



COLORADO RIVER DISTRICT
PROTECTING WESTERN COLORADO WATER SINCE 1937

February 27, 2026

Via electronic mail: crbpost2026@usbr.gov

Bureau of Reclamation

Attn: BCOO-1000

P.O. Box 61470

Boulder City, NV 89006

RE: Draft EIS Comments regarding Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Dear Acting Commissioner Cameron:

Please accept the Colorado River Water Conservation District's (Colorado River District) comments on Reclamation's Draft Environmental Impact Statement (EIS) for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead.

By way of background, the Colorado River District is a political subdivision of the State of Colorado formed by the Colorado legislature (*see* C.R.S. §§ 37-46-101, *et seq.*) in 1937 for the purpose of safeguarding that portion of the waters of the Colorado River apportioned to the state by interstate compact and for promoting the welfare of the inhabitants of the River District. Geographically, the Colorado River District encompasses an area of approximately 29,000 square miles, including all of twelve and parts of three western Colorado counties (approximately 28% of the State of Colorado). Included in that area are the headwaters and tributaries of the Colorado River mainstem and its principal tributaries, the Gunnison, the White, and the Yampa Rivers. Importantly, precipitation within our District alone provides an average of 65% of the natural flow of the mainstem of the Colorado River.

The Colorado River District represents municipal, industrial, agricultural, commercial, and recreational water users. Like all water users, the Colorado River District and its constituents seek reliable water supplies to meet their respective needs. Unfortunately, the 2007 Interim Operating Guidelines and subsequent management actions (the 2007 IGs) resulted in operations that perpetuated continued system imbalances, instead of promoting stability for all water users. The impacts of climate change and drought make clear that substantial changes must be adopted to avoid perpetuating the existing system imbalance in river operations.



We believe that Reclamation must institute bold and meaningful changes but that those changes must be implemented in a manner that is consistent with the 1922 Colorado River Compact, the 1944 binational treaty with Mexico, the 1948 Upper Basin Compact, and the other foundational elements of the Law of the River.

Please consider the following comments in the development of the Final EIS for Post-2026 operations:

- 1. Reclamation must prioritize hydrologic reality over predictability for Lower Basin users.** The Draft EIS places undue emphasis on predictability¹ for water users, a goal that is unattainable under future climate conditions unless system storage is replenished and overall demands are permanently reduced to match the supply. Hot temperatures over the last 26 years have diminished the flows of the Colorado River by 20%, and sound science demands that we anticipate and plan for future long-term reductions. Since the pre-scoping period began in June 2022, Lakes Powell and Mead remain at critically low, crisis levels, despite the temporary relief from a wet 2023 Water Year.

Further, the focus on predictability favors Lower Basin water users because of their long-standing reliance on steady reservoir releases. Hydrologic variability and the lack of massive storage facilities have always made predictability a difficult proposition in the Upper Basin. The Draft EIS's prioritization of predictability would perpetuate the current systemic imbalance and operational bias that favors Lower Basin water users. Further, this prioritization continues to unduly and unfairly look to upstream actions to protect critical infrastructure.

Rather, the proposed federal action must recognize climate science, prepare for a hotter and drier future, and focus on achieving a long-term balance between supply and demand across the Colorado River Basin.

- Recommendation: The Colorado River District recommends revising the stated purpose of the proposed federal action to: "Provide mechanisms to ensure a long-term balance of supply and demand within the Colorado River Basin system that recognizes and performs in all ranges of hydrology, including critically dry hydrology."
- 2. The Final EIS must evaluate and adjust the scale of Upper Basin conservation.** Although the geographic scope of analysis does not extend upstream of Lake Powell, several of the Draft EIS' alternative actions include management strategies that rely on Upper Basin conservation without analyzing or disclosing future impacts. The Draft EIS inappropriately sidesteps the need for proper analysis by claiming that specific

¹ Page 1-7 in the Purpose and Need: Provide Colorado River water users a greater degree of predictability with respect to annual water availability in future years under anticipated increasing variability, low runoff, and low reservoir conditions.



conservation activities are unknown, and therefore, will be assessed outside of the EIS.² This remains contrary to the NEPA requirement to analyze reasonably foreseeable and cumulative environmental effects of a proposed action, that in this instance, could result in long-term impacts to Upper Basin resources.

More specifically, several alternatives include Upper Basin water conservation ranging from zero to 500,000 acre-feet annually. This conserved water is explicitly included in modeling and is assumed to be available to stabilize system conditions. However, the Draft EIS fails to analyze the environmental or socioeconomic impacts associated with these conservation volumes. Large scale conservation in the Upper Basin would require significant reductions in irrigated acreage and municipal use. To illustrate, based on the Colorado River District's analyses of previous conservation programs, achieving approximately 200,000 acre-feet of annual conserved consumptive use in the Upper Basin could result in fallowing roughly 52,000 acres on Colorado's West Slope alone, and result in substantial economic and environmental impacts.³ The Draft EIS assumes conservation volumes increasing to as much as 500,000 acre-feet under certain alternatives, further exacerbating impacts. Conservation at this scale would have significant and potentially permanent adverse consequences, including economic impacts to agricultural communities, reductions in late season streamflow that provides critical habitat for aquatic species, reduction in habitat for terrestrial species, and loss of wetland habitat for migratory birds and other species. These impacts are reasonably foreseeable but ignored by the current Draft EIS and must be analyzed programmatically in the EIS in the same manner as the impacts to the Lower Basin.

Additionally, these assumed volumes exceed the scale of any Upper Basin conservation program implemented to date. Under the Upper Basin System Conservation Pilot Program (SCPP), the largest amount of water conserved in a single year occurred in 2024 and totaled approximately 64,000 acre-feet.⁴ While Upper Basin conservation is used in several alternatives as a backstop during dry hydrologic conditions to limit large Lower Basin shortages, the Draft EIS does not clearly disclose how much alternative performance

² Page 1-9 states "With respect to Upper Basin conservation, the nexus to the proposed federal action is the storage and delivery of that conserved water in Lake Powell. The effects of this storage in and delivery from Lake Powell are within the scope of the EIS (see Section 3.3, Hydrologic Resources, and TA 3, Hydrologic Resources), while specific activities that may be undertaken in the Upper Basin to generate the conserved water are not within the scope of this EIS. Any such activities are unknown at this time and will not necessarily require federal decision making. Any federal decisions associated with these conservation activities will be assessed outside of this EIS."

³The Colorado River District believes that the burden of any conservation program must be shared by all of the state's Colorado River water users and would strongly oppose any program that puts a disproportionate burden on West Slope agricultural users. For information regarding the adverse economic impacts resulting from large scale conserved consumptive use on Colorado's West Slope, see BBC Research & Consulting, ERO Resources Corporation, Headwaters Corporation, "Upper Basin Demand Management Economic Study in Western Colorado", Revised Final Report, September 27, 2020.

⁴ Colorado River Authority of Utah, *System Conservation Pilot Program (SCPP)*, available at <https://cra.utah.gov/system-conservation-pilot-program/> (accessed February 11, 2026).



depends on these conservation assumptions. The Final EIS should include a sensitivity analysis showing system outcomes under a range of conservation scenarios so that decision-makers can understand the role conservation plays in both short and long-term system performance and the true robustness of each alternative.

Further, we agree with the statement in the Draft EIS that operations at the CRSP Upper Initial Units must remain within the scope of their respective existing Records of Decision (RODs). To the extent any action deviates from the scope of the existing RODs, that action must be fully analyzed under NEPA and documented by a new or amended ROD for the applicable unit.

- a. Recommendation: Upper Basin conservation volumes must be fully analyzed programmatically in the Final EIS in the same manner as the impacts to the Lower Basin.
 - b. Recommendation: The Final EIS should perform a sensitivity analysis using realistic levels of Upper Basin conservation consistent with demonstrated program performance, such as those achieved under SCPP, and disclose how alternative outcomes change under reduced or no Upper Basin conservation.
- 3. Upper Basin shortages must be explicitly analyzed and disclosed.** In the Draft EIS, Lower Basin shortages are repeatedly quantified, graphed, tabulated and used as core metrics of alternative performances. Upper Basin shortages are only referenced in Appendix I, which states that *“For all demand scenarios, the modeled depletion is always less than the input demand... water use is limited based on the available supply.”*⁵ This appendix indicates that Upper Basin shortages occur across all demand scenarios and alternatives, driven by hydrologic constraints particularly in dry and critically dry conditions. Figure I-2⁶ indicates that across demand scenarios ranging from 4.5 to 6 million acre-feet, median Upper Basin shortages are on the order of 1-2 million acre-feet under critically dry hydrology. Additionally, even under wet hydrology, the median shortages remain substantial and are approximately 0.8-1.4 million acre-feet. This aligns with Upper Basin water users lived experience of continually reducing usage based on the natural and variable supply provided each year.

Although Reclamation has limited authority in the Upper Basin, the failure to disclose Upper Basin shortages in the main body of the document creates the impression that the Upper Basin experiences little or no shortage and only contributes voluntary conservation, while incorrectly implying that the Lower Basin bears the burden of reductions in demand. The modeling shows that the Upper Basin already absorbs drought risk through recurring

⁵ U.S. Bureau of Reclamation *Post-2026 Colorado River Reservoir Operation Draft EIS, Appendix I, Section I.3.1, Page I-7.*

⁶ U.S. Bureau of Reclamation *Post-2026 Colorado River Reservoir Operation Draft EIS, Appendix I, Section I.3.1, Page I-6.*



shortages, as modeled depletions fall below assumed demand, while also contributing additional conservation volumes that can reach several hundred thousand acre-feet annually under certain alternatives. The failure to explicitly disclose or analyze these Upper Basin shortages introduces a messaging and operational bias that obscures the true distribution of risk due to increasingly dry hydrologic conditions across the basin.

- a. Recommendation: Explicitly identify that Upper Basin modeled depletions fall below assumed demand in the main body of the Final EIS.
 - b. Recommendation: Add a quantitative summary of the frequency and magnitude of Upper Basin shortages across hydrologic scenarios.
- 4. Lower Basin water use must be reduced by 1.5 million acre-feet at all times, regardless of the alternative.** This amount represents system losses (i.e., transit losses and reservoir evaporation) and should not be classified as shortage. Lower Basin reductions should only be classified as “shortages” to the extent the reductions exceed the Lower Basin’s system losses. In alignment with the Bureau’s Lower Colorado River Mainstream Evaporation and Riparian Evapotranspiration Losses Report⁷, losses are an integral part of putting Colorado River water to beneficial use across the entire basin. We request the USBR use their Lower Colorado River System Consumptive Uses and Losses report and their Lower Colorado River Mainstream Evaporation and Riparian Evapotranspiration Losses Report to consider their definition of shortages and to inform the Final EIS. The failure to account for Lower Basin system losses has been a major contributor to the failure of the 2007 Interim Guidelines and the associated dramatic decline of storage in Lakes Powell and Mead. No contractor, state, or basin should be allowed to deplete more water than their legal allotment unless Lake Powell storage is full or in flood control operations. Reclamation must recognize and assess the hydrologic reality of system losses and ensure the Lower Basin limits its usage, at a minimum, to its apportionment, including accounting for tributary use as defined by Article 3.b. of the Colorado River Compact.
- a. Recommendation: Across all alternatives, always reduce Lower Basin use by 1.5 million acre-feet and define this not as a shortage, but as recognition of, and accounting for, Lower Basin system losses. Revise the definition and reporting of Lower Basin shortages throughout the document to reflect reductions in use greater than 1.5 million acre-feet.⁸
 - b. Recommendation: Update the robustness and vulnerability analysis for each alternative, assuming the Lower Basin usage accounts for these system losses and is always reduced by at least 1.5 million acre-feet.

⁷ Bureau of Reclamation. 2023. [Lower Colorado River Mainstream Evaporation and Riparian Evapotranspiration Losses Report](#).

⁸ We recognize that Lower Basin system losses vary from year-to-year. This reduction aligns with averages reported across the Basin.



5. The range of alternatives must include option(s) that perform under critically dry hydrology. Currently, none of the alternatives in the Draft EIS perform under critically dry hydrology. At least one alternative must protect critical infrastructure and respond effectively to significantly lower river flows than historically observed. The average natural flow at Lees Ferry has dropped from 14.9 million acre-feet to 12.4 million acre-feet and science indicates that this downward trend will continue (as acknowledged in Appendix E⁹ and in the Technical Appendix 3¹⁰). Failure to anticipate continued reductions in flow was a key mistake in the 2007 Interim Operating Guidelines (2007 IGs) and the subsequent adaptive and emergency actions. The latest 24-month study indicates that there is a substantial probability that Lake Powell will fall below minimum power pool this summer. Reservoirs no longer have sufficient buffer to repeat past mistakes.

- a. Recommendation: Include an analysis of the minimum Lower Basin shortage required for each alternative to meet the performance metrics at least 90% of the time under the critically dry hydrology.
- b. Recommendation: Add an alternative that would meet the performance metrics at least 90% of the time under critically dry hydrology and carry out the robustness analysis for the first five years instead of 20 years using updated initial conditions (see Figure ES-5). This will likely require additional Lower Basin shortages as the Draft EIS shows that the best performing alternative, the Maximum Operational Flexibility Alternative, allows for Lower Basin shortages of up to 4 million acre-feet. This alternative would still put Lake Powell under 3,500 ft over 10% of the time, Lake Mead below elevation 975 ft 45% of the time, and Lake Mead at dead pool (resulting in forced delivery reductions to the Lower Basin) over 20% of the time. The other alternatives perform even worse. Additionally, Appendix G acknowledges that the set of initial conditions used in the Draft EIS are higher than the November 2025 projections. Continued dry conditions have worsened this discrepancy and currently, only one of the three initial conditions used falls within the latest range of projections¹¹. The current 20-year analysis masks the actual impact of initial conditions and the fact that the reservoirs are currently at critically low elevations. A shorter-term analysis, using updated initial conditions, would better reflect current risks and the current state of storage levels.

⁹ *Appendix E, Section E.1, Page E-1*: “Future hydrology is expected to be drier (Lukas and Payton, 2020, p. 385, 2020; Salehabadi et al., 2022; Wang et al., 2025), but the magnitude and rate of drying is unknown.”

¹⁰ *Technical Appendix 3, Section TA 3.1.1, Page 3-2*: “Since issuance of the 2007 Final EIS, changes in the Basin have included further increases in temperature, ongoing years of below-normal precipitation, declining snowpack water volume and annual streamflow, and earlier snowmelt runoff. Since 2000, the average temperature across the Lower Basin has been 2.2 degrees Fahrenheit warmer than the twentieth-century average. Since 2007, the average temperature of the Lower Basin has trended upward, with the warmest 10-year period on record occurring from 2012 to 2022 (NOAA 2025).”

¹¹ February 2026 24-month study.



- c. Recommendation: Update the vulnerability analysis (see results in Table ES-6) of Lake Powell falling below elevation 3,500 feet at least once in the first five years with more current projections of initial conditions¹². The vulnerability analyses included in the Draft EIS are very insightful and highlight real risks as most of the average natural flows that would cause Lake Powell to fall below elevation 3,500 feet have occurred historically or are plausible in the future. We recommend revising this analysis with updated initial conditions to better reflect current risks.
6. **Hydrology must drive Post-2026 operations.** Operating guidelines based upon comparative reservoir elevations which do not factor in real time hydrology have been disastrous for protecting storage in Lake Powell and thus, have failed to provide the water supply certainty for the Upper Basin intended by the Law of the River, including the 1968 Colorado River Basin Project Act (with specific reference to Section 602a). Post-2026 guidelines must be designed to respond effectively to different hydrologic futures, including critically dry conditions, and to rebuild storage in both Lake Powell and Lake Mead to avoid perpetual crisis management. Furthermore, as stated in Chapter 1, Section 1.8.4.1, Glen Canyon Dam was not envisioned to be operated below minimum power pool and doing so could compromise its safety and stability. The Draft EIS must model realistic operations and its effects instead of allowing reservoirs to drop below critical elevations. This is critical for the public to understand and evaluate impacts of likely operations given current reservoir levels and hydrologic conditions.
 - a. Recommendation: Model realistic reservoir operations that protect critical elevations at Lake Powell and Lake Mead.
7. **The proposed action must not be limited to incremental changes to existing policies and must include long-term operating guidelines.** The temporary measures adopted in recent years to address declining water elevation levels at Lakes Powell and Mead have been incremental and stop-gap in nature, resulting in an ongoing cycle of crisis-based operations and decision-making. Reclamation’s adoption of new guidelines must not be constrained to “tweaks” of existing guidelines and should not be limited to long-term adoption of the moderate measures contemplated by Reclamation’s anticipated Supplemental EIS for Near-Term Operations. We believe that a short-term or phased approach continues a decision-making process driven by a crisis mindset.
 - a. Recommendation: The proposed action should include long-term operating guidelines.

¹² The initial conditions as defined on page G-1 of Appendix G are projected reservoir elevations for December 31st, 2026.



- 8. Interbasin transactions must not be allowed in the proposed action.** The primary purposes of the 1922 Colorado River Compact and the 1948 Upper Colorado River Basin Compact are to provide legal certainty regarding how much water each Basin can develop, to allow states to develop their water resources when the water is needed, and to preclude the interstate application of the prior appropriation doctrine. These, and other benefits of the compacts outweigh any short-term benefit that may accrue to one state from interbasin marketing of its compact-allocated water across basins and violates the fundamental agreement set forth in the 1922 Compact.

Additionally, interbasin transactions pose significant risks and pressures to communities in the Upper Basin. The State of Colorado has a strong public policy against interbasin and interstate water marketing and has a long-standing limitation of use of the waters of the state outside of our state boundaries.¹³ The proposal for interstate marketing will lead to the permanent deprivation of the Upper Basin’s water supply and significantly impact the environment and economy of those states.

Further, interstate transactions in the Upper Basin introduce significant uncertainty due to the lack of a clearly quantified allocation between the states. In contrast, interstate water storage agreements and consensual water marketing among Lower Basin states have been important tools to manage limited supplies of and increasing demands for Colorado River water. Because of the structure and operation of the Colorado River, consistent with the Colorado River Compact of 1922, the River District supports water marketing among the Lower Division states within the Lower Basin of the Colorado River, contingent upon their mutual agreement.

- a. Recommendation: The proposed action must not include any mechanism or action that allows or creates a market of Colorado River water between the Upper Colorado River Basin and Lower Colorado River Basin.¹⁴

- 9. Alternatives must contain clear actions that can be modeled and analyzed in the Final EIS.** The Basic Coordination Alternative includes three non-specific actions related to identifying critical conditions¹⁵ when additional reductions and actions may be needed to avoid reaching critically low elevation and to protect infrastructure. While the public can

¹³ See Colorado Revised Statutes, § 37-81-101, et. seq.

¹⁴ The concept of interbasin transactions is included on page 2-41 within the Maximum Operational Flexibility Alternative: “Extensive flexibilities for all users: transactions within and across basins, including interstate and interbasin.” Interstate transactions are included as concepts within the Maximum Operational Flexibility Alternative, the Enhanced Coordination Alternative, and the Supply Driven Alternative.

¹⁵ Basic Coordination Alternative table on page 2-39: “Identify conditions when additional reductions may be needed to avoid reaching critically low elevations”, “Identify conditions when additional action may be needed for infrastructure protection”, and “Identify conditions when additional Upper Basin actions may be needed for infrastructure protection”.



speculate on what these actions might entail, none are modeled or analyzed in the Draft EIS. As a result, the public cannot fully understand and evaluate its impacts.

Additionally, the Supply Driven Alternative includes the concept of “Gap Water” but does not define it or specify how it would be generated. In this alternative, “Gap Water” is introduced into the system when Lake Powell cannot meet its required water year release because of low elevation. However, the Draft EIS does not define this water or specify where it would come from. Appendix A explains how “Gap Water” is modelled, which raises two major concerns. First, the maximum annual “Gap Water” is equivalent to 23% of Upper Basin water use, minus the volume of Upper Basin conservation. For example, if Upper Basin use is 4 million acre-feet, “Gap Water” would be equivalent to almost 1 million acre-feet (minus Upper Basin conservation). The magnitude is unrealistic, ignores Upper Basin shortages caused by hydrologic constraints, and is disproportionate compared to Lower Basin shortages. Second, the 23% factor is equivalent to the maximum modeled reductions in the Lower Basin (2.1 million acre-feet) divided by the combined Lower Basin and Mexico apportionment (9 million acre-feet). This formula fails to exclude the 1.5 million acre-feet of Lower Basin reduction in usage that merely accounts for system losses and must be revised.

- a. Recommendation: In the Basic Coordination Alternative, clearly define, model, and analyze the additional reductions and actions that would be required to prevent critically low reservoir elevations and to protect infrastructure, including the triggers for implementing these measures.
- b. Recommendation: In the Supply Driven Alternative, fully define “Gap Water” and disclose how it would be generated. Revise the maximum allowable volume formula by excluding 1.5 million acre-feet of Lower Basin system losses. Present modelled results, including how often “Gap Water” is introduced into the system and the range of its magnitude. Beyond further specificity and analysis, we continue to have significant concerns surrounding this concept.

10. Upper Basin conservation water must remain in Lake Powell. If the proposed action includes an Upper Basin water conservation program, any conserved water must be operationally neutral with respect to releases from Lake Powell and determinations of Lower Basin shortages. Conserved water should only be released from Lake Powell at the direction of the UCRC for the sole purpose of protecting the Upper Basin’s obligations under the 1922 Compact or when Lake Powell and the other initial CRSP units are sufficiently recharged to a point where flood control is a real, predictable, and tangible reality. This is not accomplished through the conversion concepts currently outlined in the Draft EIS as conversion is triggered when Lower Basin reductions in use are minimal. As noted earlier in this letter, Lower Basin system losses of 1.5 million acre-feet are not a shortage, they are simply an integral part of the Lower Basin’s consumptive use.



- a. Recommendation: If the proposed action includes an Upper Basin water conservation program, any conserved water must be operationally neutral with respect to releases from Lake Powell and determinations of Lower Basin shortages. Additionally, conserved water should only be released from Lake Powell at the direction of the UCRC.

11. CRSP Upper Initial Units water must remain in Lake Powell. Post-2026 operational guidelines should protect all water released from any initial Colorado River Storage Project Act (CRSP) reservoirs for the purposes of protecting infrastructure in Lake Powell, such that the water stays in Lake Powell and is operationally neutral with respect to releases from Lake Powell and Lower Basin shortages determination. Water released to protect the infrastructure at Lake Powell needs to stay in Lake Powell until Lake Powell and the other initial CRSP reservoirs have sufficiently recharged. Additionally, Appendix O indicates that 60% of the years would require releases from CRSP Upper Initial Units under critically dry conditions. We are concerned about the feasibility of these reoccurring releases, their magnitudes, reservoir recovery, and whether they can be implemented under the existing Records of Decisions.

- a. Recommendation: If the proposed action contemplates releases from CRSP Upper Initial Units, released water must be operationally neutral with respect to releases from Lake Powell and Lower Basin shortages determination. Additionally, this water must stay in Lake Powell until it, and the other initial CRSP reservoirs have sufficiently recharged.
- b. Recommendation: Include analysis on how modeled CRSP Upper Initial Units releases can be accomplished under the existing Records of Decisions and if these reoccurring releases and their magnitudes are feasible.

12. Realistic evaporation and transit assessments must be applied to Lower Basin conservation water. A one-time system assessment does not account for annual reoccurring evaporation losses. This conservation water must be realistically accounted for over time.

- a. Recommendation: In the proposed action, realistic transit assessments and annual evaporation assessments must be applied to Lower Basin conservation water.

13. Section 602(a) of the 1968 Act must be honored by the guidelines. Post 2026 operational guidelines should be consistent with the principle of Section 602(a) of the 1968 Colorado River Basin Projects Act with respect to the non-impairment of annual consumptive uses in the Upper Basin.

Bureau of Reclamation
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Thank you for your efforts and consideration. Please contact me should you have any questions or concerns about our suggestions contained herein.

Sincerely,

A handwritten signature in blue ink, appearing to read "A. Mueller".

Andrew Mueller
General Manager

cc: Rebecca Mitchell, Colorado Commissioner to the Upper Colorado River Commission
Brandon Gebhart, Wyoming Commissioner to the Upper Colorado River Commission
Estevan Lopez, New Mexico Commissioner to the Upper Colorado River Commission
Gene Shawcroft, Utah Commissioner to the Upper Colorado River Commission