and Mead are necessary to ensure continued operations; however, the FR notice and the Preliminary Proposed Action noted that “Reclamation anticipates proposing modifications for the 2023 and 2024 period, and potentially for subsequent years....” The agencies encourage Reclamation to fully analyze impacts for the subsequent years, including 2025 and 2026. Furthermore, Reclamation should provide necessary environmental coverage if a new set of operating guidelines are not successfully negotiated, analyzed, and approved in a timely fashion and hydrologic conditions do not improve in the remaining interim period beyond 2026.

The Secretary, as the Lower Basin Water Master and the operator of critical infrastructure including Glen Canyon Dam and Hoover Dam, the benefits of which are shared by all, has the discretion to impose reductions equitably across all water users that are necessary to protect critical infrastructure. Modeling shown by Reclamation indicates that it intends to absolutely protect elevation 3,490’ in Lake Powell in order to protect infrastructure². For the Lower Basin this will result in the loss of water previously assumed to be available for deliveries to the Lower Basin. Secretarial action in this regard is distinct from shortage administration, which is focused exclusively on sufficiency of water supplies.

¹ A “surplus” currently does not exist because natural flows in the Colorado River have not exceeded 16 maf in the past 10 years.

² Protection of the hydropower production to the detriment of water users would conflict with the Law of the River.

The FR Notice also states, “Given the potential risks to infrastructure and public health and safety, the Department will promptly identify and analyze modified operating guidelines to address current and foreseeable hydrologic conditions.” The agencies agree that the historic drought and low runoff conditions are cause for concern for the safety of Hoover and Glen Canyon Dams and these are indeed extraordinary circumstances pursuant to Section 7.D of the 2007 Interim Guidelines. However, such extraordinary circumstances also include the health and integrity of the Central Arizona Project (CAP) canal. The CAP canal is a 336- mile system that brings Colorado River water to central and southern Arizona, delivers the State of Arizona’s single largest renewable water supply, and serves over 80% of Arizona’s population. The CAP is a key piece of federal infrastructure where integrity remains crucial to ensure its future functionality.

The CAP supports a trillion-dollar economy in central and southern Arizona and socioeconomic impacts of CAP not being able to deliver water supplies would be devastating both from a federal infrastructure standpoint and from a socioeconomic and public health and safety perspective. The SEIS should include an analysis of socioeconomic and public health and safety impacts to Colorado River contractors that may experience reduced Colorado River supplies under actions proposed by the SEIS. The agencies also recommend a comprehensive analysis of infrastructure impacts to the CAP canal from actions proposed under the SEIS.

Purpose and Need

The FR Notice states:

The identified purpose of the SEIS is to supplement the EIS completed in 2007 in order to modify operating guidelines for the operation of Glen Canyon and Hoover Dam to address historic drought and low runoff conditions in the Colorado River Basin.

The agencies agree the 2007 Guidelines and the 2019 Drought Contingency Plan are currently insufficient to protect the system from effects of persistent drought, precipitation patterns, warmer temperatures, and low runoff conditions. The agencies also believe the Colorado River system is operating out of balance with available supplies because there has not been an equivalent reduction in consumptive uses across all water users. All water users share risk from these conditions and the SEIS should ensure that the burdens associated with managing that risk are shared across all sectors and by all water users. Therefore, we suggest that the purpose of the SEIS be reworded to:

to supplement the EIS completed in 2007 for the 2007 Interim Guidelines in order to modify operating guidelines for the operation of Glen Canyon *Dam* and Hoover Dam *and distribute burdens of reductions equitably across all water users* to address historic drought and low runoff conditions in the Colorado River Basin.

We agree that:

the need for the revised operating guidelines is based on the potential that continued low runoff conditions in the Colorado River Basin could lead Glen Canyon Dam to decline to critically low elevations impacting both water delivery and hydropower operations in 2023 and 2024.

However, the need statement ignores the fact that demands and losses on the Colorado River continue to exist. We suggest the need statement be revised to

The need for the revised operating guidelines is based on the potential that continued poor hydrologic conditions in the Colorado River Basin *coupled with continuing existing demands* could lead Glen Canyon Dam *and Hoover Dam* to decline to critically low elevations impacting both water delivery and hydropower operations in 2023 and 2024.

Proposed Actions:

Potential revisions to existing operating rules should provide certainty and predictability for annual operations while balancing consumptive uses and depletions with available supplies.

Preliminary proposed actions as laid out in the FR notice includes revising Section 2.D. including potential modifications to Sections 2.D.1.b and 2.D.1.c to decrease the quantity of water that shall be apportioned for consumptive use in the Lower Division States of Arizona, California and Nevada. Admittedly, the impacts of prolonged drought and low runoff conditions accelerated by climate change have led to historically low water levels in both Lake Mead and Powell. However, there has not been an equivalent or equitable reduction in water use across all Colorado River water users. The agencies believe that the impacts of prolonged drought and climate change should not be borne by a single nation, state, basin or water user and decreases in the quantity of water apportioned for consumptive use should be borne equitably across the Lower Division States of Arizona, California and Nevada, as well as Mexico.

Between elevations 1,025 and 1,050, Lake Mead holds between 6 to 7.6 maf of live storage. As of the end of CY 2021, Lake Mead storage holds almost 3 maf of Intentionally Created Surplus water (ICS) that must be retained in Lake Mead for the benefit of the ICS holders. In tier 2, based on the CY 2021 ICS balance, ICS could make up anywhere between 40-50% of Lake Mead live storage. If Lake Mead falls below elevation 1,025', ICS could make up more than half of Lake Mead live storage and cannot be released even to ICS holders pursuant to Section 3.B.(8) and Section 3.C of the 2007 Interim Guidelines. An analysis of categories of water stored in Lake Mead and under what circumstances those categories and volumes of water, including ICS, may be released from Lake Mead is required.

Analysis of the associated reductions beyond those contemplated in the 2007 Guidelines should include available information from the Lower Basin States on minimum required deliveries for municipal and industrial (M&I) water users to protect public health and safety (currently undefined). Reclamation should, using data provided by the Lower Basin states, determine the minimum deliveries that would be required, regardless of priority. Reclamation should also conduct an analysis of what a "run of river" scenario might look like compared to the delivery requirements to meet public health and safety needs. The agencies stand ready and able to provide data, and assist with additional data collection from CAP subcontractors, for this necessary analysis.

The SEIS contemplates expanding Section 7(c) of the 2007 Guidelines that provides for a Mid-Year review to allow for better overall water management during the Interim period. Revisions to the Mid-Year Review could allow for potential determinations that would allow for reduced deliveries from Lake Mead pursuant to Section 2 of the 2007 Guidelines. Determinations that allow for reduced deliveries from Lake Mead pursuant to the proposed changes under the Mid-Year Review could cause hardship to a large number of stakeholder groups that are dependent on Lake Mead for their Colorado River supplies, specifically with regard to public health and safety. Moreover, recipients of the low priority CAP Non-Indian Agricultural (NIA) pool may take full deliveries of their water prior to any potential reductions under the Mid-Year Review. Implementing reductions after the water has already been delivered could disrupt the CAP priority system and cause unintended consequences, specifically with regard to firming and mitigation obligations including those under Arizona agreements for implementing the Drought Contingency Plan (DCP).

The agencies also have concerns regarding possible reductions resulting from the Mid-Year Review and the impacts such reductions could have on the participants in the 2023 ICS Preservation Program and other voluntary conservation programs. The purpose of the 2023 ICS Preservation Program is to preserve approximately 85,000 af of CAWCD ICS in Lake Mead that would otherwise be released in 2023 to satisfy mitigation obligations to the entities that receive Non-Indian Agricultural (NIA) pool water under the Arizona DCP NIA Mitigation Agreement. The NIA pool is low in priority and, under shortage conditions deeper than tier 1, water will not be available to satisfy the NIA priority pool. Should deeper cuts be announced under a Mid-Year Review, participants in the 2023 ICS Preservation Program or other voluntary conservation programs may not have access to the supplies that are pledged to be conserved. The cuts resulting from the Mid-Year Review could affect not only the entitlement holders, but also the entities that are funding conservation programs.

The agencies believe the Mid-Year Review should be expanded to include quarterly consultations with the Lower Basin States to provide enough notice before determinations on reduced deliveries are made. Additionally, the agencies strongly advocate the commitment made in the May 3, 2022 letter from Assistant Secretary Trujillo be carried forward through remainder of the interim period. That letter provided, “Consistent with the provisions of the 2007 Interim Guidelines and to preserve the benefits to Glen Canyon Dam facilities and operations in 2023, Reclamation will consult with the Basin States on monthly and annual operations.”³

Alternatives

The FR notice laid out two action alternatives for consideration under the SEIS. The Framework Agreement Alternative, which “would be developed as an additional consensus-based set of actions that would build on the existing framework,” and the Reservoir Operations Modification

³ The May 3rd, 2022 letter also stated “Reclamation will address future releases of the 480,000 af reduced release amount from Lake Powell in an appropriate manner, and at an appropriate time, and will seek support from the Basin States for any such future releases given all relevant operational considerations for Glen Canyon Dam and Hoover Dam.” This commitment is outside the scope of the current actions being considered.

alternative, which “would be developed by Reclamation as a set of actions and measures adopted pursuant to Secretarial authority under applicable federal law.”

The agencies endorse the consideration of Colorado River Commission of Nevada’s and Southern Nevada Water Authority’s proposal, as described in their comment letter dated December 20, 2022, as a starting point for development of a consensus-based set of actions. The agencies, along with other stakeholders, will likely seek adjustments to the proposal to achieve consensus support.

While we understand that the FR Notice presents the proposed alternatives as a preliminary overview, the Reservoir Operations Modification Alternative simply provides reference to a broad set of authorities that may be used to mitigate the projected risks to the Colorado River System reservoirs. The Reservoir Operations Modification Alternative therefore does not provide any reference to the reader as to exactly what actions may be taken under this alternative to meet the purpose and need of the SEIS. The agencies strongly recommend that the development of the Reservoir Operations Modification Alternative recognizes that the impacts of the current prolonged drought and climate change emergency cannot be borne by a single water user or state and the development of this alternative must adopt the concept of sharing the impacts of climate change and infrastructure protection equitably across all water users in the Colorado River Basin.

The No Action alternative includes the continued implementation of existing agreements that control the operation of Hoover and Glen Canyon Dams. However, Reclamation recently announced the Lower Colorado Conservation and Efficiency Program as a part of the commitment made by the Department to address the drought crisis with investments to secure the Colorado River Basin. While details are still unknown, it is anticipated that the participants in the Lower Colorado Conservation and Efficiency Program may contribute additional volumes of water to remain in Lake Mead. The SEIS should clearly distinguish between the voluntary actions contemplated in the Lower Colorado Conservation and Efficiency Program and the existing agreements that control the operation of Hoover and Glen Canyon Dams so stakeholders are better situated to determine whether and to what extent they can accept a proposed action as necessary to protect the health of the Colorado River system.

Article 10(b) of the 1944 Treaty between the United States and Mexico on the "Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande" (1944 Treaty) allotting Mexico 1.5 maf annually from the Colorado River provides for proportional consumptive use reduction to Mexico if “in the event of extraordinary drought or serious accident to the irrigation system in the United States, thereby making it difficult for the United States to deliver the guaranteed quantity of 1.5 maf.” In years in which Secretary imposes additional reductions to consumptive use in the lower basin states of Arizona, California and Nevada, the United States must also exercise its authority to analyze commensurate reductions to Mexico under Article 10(a) of the 1944 Treaty. In recent years, Mexico has agreed to voluntary reductions in parity with those in the Lower Basin. Reclamation should analyze the potential impacts of additional reductions to Mexico, should such reductions be agreed to by Mexico or implemented by the United States.

Identification of relevant information and studies

In addition to operational measures, the Department should consider and implement non-operational measures to address the impact of projected risks to Colorado River system reservoirs.

Evaporation and System Losses: Reclamation should analyze the impacts associated with assessing evaporative and system losses (ESL) to all water users within the Lower Basin. The “Criteria for Coordinated Long-Range Operation Colorado River Reservoirs” (LROC) are promulgated (pursuant to the 1968 Colorado River Basin Project Act) to control the coordinated long-range operation of storage reservoirs in the Colorado River Basin. Under Section III of the LROC, water is to be released from Lake Mead to meet the requirements as follows:

- A) Mexican Treaty Obligations
- B) Reasonable consumptive use requirements of mainstream users in the Lower Basin
- C) Net River losses
- D) Net Reservoir losses
- E) Regulatory wastes

To meet these requirements Hoover Dam has released an average of 9.13 maf per year in the past 10 years and on average lost 550 kaf per year to evaporation. Collectively, the annual volume released and lost to evaporation is on average 1.33 maf higher than the consumptive use requirements of AZ, CA, NV, and MX.

43 Code of Federal Regulations Part 417, “Procedural Methods for Implementing Colorado River Water Conservation Measures with Lower Basin Contractors and Others” (Part 417) requires the Regional Director to make “annual recommendations relating to water conservation measures and operating practices in the diversion, delivery, distribution and use of Colorado River water” and “determinations of each Contractor’s estimated water requirements for the ensuing calendar year to the end that deliveries of Colorado River water to each Contractor will not exceed those reasonably required for beneficial use under the respective” contract or entitlement. The FR Notice repeatedly and consistently mentions climate change, prolonged period of drought, record-low runoff conditions and continuing declines in reservoir levels in the Colorado River Basin. Further, the FR Notice emphasizes that without changes in hydrologic patterns and water use patterns, reservoirs will continue to decline, adding to the potential risk to infrastructure. The FR Notice also mentions the need to protect Hoover Dam operations and system integrity among others. Under these circumstances, additional releases of water from Lake Mead over the consumptive use requirements to meet losses are exacerbating the decline of Lake Mead and adding to the potential risk to Hoover Dam infrastructure.

In that regard, reasonable consumptive use requirements of the water users in the Lower Basin should account for the current climatic conditions and include the additional volumes of water released by Lake Mead to meet net River losses, net reservoir losses and regulatory wastes (collectively, evaporation and system losses or ESL). Selective application of ESL to only some water users, based on priority or otherwise, is simply shortage administration, not assessment of

ESL. All Lower Basin water users benefit from storage in Lake Mead. All water users should similarly share the burden of accounting for those impacts.

A variety of methods may be employed to account for the fair, equitable, and scientifically defensible assessment of ESL, and the impacts of each should be analyzed. For example, assessments to water users below Hoover Dam without regard to priority and proportionate to entitlement or historic use is one possible method. A second method has been covered in the media and introduced by the Southern Nevada Water Authority to assess losses by river reaches. The agencies do not currently endorse one method over the other but support the equitable assessment of ESL to all Lower Basin water users.

Even while Reclamation continues to examine and assess its authority to impose such evaporative and system losses, the opportunity to fully analyze the impacts of such an action should not be missed and the agencies strongly encourage Reclamation to analyze these impacts.

Efficiency Measures: The Department should ensure Colorado River basin uses are held to a certain level of efficiency. Reclamation should adopt permanent use standards in line with 43 CFR Part 417 requiring efficient use for all contractors. 43 CFR 417.3 sets forth certain base conditions for Reclamation to make the efficiency determination such as, “area to be irrigated, climatic conditions, location, land classifications, the kinds of crops raised, cropping practices, type of irrigation system in use, condition of water carriage and distribution facilities, record of water orders, and rejection of water orders, general operating practices, the operating efficiencies and methods of irrigation of the water the water users, amount and rate of return flows to the River, municipal water requirements and the pertinent provisions of the Contractor’s Boulder Canyon Project Act water delivery contract.

ESA Consultation and Section 106

Given the threatened status of several species within the mainstem of the river, including Humpback chub, Reclamation should consult with U.S. Fish and Wildlife Service and provide a Biological Assessment as part of this SEIS.

In addition, Reclamation should work with the U.S. Fish and Wildlife Service and the state parties to reconsult under Section 10 and Section 7 of the Endangered Species Act for the Lower Colorado River Multi-Species Conservation Plan. This Reconsultation should build upon the collective work completed in 2022 by the same parties to increase the flow reduction coverage on the Lower Colorado River resulting in consistent coverage along the entire length of the river rather than varied coverage based on river reach.

The agencies encourage Reclamation to complete a National Historic Preservation Act Section 106 Consultation with impacted mainstem tribes through this SEIS. While building a Section 106 analysis into a NEPA document is not required, given the short timeframe for action, the agencies recommend Reclamation complete this analysis for efficiency purposes in a single document.

Conclusion

The comments offered above are intended to offer a foundation for a robust, meaningful, and appropriately tailored approach to the management of the Colorado River through 2026. We have a particular interest in ensuring that efforts to protect the sustainability of the Colorado River System are implemented with fairness and equity. Should there be any questions or concerns regarding this letter or any aspect of the agencies' interest regarding the SEIS process, please contact us at your earliest convenience.

Sincerely,



Tom Buschatzke
Director,
Arizona Department of Water Resources



Ted Cooke
General Manager,
Central Arizona Water Conservation District