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RIVER COMMISSION
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May 21, 2026

Scott J. Cameron
Acting Commissioner
U.S. Bureau of Reclamation
1849 C Street, NW
Washington, D.C. 20240-0001

VIA ELECTRONIC MAIL

RE: Response to Presentation of Preliminary Preferred Alternative for Post-2026 Colorado River Operations

Dear Acting Commissioner Cameron:

The Upper Division States of Colorado, New Mexico, Utah, and Wyoming (UDS) appreciate Reclamation's May 8, 2026 presentation on the "preliminary" preferred alternative (PPA) framework for Post-2026 Colorado River operations. Per your request during our May 12, 2026 meeting, the UDS submit the following initial response acting through the Upper Colorado River Commission.

The presentation and discussion were general in nature. Therefore, this response may change as additional detail becomes available. More information is needed to assess several components of the PPA, including explicit operations for Lake Powell and Lake Mead for water years 2027 and 2028. This preliminary response is consistent with the enclosed letters from the UDS dated March 2, 2026 and May 1, 2026.

A. General Observations

The PPA includes several aspects the UDS may support. First, the UDS support the proposed reductions of "up to 3.0 MAF" per year in the Lower Basin States, which appear to respond to the current hydrology and the risks facing the Colorado River Basin.

Second, the UDS recognize Reclamation's commitment to Lake Powell operations that are hydrologically responsive, intended to operate conservatively under low-inflow conditions, and that would transition to a recovery posture. The UDS believe these features help ensure a resilient and adaptive operating regime using observed inflow and storage conditions.

Third, the UDS recognize Reclamation's commitment to operate Lake Powell based on supply rather than downstream actions.

Fourth, the UDS support providing opportunities to incorporate consensus recommendations within the NEPA framework.

Fifth, the UDS generally support the concept of a contribution pool in Lake Powell and potentially in the Upstream Initial Units (UIUs). As the enclosed letters explain, the UDS assert that the proposed contribution pools in Lake Powell and the UIUs must be operationally neutral. In addition, the creation and accounting of water to be stored in the contribution pools is a parallel activity relative to the FEIS and resulting ROD and will require the execution and implementation of an appropriate contribution and accounting agreement between the UDS and Reclamation.

Sixth, the UDS generally support the concept of conservation and exchange pools in Lake Mead. However, we observe that recent experience illustrates the potential risk that enhanced flexibility may create unintended adverse impacts on Lake Mead and to operations upstream of Lee Ferry. Any flexibility provided in Lake Mead operations must not adversely impact operations at Lake Mead or upstream of Lee Ferry.

Seventh, the UDS consider UIU operations to be "extraordinary" actions with the purpose and intended benefit of protecting critical elevations at Lake Powell. Further, when considering extraordinary actions involving the UIUs, Reclamation must also consider reduced releases from Lake Powell. UDS support Reclamation's intent to fully preserve the benefits of "extraordinary" actions.

Eighth, the UDS support consultation if the projected Lake Mead elevation is less than 1,000', or the projected Lake Powell elevation is less than 3,500', to determine additional actions. However, the UDS assert that any Lake Powell elevation which might trigger additional UIU releases must be controlled by a separate agreement between the UDS and Reclamation.

B. Concerns Regarding the PPA

The UDS have concerns with several aspects of the PPA. First, the PPA explicitly includes the UIUs. However, the UIUs are outside the geographic scope of the NEPA process for Post-2026 operations. The UDS recognize that, when needed, the UIUs are an important resource available to help protect critical elevations at Lake Powell. This is illustrated by the successful partnership of Reclamation and the UDS to implement the Drought Response Operating Agreement (DROA). The operation of the UIUs is appropriately addressed as separate but parallel activities, implemented through an agreement similar to the existing DROA, that includes robust engagement with Lower Basin States.

Second, the PPA proposes a limited duration of 10 years and includes the issuance of new operational guidelines every two years. This fails to provide the predictability or robustness required by Reclamation in its October 20, 2023, Notice of Availability, and therefore may not meet the Purpose and Need for this NEPA process. In addition, the analyses in the DEIS assume a 20-year duration. Therefore, a 10-year FEIS will create an inconsistency between the analyses conducted from the draft to the final EIS. Moreover, this fails to provide certainty, reliability, and stability as stated by Reclamation in its May 7, 2026, presentation on the PPA. We suggest a term of three or more years for operational guidelines within a 20-year framework.

Third, the PPA's apparent reliance on forecasted inflows is problematic. Experience under the 2007 Interim Guidelines demonstrated that the current forecast tools cannot predict hydrologic conditions with sufficient accuracy to form the basis of operations, particularly in the late summer through early fall prior to snow accumulation. Relying on forecasts, rather than actual supply conditions, reduces certainty and limits the effectiveness and availability of adaptive tools. In addition, the PPA includes reliance on the August 24-Month Study to prepare the Annual Operating Plan, mid-year adjustments, and exclusive use of forecasts instead of actual conditions, similar to the 2007 Interim Guidelines. Continuing use of these tools—and combining them with a two-year decision cycle—would require the Basin States to constantly react to hydrology on a short-term basis, thereby depriving them of the opportunity to craft longer-term solutions. The UDS recommend that operations be based on actual conditions. Specifically, Lake Powell and Lake Mead operations should be based on the water year initial conditions (October 1). This approach results in more certainty for operations and more responsiveness to hydrologic variability.

Lastly, the PPA references implementing the Long-Range Operating Criteria (LROC). The UDS have significant concerns with Reclamation's previously stated LROC approach. We extensively documented these concerns in letters dated June 11, 2024, March 2, 2026, and May 1, 2026. We continue to assert that the LROC describes a series of analyses and processes rather than any particular volume for releases.

C. Clarifying Questions

The UDS have identified several areas within the PPA that would benefit from additional clarification. We anticipate discussing the following questions and perhaps others in greater detail during an upcoming meeting with Reclamation.

1. The sideboards and comments in the PPA suggest that Reclamation would operate Lake Powell and Lake Mead based on each reservoir's respective conditions. Please confirm whether this understanding is correct.

2. Would the PPA operate Lake Powell based on inflow or storage or both?

3. To what extent will hydrologic forecasting determine operational decisions?

4. How does Reclamation define "dry hydrologic sequences at Hoover Dam"?

5. How does the PPA consider Lake Mead operations < 1,000 ft in relation to Lake Powell operations or other upstream operations?

6. The PPA indicates that reductions in the Lower Basin could be "[u]p to 3.0 MAF" and refers to additional reductions following consultation. What is Reclamation's baseline for the "[u]p to 3.0 MAF" reductions in the Lower Basin? Does Reclamation contemplate reductions greater than 3.0 MAF?

7. Clarify that Reclamation will require implementation agreements for Lake Powell and Lake

Mead conservation pool programs, including existing Intentionally Created Surplus in Lake Mead and deadlines for such agreements?

8. Clarify how Reclamation intends to incorporate Mexico into the operational approach (e.g., through a series of short-term Minutes)?

9. The PPA references consultation. Please clarify with whom Reclamation will consult for each specific reference?

10. Will the proposed operational approach move away from the current demand-based framework, which has contributed to depleted storage, to a supply-based approach?

We appreciate our partnership with Reclamation and thank you for considering our input. We will provide formal comments when the Preferred Alternative becomes available, inclusive of operations in 2027 and 2028. The UDS also maintain their request for immediate mediation to reach a seven-state consensus.

Sincerely,

UPPER COLORADO RIVER COMMISSION

Charles R. Cullom
Executive Director

Enclosures: UCRC Letter to Andrea Travnicek, Assistant Secretary of Water and Science, the U.S. Department of the Interior, providing additional input on the preferred alternative for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead (May 1, 2026)

UCRC letter to Reclamation regarding Draft Environmental Impact Statement for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead (March 2, 2026)

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May 1, 2026

Andrea Travnicek
Assistant Secretary of Water and Science
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240

Submitted to andrea_travnicek@ios.doi.gov

Dear Assistant Secretary Travnicek,

On Friday, April 24, 2026, you invited the Colorado River Basin States to provide additional input on the Post-2026 operations of Lake Powell and Lake Mead (Post-2026 NEPA process). On April 29, 2026, Deputy Commissioner of the Bureau of Reclamation (Reclamation), David Palumbo, in his email to the seven Governors' representatives, noted that Reclamation would provide the Upper Division States (UDS) with further opportunity to respond to any ideas or concepts that may be shared pursuant to that invitation. The UDS, acting through the Upper Colorado River Commission (UCRC), maintain that absent a seven Basin States consensus agreement, Reclamation must select its Preferred Alternative and issue a Record of Decision consistent with the ongoing Post-2026 NEPA process. Any additional input on the Post-2026 NEPA process, including a Preferred Alternative selected by Reclamation, must adhere to the geographic scope described in the Draft Environmental Impact Statement (DEIS) and must be limited to the existing authorities of the Secretary of Interior and Reclamation.

The UDS have consistently advocated for Post-2026 operations that address current and future risks to the system caused by climate change and current water demands on Lake Powell and Lake Mead. Since 2000, there has been a growing imbalance with water use exceeding supply. As a result, storage in Lake Powell and Lake Mead has been significantly depleted. Climate science and Reclamation's projections indicate the Colorado River Basin should expect continued long-term and sustained drought, increasing temperatures, low soil moisture, and low runoff conditions. Post-2026 operations must sustain Lake Powell and Lake Mead into the future through a wide range of water supply conditions. Demand-driven operations cannot be sustained.

Over the course of the Post-2026 NEPA process, the UDS have provided input designed to address the purpose and need identified in the Federal Register Doc. 2023–23127, filed October 19, 2023.

On March 5, 2024, the UDS submitted a proposed alternative for consideration by Reclamation in the Post-2026 NEPA process and subsequently submitted a refined alternative on December 31, 2024. This refined UDS alternative included operational rules that effectively respond to actual hydrologic conditions, appropriately coordinate Lake Powell and Lake Mead operations while managing risks, and rebuild storage within existing legal authorities. Neither the original nor the refined UDS alternative was selected by Reclamation for analysis as a proposed alternative in the Post-2026 NEPA process. Finally, on March 2, 2026, the UDS, both individually and collectively through the UCRC, submitted comments on the DEIS.

On a separate but parallel track, in the context of negotiations among the seven Basin States to try to reach a consensus agreement on post-2026 operations, the UDS offered numerous compromise proposals. These compromises for both short-term and longer-term operations were offered as consideration for a Basin States consensus agreement in advance of the Reclamation-imposed February 14, 2026, deadline. Even though our proposals were dismissed, we remain willing to engage in negotiations on a consensus agreement, including for shorter-term operations.

Additionally, throughout the entire negotiation process, the UDS have committed to actions in the Upper Basin that are beyond the scope of the Post-2026 NEPA process but will complement those operations. Current and projected hydrology warrants complementary actions to support Lake Powell, and the UDS have demonstrated their commitment to such actions. On April 21, 2026, the UDS approved the release of up to 1 million acre-feet from Flaming Gorge under the 2026 Drought Response Operations Plan. Pursuant to the December 2, 2024, Memorandum of Understanding between the UDS and Reclamation, the UDS are also implementing Provisional Accounting projects that contribute additional water to Lake Powell and the Upper Initial Units (UIU). These projects are a precursor to an agreement between the UDS and Reclamation which properly recognizes and accounts for the water contributed. The UDS look forward to working with Reclamation to develop agreements, outside of the Post-2026 NEPA process, regarding the operation of the UIUs and contribution activities that support Lake Powell operations.

Given the current impasse between the Upper and Lower Basins, on April 23,2026, the UDS proposed mediation. We remain committed to exhausting all possibilities for a consensus solution even at this late hour and believe there is merit in neutral mediation. Accordingly, we will continue to pursue mediation as a path forward.

The UDS continue to believe that a consensus Basin States agreement is the optimal outcome for each Basin State and the Colorado River system as a whole. In the absence of consensus, the Preferred Alternative must adhere to the scope of the Post-2026 NEPA process and must fit squarely within existing federal authorities.

Sincerely,

Charles Cullom
Executive Director
Upper Colorado River Commission

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March 2, 2026

Scott J. Cameron
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VIA ELECTRONIC MAIL
crbpost2026@usbr.gov

RE: Comments on the Draft Environmental Impact Statement for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead (January 16, 2026)

Dear Acting Commissioner Cameron:

The States of Colorado, New Mexico, Utah, and Wyoming (collectively, the "Upper Division States") acting through the Upper Colorado River Commission ("UCRC"), respectfully submit the following comments to the Bureau of Reclamation's ("Reclamation") *Draft Environmental Impact Statement for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead* ("DEIS") issued on January 16, 2026. Thank you for considering these comments.

The UCRC was established by the 1948 Upper Colorado River Basin Compact ("1948 Compact") to serve as the interstate administrative agency with the authorities identified in the1948 Compact. The UCRC does not control the in-state administration of water rights; this remains the responsibility of each individual Upper Division State.

1. Summary of UCRC Comments

We support Reclamation's goal of establishing durable, supply-focused guidelines for Lake Powell and Lake Mead. However, the DEIS relies on several assumptions that exceed federal authority, has flawed modeling assumptions including the injection of fictional water, omits critical Lower Basin use data, misapplies the Long-Range Operating Criteria ("LROC"), and inconsistently treats Upper Basin and Lower Basin operations. Our comments identify these deficiencies and provide a path toward a lawful, implementable, and hydrologically grounded framework capable of supporting the long-term stability of Lake Powell and Lake Mead.

The UCRC agrees that the geographic scope of the federal action must be limited to operations from Lake Powell to the southerly international boundary with Mexico; however, several alternatives rely heavily on upstream actions and Mexico-dependent assumptions that lie outside the scope. This creates a fundamental inconsistency between the alternatives modeling and the impacts analysis: the DEIS models extensive operational changes above Lake Powell, which is outside the

scope of the DEIS, but then excludes the Upper Basin operations from its impacts analysis. These inconsistencies must be resolved.

The UCRC provides detailed technical evaluations, summarized below, of each of the following alternatives:

- No Action Alternative ("NAA"): Incorrectly fixes Lake Powell releases at 8.23 MAF and carries forward 2007 Interim Guideline equalization assumptions inconsistent with LROC. It fails to reflect the system's actual operational baseline and does not meet the purpose and need.
- Basic Coordination Alternative ("BCA"): Is the only alternative potentially implementable under existing authority but must be corrected to properly apply the LROC sequence, utilize shortage and surplus criteria, and avoid reliance on Colorado River Storage Project ("CRSP") Upstream Initial Unit ("UIU") releases.
- Enhanced Coordination Alternative ("ECA"): Relies on technically infeasible Upper Basin conservation pools, improper conversion of Upper Basin water to "system water," mid-year Powell release adjustments, and Mead-based triggers that increase system risk.
- Maximum Operational Flexibility Alternative ("MOFA"): Uses invalid reservoir indicators, relies on a basin-wide conservation reserve that is currently unimplementable under the Law of the River, and fails to reflect actual system connectivity or feasibility.
- Supply Driven Alternative ("SDA"): Is infeasible; the fixed-percentage release requirement drains system storage, requires fictional "gap water," and understates Lower Basin demand.

The UCRC also highlights deficiencies in Colorado River Simulation System ("CRSS") initialization, hydrology ensembles, and modeling assumptions that fail to reflect current reservoir conditions and underestimate system risk under dry hydrology. The DEIS further fails to incorporate mandatory Section 602(a) storage determinations, realistic evaporation and loss assessments, or the impacts associated with hydrologic shortages experienced annually in the Upper Basin.

Finally, the UCRC reiterates that any mechanism involving contribution/conservation pools or Intentionally Created Surplus ("ICS") expansion, must be operationally neutral and must not reduce or impair Upper Basin apportionments in any manner. Further, the UCRC supports the participation of Upper Basin Tribes in Upper Basin programs including contribution/conservation pools.

2. Technical Comments

The UCRC provides the following technical comments that apply to more than one Alternative in the DEIS. Any preferred alternative must be technically feasible and comply with the Law of the River. Specifically, the Secretary's authorities to operate Upper Basin facilities under the Colorado River Storage Project Act ("CRSP Act") and the Colorado River Basin Project Act ("1968 Project Act"), are constrained by the 1922 Compact, the 1948 Upper Basin Compact, and other components of the Law of the River.[1]

a. <u>Concerns Regarding the DEIS's Assumptions About Upper Basin Contribution</u>

[1] 43 U.S.C. § 620m (CRSP Act); 43 U.S.C. § 1551 (1968 Project Act).

In the DEIS Reclamation has made assumptions for modeling Upper Basin contributions and the DEIS does not reflect that such contributions are constrained by actual operating authorities and physical system conditions. Treating Upper Basin contributions as presumed to occur, controllable inputs is inappropriate because any Upper Basin contributions program would require separate agreements with the Upper Division States and would be constrained by annual hydrology.

The DEIS also assumes Upper Basin conserved or contributed water can be unilaterally converted into "system water" by Reclamation and used to influence or offset Lower Basin shortages. This is contrary to the 1922 Compact and 1948 Compact, and would require explicit approval from the Upper Division States.

Finally, any Upper Basin contribution pool would need to be operationally neutral, meaning it could not affect Lake Powell release determinations, Section 602(a) storage calculations under the 1968 Act, or any other Powell-to-Mead coordination logic.

b. Hydrologic Shortages

Water users in the Upper Division States regularly take shortages that average approximately 1.2 MAF per year due to highly variable hydrology and the lack of large reservoirs above their places of use. CRSS has the capability to calculate Upper Basin hydrologic shortage (demand less available supply) and this metric should be included in the DEIS analysis.

c. Concerns About the DEIS's Assumptions Regarding Lower Basin Conservation and Intentionally Created Surplus

Reclamation proposes expanding upon the Intentionally Created Surplus ("ICS") mechanism in its Enhanced Coordination, Maximum Operational Flexibility, and Supply Driven Alternatives. We question the consistency of any form of carryover storage accounts in Lake Mead under the Law of the River.

Reclamation's proposed expansion of ICS must ensure that all future ICS creation, storage, and recovery in Lake Mead is operationally neutral with respect to system reductions and reservoir operations. In addition, ICS volumes should not substitute for mandatory Lower Basin shortage reductions, alter the operational storage used for determining shortage benchmarks, or influence Powell release decisions under the LROC. To maintain a physically accurate mass balance, ICS water must be excluded from operational elevations and subjected to evaporation and system loss assessments that are scientifically in line with actual losses.

Additionally, ICS storage must remain fully isolated downstream of Lee Ferry and must not influence any operational requirements upstream, including Section 602(a) storage calculations or Glen Canyon Dam release determinations. The UCRC requests that any future ICS program include transparent accounting, verifiable tracking, and controls that prevent ICS water from influencing system operations beyond the Lower Basin.

Finally, any prospective ICS program should be accurately characterized as a water banking program rather than as a conservation program. In the alternatives that include a Lake Mead mechanism, water that is not withdrawn from Lake Mead in a particular year is banked to be withdrawn in the future. After the program expires and all the banked water is withdrawn, there will

no longer be any net reduction of water use resulting from this program; this is simply a retiming of withdrawals.

d. The DEIS Did Not Incorporate Lower Basin Consumptive Uses and Losses ("CU&L") Data

On December 19, 2025, Reclamation released CU&L data for the Lower Colorado River System covering the period 2006-2024. The UCRC appreciates the publication of the data to better inform decision-making in the Colorado River Basin, particularly with respect to new operations of Lake Powell and Lake Mead. However, the updated data was not incorporated into the DEIS. The discussion of historic basin-wide uses notably excludes full system uses and losses that are covered by the updated CU&L data.[2]

Review of the CU&L data recently released by Reclamation for the 2006 to 2024 period shows an average consumptive use in the Lower Basin of 11.1 MAF per year. Estimates of Lower Basin consumptive use during this period based on Reclamation's new data are set forth below.

Year	Arizona Consumptive Use[1]	California Consumptive Use	Nevada Consumptive Use	Mainstream Evaporation	Estimated Transit Losses[2]	Total
2006	5,024,759	4,293,712	463,341	914,010	545,913	**11,241,735**
2007	5,041,914	4,370,753	470,176	868,330	545,913	**11,297,086**
2008	5,206,385	4,498,865	450,433	847,729	545,913	**11,549,325**
2009	5,085,792	4,358,122	439,087	842,667	545,913	**11,271,581**
2010	5,075,986	4,356,887	412,359	753,843	545,913	**11,144,988**
2011	5,076,797	4,312,708	412,881	859,313	545,913	**11,207,612**
2012	5,033,394	4,416,718	436,197	867,252	545,913	**11,299,474**
2013	5,011,649	4,475,835	415,450	844,832	545,913	**11,293,679**
2014	5,207,313	4,649,780	426,439	803,918	545,913	**11,633,363**
2015	5,306,216	4,620,801	422,386	784,428	545,913	**11,679,744**
2016	4,996,307	4,381,139	395,990	769,566	545,913	**11,088,915**
2017	5,048,764	4,026,554	399,150	803,151	545,913	**10,823,532**
2018	5,017,835	4,265,565	400,399	795,297	545,913	**11,025,009**
2019	4,865,934	3,840,726	378,222	756,050	545,913	**10,386,845**
2020	5,163,531	4,059,950	417,713	824,239	545,913	**11,011,346**
2021	5,148,069	4,404,767	404,150	786,692	545,913	**11,289,591**
2022	4,683,232	4,424,287	382,322	736,341	545,913	**10,772,095**
2023	4,657,136*	3,699,195	347,625	730,229	545,913	**9,980,098**
2024	4,575,402*	3,943,779	380,978	776,597	545,913	**10,222,669**
Total	**95,226,415***	**81,400,143**	**7,855,298**	**15,364,484**	**10,372,347**	**210,218,687**
Average	**5,011,917***	**4,284,218**	**413,437**	**808,657**	**545,913**	**11,064,141**

[1] Total of Mainstream, Tributary, and CAP Underground Storage Facility Net Delivery.

[2] Estimated Transit Losses from Lower Colorado River Mainstream Evaporation and Riparian Evapotranspiration Losses Report, Bureau of Reclamation (December 2023).

* No data available for CAP Underground Storage Facility Net Delivery in 2023 and 2024.

[2] DEIS at 1-19, Figure 1-3.

This most recent data is not consistent with the volumes provided in the DEIS, particularly those in Appendix 4 (Table TA-4-5). The UCRC requests that Reclamation explain its rationale for using data in the DEIS that is different from the data in the CU&L reports. The exclusion of this data raises questions about the adequacy of the alternatives and impacts analyses in the DEIS, when Reclamation's own documents, presumably the best available science, show a much larger Lower Basin water use than is applied and analyzed in the DEIS. This in turn raises questions about the assumptions underpinning Reclamation's operations that bear on this analysis. The Final EIS should include and incorporate the 2006-2024 CU&L data on Lower Basin uses to ensure that the data is used in developing a Preferred Alternative.

e. Lower Basin CU&L Reporting and Underground Storage

In addition to Lower Basin CU&L data, underground water storage of mainstream Colorado River Water in Arizona is a critical component of available water supply in the Lower. The most recent Arizona Division of Water Resource data available through 2022 indicates that Arizona's five original aquifer management areas hold a total of 12.2 MAF of Colorado River water available for recovery in the subsurface. This water is part of the Colorado River System, was sourced from the Colorado River mainstream, and is stored with the intent to supply Lower Basin users. Under current conditions, this underground storage is nearly twice the size of the active pool in Lake Mead. However, the updated CU&L data does not account for the water delivered into underground storage that is not consumed in the current year. This obscures the timing and potential magnitude of depletions to the Colorado River System by deferring recognition of consumptive use until stored groundwater is withdrawn. Such withdrawals could occur decades from now, if at all. Reclamation's failure to consider this substantial water supply in the DEIS distorts Arizona system uses and available supply.

Failure to account for water diverted from the Colorado River mainstream and stored underground in Lower Basin aquifer systems creates a significant data gap in Reclamation's analysis. The UCRC reiterates its November 1, 2025 request, incorporated herein by reference, that Reclamation correct this flaw in the CU&L methodology and include the corrected CU&L data analysis in the Final EIS.

f. Colorado River System Simulation (CRSS) Initial Conditions

While the DEIS selected CRSS initialization conditions to cover a range of possible system conditions, current projected reservoir levels for December 31, 2026, are lower than considered in these ranges for the following reservoirs: Blue Mesa, Navajo, Powell, and Mead (see table below). As such, the DEIS does not consider the full range of potential risk to these reservoirs. In addition, due to the coordinated nature of Lake Powell and Lake Mead operations, the pairing of higher than projected Powell initial elevations with lower than projected Mead elevations (see table below) results in a flawed tradeoff analysis in the DEIS.

End of Month December 2026 Reservoir Conditions				
	DEIS Low[1]	Current Projection Probable Minimum[2] (10th percentile)	DEIS Mid[1]	Current Projection Most Probable[3] (50th percentile)
Blue Mesa				
Elevation	7444.41'	7435.06'	7477.52'	7460.05'
Approx Storage	279,616 AF	234,125 AF	484,034 AF	367,764 AF
Navajo				
Elevation	6010.59'	5999.93'	6039.82'	6025.29'
Approx Storage	785,430 AF	700,640 AF	1,058,713 AF	916,570 AF
Powell				
Elevation	3511.36'	3469.23'	3574.39'	3488.42'
Approx Storage	4,792.558 AF	2,851,983 AF	8,853,268	3,669,998 AF
Mead				
Elevation	1038.03'	1054.71'	1063.29'	1058.35'
Approx Storage	6,842,897 AF	8,011,488 AF	8,674,470 AF	8,309,748 AF
[1]From Table G-1 of DEIS and used in the DEIS analysis [2]From Feb 2026 Probable Minimum 24 Month Study [3]From Feb 2026 Most Probable 24 Month Study				

g. CRSS Hydrology Ensembles

Reclamation employed the decision making under deep uncertainty ("DMDU") analytical framework in the DEIS and selected 400 hydrology traces from five distinct ensembles to cover a broad range of plausible hydrologic conditions. Section 4 of the Executive Summary presents key tradeoffs and conclusions for a 20-year analysis. The Lees Ferry natural flow hydrology assumed for this analysis averages 13.2 MAF. As noted in footnote 9 of the Executive Summary, the current 20-year average Lees Ferry natural flow is 12.7 MAF, which is substantially drier than the hydrology used in the modeling. As such, the analysis may be optimistic with respect to hydrology, and this assumption has critical implications for all the other analyses in the DEIS.

The UCRC appreciates Reclamation's attempt to bin tradeoffs to bands of hydrology. What is unclear is whether or to what extent Reclamation will use this information to inform decision making in the Preferred Alternative. The UCRC requests that Reclamation focus on performance under dry hydrology in the Final EIS, as this is where the greatest risk lies for the Colorado River basin.

h. Powell Infrastructure Protection (PIP) Releases

PIP operations were described in the Continued Current Strategies comparative baseline, and assumed in the Basic Coordination and Supply-Driven Alternatives. Assumed unilateral releases from UIUs will never be sufficient to protect infrastructure at Lake Powell under recent hydrology. To the extent releases from UIUs are envisioned to support Lower Basin shortages, they are inconsistent with existing authorities and physically unrealistic. Any decisions regarding such operations are explicitly outside the scope of this process. The operations of the UIUs are

necessarily governed by the authorities established in the CRSP Act and the respective Records of Decision for the UIUs, which do not provide for unilateral operations by the Secretary.

As noted in Appendix A: CRSS Model Documentation, no maximum annual release from the UIUs was specified in the modeling runs, which, in some traces, results in required volumes that cannot realistically be released in a year. In addition, operational experience in 2021 through 2024 has demonstrated significant limitations of releases from the UIUs. Moreover, including PIP operations as part of the alternatives masks the performance of other operations (particularly the risk of Lake Powell falling below critical elevations) and prevents a meaningful comparison of the alternatives.

i. Technical Comments on Specific Alternatives

i. No Action Alternative

The No Action Alternative (NAA) as defined in the DEIS does not meet the purpose and need of the DEIS. However, it does not reflect the actual operational outcome if no new guidelines are adopted. For Lake Powell and Lake Mead, operations would revert to the existing LROC, the surviving federal authority governing coordinated operations of Lake Powell and Lake Mead. LROC provides the full framework for determining Section 602(a) storage, the release from Lake Powell, and coordinated operations. It also allows Reclamation to develop detailed, predictable guidelines.

The DEIS asserts that "[p]ursuant to the LROC, the objective is to maintain a minimum release of water from Lake Powell of 8.23 MAF unless a higher release is required for equalization.[3]" However, this assertion, and Reclamation's analysis, miss the crucial and non-discretionary step required under Section 602(a) and the LROC that Reclamation make an annual Section 602(a) storage determination prior to setting a Lake Powell release.

While the NAA of the DEIS sets 8.23 MAF as a *de facto* fixed release in the curve provided in Figure 2-2, the LROC is more flexible than that. Since the LROC was first promulgated in 1970, the Secretary of the Interior has assured Colorado River Basin users that, especially in connection to Article II(5) of the LROC, "the Operating Criteria imposes no firm or fixed obligation that 8.23 million acre-feet be released each year from Lake Powell. That quantity is stated as an "objective" of the Operating Criteria.[4]" However, the NAA is modeled as if Reclamation does not exercise its discretion to release less than 8.23 MAF a year. The NAA also carries forward the equalization framework from the 2007 Interim Guidelines, rather than applying the plain direction provided by LROC. In doing so, the NAA misapplies LROC's sequence for determining 602(a) storage and impermissibly undermines Upper Basin reservoir protection provided under the 1968 Project Act. In addition, the NAA imposes Lower Basin shortages that would not be sufficient to protect critical elevations in Lake Mead if hydrology does not improve. This distorts the baseline comparison because it likely underestimates Reclamation's maximum shortage determinations, particularly under dry and critically dry hydrologies. Upon expiration of the 2007 Guidelines, Reclamation retains full discretion under the

[3] DEIS, Ch. 2, 2-9

[4] *Departmental Actions on Comments from Upper and Lower Division States on Proposed Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968 (P.L. 90-537)*, *Updating the Hoover Dam Documents, 1978*, Appendix VII, VII-11.

1968 Project Act to apply LROC correctly and select 602(a) parameter inputs consistent with the Law of the River.

The UCRC requests that Reclamation correct the NAA to model operations consistent with LROC rather than substituting a *de facto* fixed minimum release. The NAA should include the 602(a) storage determination process required by the 1968 Project Act; the flexible release from Lake Powell, including volumes below 8.23 MAF; and a shortage determination volume that would protect critical elevations at Lake Powell.

ii. Basic Coordination Alternative

Reclamation indicates that the Basic Coordination Alternative (BCA) may be implemented in water year 2027 "if no new agreements among relevant entities in the Basin are developed."[5] Reclamation asserts that the BCA is immediately implementable without additional authority from Congress. It does not contemplate modifications that would run contrary to the 1922 Colorado River Compact. However, for Reclamation to implement the BCA, it would require, at a minimum, an agreement with the Upper Division States.

While the UCRC appreciates that the BCA does not treat 8.23 MAF as a fixed release, the BCA's coordinated operations do not accurately reflect the two-step LROC process for determining 602(a) storage and annual releases from Lake Powell. Like the NAA, the BCA impermissibly omits the requirement to determine 602(a) storage before determining annual releases. And like the NAA, the BCA continues to underestimate Reclamation's maximum shortage determinations by limiting shortages in the Lower Basin to 1.48 MAF. There is no limitation on the Secretary's authority to consider Lower Basin shortages greater than 1.48 MAF. In the DEIS, Reclamation has analyzed Lower Basin reductions up to 4 MAF and should include the flexibility for greater reductions in the Final EIS. Similarly, the BCA limits surplus determinations to a single Mead elevation or a modeling concept tied to flood-control storage. This does not reflect the full set of considerations required under LROC, which mandates a broader analysis of factors before declaring a surplus. Reclamation should revise this component to align with the LROC surplus determination process and include the statutorily required criteria.

It is the UCRC's position that using LROC correctly would protect Powell's infrastructure far more effectively than reliance on assumptions about UIU releases. The UCRC requests that Reclamation modify the BCA in the Final EIS to consider Lower Basin reductions greater than 1.48 MAF, and to revise the surplus component to align with the LROC surplus determination process and include the criteria identified in Article III(3) of LROC.

iii. Enhanced Coordination Alternative

The Enhanced Coordination Alternative (ECA) incorporates operational elements that are technically infeasible and incompatible with existing authorities. The Upper Basin conservation pool is modeled as a guaranteed annual supply that scales upward over time and is used to offset Lower Basin shortages at ratios as high as 2:1. Because actual Upper Basin depletions are hydrologically constrained and Upper Basin participation is voluntary, the DEIS modeling presumes water volumes that cannot be operationally produced. The proposal to convert Upper Basin conserved water into

[5] ES-11

"system water" for Lower Basin shortage mitigation would, in practice, make Upper Basin contributions a mandatory and continuous supply rather than a voluntary endeavor, an outcome that conflicts with both hydrology and the physical availability of water in the Upper Basin. The structural deficit in the Lower Basin (~1.3 MAF/year) means the ECA would rely on Upper Basin contributions in nearly all hydrologic sequences, including average years, making the alternative non-viable from a mass-balance perspective. Compounding this, the ECA includes the Upper Basin conservation pool in the determination of releases from Lake Powell, resulting in increased releases. Any Upper Basin conserved water should be operationally neutral with respect to Lake Powell release determinations.

The ECA also incorporates release logic for Lake Powell that depends on Lake Mead storage. In this alternative, Lake Mead storage also includes conservation pools and protection pool volumes. This directly increases operational risk to Lake Powell. Tying Lake Powell releases to Lake Mead contents, combined with mid-year release adjustments based on variable inflow forecasts, replicates the same balancing behavior that repeatedly destabilized Lake Powell under the 2007 Interim Guidelines. Mid-year adjustment schemes have historically been subject to forecast swings exceeding 1.0 MAF from month to month, and Reclamation's own modeling has shown that balancing-type operations increase the probability of system failure when Powell is near critically low elevations. For system stability, all mid-year release adjustments should be removed.

The ECA's reliance on LTEMP as a constraint on annual Glen Canyon Dam releases is also operationally incorrect. LTEMP governs sub-annual hydrograph shaping; not annual release volumes. LTEMP cannot be used to modify, limit, or reassign annual release determinations required by the 1968 Project Act. Allowing discretionary annual release modifications for downstream resource considerations would bypass the established LTEMP adaptive management structure and create year-to-year uncertainty in Powell's mass balance and release planning, which is detrimental to the entire Basin

The Lake Mead conservation and protection pools in the ECA introduce additional operational instability. Creating individualized storage accounts, applying a one-time 7% assessment, and holding non-system water indefinitely within a federal "protection pool" would distort the true active storage of Lake Mead and undermine shortage determinations. The DEIS provides no analysis for the claim that these pools would not overtake system storage, nor does it describe how Reclamation would acquire or manage water in these pools consistent with existing Law of the River accounting. Because Lake Powell releases under the ECA depend on Lake Mead's physical contents, any such pool structure directly affects Upper Basin operations and is therefore not a technically neutral mechanism. It is also not realistically feasible if Reclamation intends to protect power generation at Glen Canyon Dam. The ECA includes the Upper Basin conservation pool in the determination of releases from Lake Powell, resulting in increased releases. All pools created under a Preferred Alternative, whether they are in Lake Powell or Lake Mead, should be treated identically in terms of operational neutrality: Either they are all included in release determinations, or they are all excluded. The UCRC prefers operational neutrality. There should not be two different ways of treating water in conservation, contribution or protection pools. The issues identified here related to the federal protection pool apply across operational frameworks that may implement this mechanism.

Finally, the ECA envisions the immediate conversion of existing ICS to a new undefined and unmodeled mechanism. The URCR requests that Reclamation provide the necessary details and perform impact analysis of the impacts of such immediate conversion of ICS in the Final EIS.

iv. Maximum Operational Flexibility Alternative

As formulated in the DEIS, the Maximum Operational Flexibility Alternative ("MOFA") is based on operational constructs that are not physically, hydrologically, or legally supportable. MOFA uses indicators and release logic that do not reflect actual system connectivity, do not comply with existing authorities, and cannot produce the modeled outcomes.

MOFA bases Lower Basin shortages on 7-reservoir combined storage, including UIUs. These reservoirs do not supply the Lower Basin and have no operational linkage to Lower Basin shortages, making their inclusion an arbitrary and technically invalid indicator. Because MOFA ties both Lake Powell releases and Lower Basin shortages to reservoirs that cannot influence either operation, the resulting modeled performance is not representative of real system behavior. In addition, if the intent is to reflect total available water supply, MOFA excludes the largest single block of recoverable mainstream Colorado River water in the Basin: Arizona's ~12.2 MAF of Long-Term Storage Credits.

The proposed basin-wide conservation reserve is operationally infeasible. It requires cross-basin transactions, new storage purposes, and individual storage accounts in both Lake Powell and Lake Mead. These mechanisms would require substantial restructuring of the Law of the River, which is unlikely to occur. MOFA also grants Reclamation unilateral discretion to shift annual release volumes between reservoirs to meet infrastructure or environmental objectives. Such authority conflicts with the 1968 Project Act, the LTEMP framework, and the Grand Canyon Protection Act, and MOFA does not explain how water could be physically transferred between Lake Powell and Lake Mead to support this redistribution. Finally, because the reserve is used to offset Lower Basin shortages above 2.0 MAF, any Upper Basin contributions would be automatically converted into shortage-offset water, effectively turning Upper Basin supplies into a *de facto* support system for Lower Basin deficits. The model provides no procedure for years when the reserve is empty, nor does it account for realistic evaporation losses, which could exceed the proposed one-time 10% assessment.

Finally, the MOFA envisions a five-year conversion of existing ICS to a new undefined and unmodeled mechanism. The URCR requests that Reclamation provide the necessary details and perform impact analysis for this ICS conversion framework in the Final EIS.

v. Supply Driven Alternative

As formulated in the DEIS, the Supply Driven Alternative (SDA) relies on operational constructs that are not hydrologically, physically, or legally viable. The proposed fixed percentage release that requires Lake Powell to release 65% of natural flow each year creates a mandatory annual release obligation that conflicts with the requirements of the 1922 Compact and the 1968 Project Act. Moreover, this mandatory release obligation cannot be met under most actual hydrologic conditions. The DEIS further assumes that Upper Basin conserved water in Lake Powell would be used to meet this release obligation. This effectively converts Upper Basin contributed water supplies into a guaranteed water source for the Lower Basin, especially when coupled with the DEIS's assumptions regarding Upper Basin conserved water, as described above. This construct is incompatible with hydrologic variability and produces modeled outcomes that are not physically achievable. Over the full hydrologic record, the SDA fails to protect Lake Powell elevations and

performs worse than CCS, demonstrating that the operation drains system storage and is therefore not technically feasible.

The SDA also depends on up to 1.1 MAF/year of "gap water" which is an undefined, fictional volume inserted directly into the model to satisfy the fixed 65% release requirement. Because the DEIS does not identify any physical or legal source for this water, its inclusion constitutes a modeling artifice rather than an actual operational element. The SDA also includes assumptions that impose proportional "non-voluntary reductions over and above hydrologic shortages" on the Upper Basin to generate "gap water." This assumption is fatally flawed because it ignores the water rights administration systems in the Upper Basin. In addition, Lower Basin shortages are limited to only 2.1 MAF despite demonstrated average Lower Basin use of ~11.1 MAF. This assumption understates Lower Basin demand and guarantees unsustainable withdrawals from Lake Powell. The SDA also incorporates UIU releases modeled after the 2019 DROA, but without the required Upper Division State agreements, planning process, or recovery operations that were a part of DROA. The UCRC request that Reclamation revise the SDA to remove the concept of "gap water."

j. Impact Analysis

The geographic scope of this federal action must remain limited to operations from Lake Powell to the Southern International Boundary with Mexico, as this is the only reach within the Secretary's operational authority. By incorporating assumptions involving Upper Basin operations or actions by Mexico, Reclamation exceeds the Secretary's authority and introduces effects outside the defined scope that cannot be analyzed or implemented. The DEIS impact analysis notably excludes impacts to the Upper Basin. While this is seemingly consistent with the geographic scope of the proposed federal action, there is a significant discrepancy between modeling assumptions for the alternatives analysis and assumptions for the impacts analysis that blur the geographic scope and create bias in the results of the analysis.

The DEIS creates a technical inconsistency by modeling operational actions upstream of Lake Powell, including Upper Basin conservation and UIU releases, while excluding the Upper Basin from the impacts analysis. Either those upstream actions are speculative and should not be included in the alternatives modeling, or they are operationally relied upon, and their impacts must be analyzed.

The DEIS excludes Upper Basin impacts by reasoning that UIU releases would occur only under existing Records of Decision for those Units. However, the DEIS repeatedly mentions broad, undefined "emergency" authority to justify possible additional releases from these units. Actual emergency releases occurred in 2021. They produced measurable environmental and economic effects in the Upper Basin. If Reclamation intends for the alternatives to rely on such releases, the DEIS must analyze their reasonably foreseeable impacts. But importantly, alternatives that go beyond Reclamation's existing authority and have impacts beyond the geographic scope should be excluded from analysis in this EIS.

Similarly, the DEIS assumes maximum Upper Basin conservation volumes in several action alternatives yet excludes the Upper Basin from the impacts analysis on the basis that these activities are "unknown." This creates an analytical inconsistency: the alternatives rely on Upper Basin actions to generate system water and perform better than they otherwise would, but the environmental and operational consequences within the Upper Basin are not evaluated. Even if

program design rests with the Upper Division States, any conservation that reduces or forgoes use necessarily affects Upper Basin reservoir operations, and apportionment utilization.

j. **Reservation of Rights**

The Upper Division States acting through the UCRC expressly reserve their rights under applicable law, including, but not limited to, the Law of the River. Nothing in this letter is intended to be, nor shall it be construed to interpret, diminish, or modify the rights of the Upper Division States under federal or state law or administrative rule, regulation, or guideline. This submittal is not intended to be, and shall not be construed in any way, as, a waiver of any such rights.

We reserve the right to provide further comments, consult with the Secretary, take any other necessary steps, and engage with Reclamation as it proceeds with subsequent phases of the Post-2026 Operations NEPA process. In particular, the Upper Division States remain committed to negotiating in good faith with the states and water users that are prepared to live within the means of the River to reach a durable, long-term agreement on Post-2026 Operations.

k. **Conclusion**

The Upper Division States, through the UCRC, appreciate the opportunity to comment on the Draft EIS. We are committed to working with Reclamation to develop and analyze alternatives in this NEPA process. We urge Reclamation to include our comments in the development of the Final EIS and in the selection of a Preferred Alternative for the Post-2026 Operations.

Sincerely,

UPPER COLORADO RIVER COMMISSION

Charles R. Cullom
Executive Director