



The Colorado River Basin States Representatives of Arizona, California, and Nevada

February 13, 2025

Via email and U.S. Mail
c/o Daniel.gustafson@ios.doi.gov

The Honorable Doug Burgum
Secretary of the Interior
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240

Re: Congratulations and Perspectives from the Lower Basin States on the Colorado River Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Dear Secretary Burgum:

Congratulations on your appointment and confirmation as Secretary of the Interior. Your leadership in the West makes you exceptionally well-positioned to lead the Department at this critical time. We look forward to working with the Trump-Vance administration and you as we navigate the challenges and opportunities ahead for the Colorado River and the Nation.

A top priority for Arizona, California, and Nevada (the Lower Basin States) is developing the next set of operating guidelines for the Colorado River. As you know, the current guidelines governing the operations of Lake Powell and Lake Mead will expire next year in 2026, and the process of formulating new guidelines for implementation in 2027 is already underway. This effort, including the associated National Environmental Policy Act (NEPA) process, is crucial to the future management of the Colorado River system.

In a January 2025 letter to the seven Basin State Representatives, the fourteen United States Senators representing the Basin States underscored the importance of a seven-state consensus and urged Basin negotiators to commit to developing a consensus proposal for future Colorado River operations. The Lower Basin States strongly support a collaborative, consensus-driven approach to developing these guidelines and remain actively engaged in discussions among the seven Colorado River Basin States to reach a unified agreement. An imposed solution or litigation would undermine decades of cooperative progress and jeopardize our ability to continue managing the system effectively. Collaboration has long been a hallmark of the Colorado River Basin, and we are confident that, with your leadership and support, this tradition will endure and deliver success on the Colorado River in this administration.

Our commitment to this process is reflected in our proactive efforts. As an initial step, the Lower Basin States have voluntarily proposed conservation commitments totaling 1.5 million acre-feet per year under most system conditions, as part of a package that would include more substantial Basin-wide reductions when system contents fall below certain thresholds, among other operational components. We are

encouraged by the collaborative momentum ongoing among the Basin States, which we believe can lead to a consensus-driven agreement.

However, we remain concerned about the Biden-Harris administration's January issuance of the Post-2026 "Alternatives Report," which imposed a new milestone outside the standard NEPA process. This report sought to set the direction for future Colorado River operations while failing to consider the Lower Basin's proposed alternative. Of particular concern is the report's complete omission of compliance with the 1922 Colorado River Compact, the foundation of the Law of the River.

Additionally, the prior administration's approach to protecting the Lake Powell outlet works by reducing releases from Lake Powell—rather than making infrastructure repairs and improvements—is shortsighted and harms the Lower Basin States by slashing the water available to our farmers, communities, and economies. These profound impacts can be avoided by some combination of straight forward engineering fixes, moving water to Lake Powell from upstream reservoirs when necessary, and temporary reductions in Upper Basin use.

These fundamental issues, further detailed in the enclosed Attachment 1, have been repeatedly communicated to the Bureau of Reclamation and made clear in public discussions. Despite our well-documented objections during the last administration, these serious flaws were incorporated into the "Alternatives Report," undermining the negotiation process among the seven Basin States.

We are encouraged by the renewed spirit of collaboration in our ongoing discussions and optimistic that, under your leadership, we can refocus on achieving a durable, consensus-based agreement that respects the needs of our States and Nation. Our collective goal is to secure a solution that respects the cooperation of the States and avoids litigation.

Once again, congratulations on your appointment. We would welcome the opportunity to meet with you at your convenience to provide a more detailed briefing on our deep concerns with the Biden-Harris administration's "Alternatives Report" and our perspectives as Lower Basin States.

Thank you for your time and consideration. We look forward to working together in the months and years ahead.

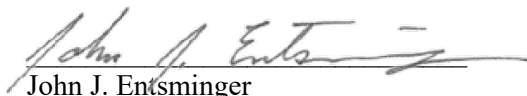
Sincerely,



Thomas Buschatzke
Governor's Representative
State of Arizona



J. B. Hamby
Governor's Representative
State of California



John J. Entsminger
Governor's Representative
State of Nevada

cc: David Palumbo, Acting Commissioner, Bureau of Reclamation
Attachment

ATTACHMENT 1

Lower Basin States Comments on Alternatives Report

On January 17, 2025, the Bureau of Reclamation (“Reclamation”) released a document entitled “Alternatives Report: Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead,” (the “Alternatives Report”). For the reasons stated below, the Secretary should direct Reclamation to retract the Alternatives Report and to collaborate with the Lower Basin States to prepare an alternatives analysis compliant with the National Environmental Policy Act (“NEPA”) and the Law of the River.¹

INTRODUCTION

Reclamation is developing post-2026 operational plans for the Colorado River Basin and evaluating those plans and alternatives pursuant to NEPA. Several reservoir and water management decisions and agreements governing the operation and management of the Colorado River and its facilities are set to expire at the end of 2026. These include the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (“2007 Interim Guidelines”), 2019 Drought Contingency Plans, and international agreements between the United States and Mexico.

The Lower Basin States remain committed to developing a consensus alternative that can achieve support among the Seven Basin States, the Tribes, the United States, Mexico, and Colorado River water users. However, developing such a consensus requires Reclamation’s compliance with the requirements of NEPA to prepare an accurate and robust analysis of alternatives and likely environmental effects, including the effects of full implementation of the Law of the River as it currently stands. The analysis and modeling of compliance with the Colorado River Compact of 1922 (the “Compact”) in all alternatives is mandatory pursuant to NEPA’s informed decision-making and public disclosure requirements and is critical to understanding the real-world implications of each alternative. Doing so could encourage development of a consensus-based approach. However, Reclamation’s failure to interpret and disclose application of the Law of the River, particularly the implications of a likely Compact Call, falls short of the minimum requirements of NEPA and leaves stakeholders to speculate regarding Reclamation’s intentions regarding future Colorado River operations during low-flow conditions. Therefore, the Secretary should direct Reclamation to evaluate a range of

¹ The Secretary of the Interior has responsibility for ensuring operation of the Colorado River water delivery systems in compliance with the Law of the River. *E.g.*, Colorado River Basin Project Act (“CRBPA”) § 602(a)-(b), 43 U.S.C. § 1552(a)-(b) (directing the Secretary to consultatively develop operational criteria—known as Long-Range Operating Criteria (“LROC”)—for federally authorized Colorado River reservoirs); *see also Arizona v. California*, 376 U.S. 340 (1964).

alternatives in the upcoming draft environmental impact statement (“DEIS”) that complies with NEPA and Reclamation’s legal obligations under the Law of the River.

To facilitate this, the Secretary should direct Reclamation to retract its previously released Alternatives Report and meet with representatives of the Lower Basin States to discuss the technical and legal deficiencies in Reclamation’s alternatives analysis as currently set forth in the Alternatives Report. Specifically, the Lower Basin States propose discussing in detail (a) why Reclamation believes the March 6, 2024 Lower Basin Alternative, as amended, fails to meet the Purpose and Need of the proposed action; (b) what additional information or analysis Reclamation needs to fully evaluate and carry forward the Lower Basin Alternative in the DEIS; (c) the need to include in the DEIS an additional alternative that includes a fix (such as repairs or structural modifications, or water management mechanisms in the Upper Basin) that would eliminate the infrastructure limitations at Glen Canyon Dam to ensure adequate water deliveries to the Lower Basin during low-flow conditions; (d) the need to include in each alternative Reclamation’s proposed application of the Compact and other elements of the Law of the River; (e) what additional legal authority Reclamation believes it needs to both ensure deliveries to the Lower Basin and protect infrastructure during low-flow conditions; and (f) the technical and legal bases for the reasonable foreseeability of a Compact Call which needs to be reflected in the DEIS Alternatives Analysis.

BACKGROUND

NEPA Alternatives Process for Post-2026 Operational Guidelines and Strategies

Reclamation began developing alternatives for the NEPA process in late 2023. In March 2024, the Lower Basin States submitted their suggested alternative to Reclamation for consideration in the ongoing NEPA process. In December 2024 and January 2025, the Lower Basin States provided additional information, including assumptions and the bases for the Lower Basin Alternative.

In November 2024, Reclamation issued a summary of the anticipated alternatives that Reclamation would carry forward for detailed analysis in the Draft EIS, which included:

- No action alternative
- Federal authorities alternative
- Federal authorities hybrid alternative
- Cooperative conservation alternative
- Basin hybrid alternative

These alternatives did not include the Lower Basin Alternative, which Reclamation claims does not satisfy the purpose and need for its proposed action.² Reclamation maintains that the “Basin Hybrid Alternative” “reflects components of the proposals and concepts submitted by the . . . Lower Division States” and others, including the Upper Division States and Colorado River Basin Tribes.³ But the Lower Basin States informed Reclamation that the various elements of their alternative “work synergistically and ... it would be inappropriate to separate individual elements and presume their stand-alone implementability.”⁴

On January 17, 2025, Reclamation published its Alternatives Report that described in more detail the five alternatives previously identified by Reclamation in its November 20, 2024 summary.

The Lower Basin States Submitted a Detailed, Viable Lower Basin Alternative

Importantly, the Lower Basin Alternative takes a holistic, science-based approach to Colorado River management:

The Lower Basin Alternative shifts away from the reliance in the 2007 Interim Guidelines on the 24-Month Study forecasts and elevations in Lake Powell and Lake Mead to determine reservoir releases and Lower Basin shortages. This [Lower Basin] Alternative instead primarily uses actual hydrology and total system contents—a recognition that, whatever the elevation of a particular reservoir in the system may be, sustainable management must be focused on contents that are actually available in the system as a whole. “Total system contents” includes the contents of Flaming Gorge, Blue Mesa, Navajo, Powell, Mead, Mohave, and Havasu. In addition to more holistically managing the system, moving away from forecasts and reservoir elevations and instead relying on actual hydrology and system contents should reduce disagreements among and between the Basins that have resulted from reliance on Lake Powell and Lake Mead elevations and 24-Month Study forecasts in the past.⁵

² Alternatives Report § 4, at 4.

³ See *id.* at ES-1 to ES-2.

⁴ See Email Correspondence from Tom Buschatzke (Arizona Department of Water Resources) to Reclamation (Jan. 13, 2025).

⁵ Lower Basin States Alternatives Letter, at 3-4 (Mar. 6, 2024).

Specifically, the Lower Basin Alternative addresses “the impacts of drought and climate change through a holistic and sustainable approach to the coordinated operations of Lake Powell and Lake Mead that improves predictability for water users” by:⁶

- **Addressing the structural deficit in the Lower Basin.** It includes reductions from Lower Basin state apportionments and deliveries to Mexico by 1.5 million acre-feet (maf) (static reduction) under most system conditions. The static reduction is larger than the structural deficit in the Lower Basin regardless of the various ways that the structural deficit may be calculated.
- **Operating the reservoirs based on system contents rather than elevations at Lake Powell and Lake Mead.** It shifts to a more holistic, systemwide approach in which operations are dictated by overall system conditions instead of forecasts and elevations in the two main reservoirs.
- **Sharing water use reductions broadly.** It recognizes the need to make water use reductions from state apportionments under most system conditions and shares those reductions predictably among the Lower Basin water users and Mexico. Under the most critical system conditions, the Lower Basin Alternative shares water use reductions between the Upper Basin and Lower Basin including Mexico.
- **Including provisions for storage and delivery of stored water.** It includes opportunities for storage and augmentation that will encourage innovation and investment.⁷

Subsequent to the initial submittal of the Lower Basin Alternative in March 2024, the Lower Basin States in June and December 2024 requested that Reclamation include compliance with the 1922 Colorado River Compact in each alternative to be analyzed in the NEPA process. Also, in the December request, the Lower Basin States provided the Compact compliance assumptions to be incorporated into the DEIS alternatives, including:

- Required deliveries pursuant to Article III of the Compact.
- Compact Call by the Lower Basin States.
- Upper Basin curtailment or other reductions as necessary to comply with the Compact requirements.

⁶ Letter from Lower Basin States to Camille Touton, Commissioner, Reclamation at 2 (Mar. 6, 2024).

⁷ See *id.* at 2-3. Originally, the Lower Basin Alternative included a Powell to Mead release regime designed to reflect Upper Basin “hydrologic shortage” by varying the release in part based upon use volumes in the Upper Basin. As discussed *infra*, the Lower Basin altered the approach to ensure that Lake Powell operates above critical elevations in a broader range of hydrologies.

- Actions by the United States in management of federal reservoirs.

These assumptions are described more fully in the December 24, 2024 email from JB Hamby to Reclamation staff.

Following that, in January 2025, the Lower Basin States provided Reclamation an amended Lower Basin Alternative. Those modifications included refinements on the proposed releases from Lake Powell to better protect Lake Powell over the analysis period.⁸ Nonetheless, Reclamation did not consider any of the Lower Basin States' post-March 2024 submitted information as part of Reclamation's Alternatives Report.⁹

Reclamation's Alleged Basis for Failing to Consider the Lower Basin Alternative

In the Alternatives Report, Reclamation claimed in conclusory fashion that "as submitted in the spring of 2024" the Lower Basin States' proposal "d[id] not provide an appropriate basis for comprehensive and coordinated operations of Lake Powell and Lake Mead, a necessary component of the purpose and need for this proposed action."¹⁰ Reclamation also claimed that it had "identified and communicated concerns about imbalanced Basin impacts and lack of reservoir coordination."¹¹

In fact, the Alternatives Report failed to provide a sufficient and documented basis for not including detailed analysis of the entire Lower Basin Alternative in the DEIS. Instead, Reclamation's "explanation" focused on the incorrect assumption that Reclamation needs to maintain the power pool elevation of 3,490 feet in Lake Powell to protect Glen Canyon Dam infrastructure. But that assumption is mistaken for three reasons. *First*, the Lower Basin Alternative, particularly as amended, provides adequate protection of Lake Powell elevations.¹²

⁸ See email from Tom Buschatzke to Reclamation Staff (Jan. 13, 2025).

⁹ See Alternatives Report § 2, at 2 ("Reclamation will continue its efforts working with Basin partners and stakeholders and will analyze information submitted after November 20, 2024.").

¹⁰ See Alternatives Report § 6.2, at 9.

¹¹ *Id.*

¹² See, e.g., Lower Basin States Alternatives Letter (Mar. 6, 2024), at 3 ("storage [opportunities provided by the alternative] will help to protect infrastructure and habitat and provide predictability for water users"); 6-7 ("[B]ased on our preliminary reviews, the Lower Basin Alternative is highly effective at keeping Lake Powell above critical elevations. Even during drier hydrologies, when Lake Powell's elevation may temporarily fall below 3500 feet, the use of total system contents . . . improves flexibility to protect critical infrastructure by enabling the movement of water through the system as necessary for infrastructure protection and

Second, consistent with NEPA and sound decision-making principles, Reclamation must evaluate alternative methods to protect the infrastructure at Glen Canyon Dam other than relying solely on reducing releases to the Lower Basin to maintain a hard elevation floor.¹³ Such alternatives could include, for instance, short-term or long-term repairs or modification of the infrastructure at Glen Canyon Dam, conservation or curtailment in the Upper Basin, revised operation of federal infrastructure upstream of Lake Powell, or operational regimes—such as proposed in the Lower Basin Alternative—that, assuming Reclamation adheres to the Law of the River, would both protect the infrastructure at Lake Powell and provide legally sufficient deliveries to the Lower Basin.¹⁴ Proceeding on the basis of a mistaken or invalid assumption—namely that Reclamation can maintain Lake Powell above elevation 3,490 feet solely by reducing releases from Glen Canyon Dam—would invalidate Reclamation’s alternatives analysis in the EIS.¹⁵ *Third*, as explained below, Reclamation’s apparent top priority of maintaining Lake Powell’s elevation above 3,490 feet at the sole expense of the Lower Basin directly contravenes numerous foundational elements of the Law of the River including the Compact, the 1944 Treaty with Mexico, LROC, and the Colorado River Basin Project Act Section 602.¹⁶

environmental flows while satisfying water delivery requirements and Compact obligations.”); email correspondence from Tom Buschatzke, *supra* n. 4 (providing modification to Lower Basin Alternative to provide “refinements to the releases from Lake Powell” for “Lake Powell release[s] to avoid critical elevations”). *See also supra* nn. 7-8 and accompanying text.

¹³ *See 'Ilio'ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1098 (9th Cir. 2006) (“When the proposed action is an integral part of a coordinated plan to deal with a broad problem, the range of alternatives that must be evaluated is broadened.”) (cleaned up); *Friends of Yosemite v. Kempthorne*, 520 F.3d 1024, 1039 (9th Cir. 2007) (agency violated NEPA because the “the action alternatives were not varied enough to allow for a real, informed choice”); *Alaska Wilderness Recreation & Tourism Ass’n v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995) (“An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, and sufficient to permit a reasoned choice.”) (cleaned up).

¹⁴ *See infra* pp. 19-23.

¹⁵ *See, e.g., Natural Resources Defense Council v. U.S. Forest Serv.*, 421 F.3d 797, 810-13 (9th Cir. 2005) (holding EIS inadequate where economic effects analysis was based on faulty timber demand forecasts, which also failed to allow for an informed comparison of alternatives in the EIS); *Alaska Wilderness Recreation & Tourism Ass’n v. Morrison*, 67 F.3d 723, 733 (9th Cir. 1995) (use of no-longer-applicable timber sale contract as constraint on selection of alternatives in EIS was inconsistent with NEPA’s requirements).

¹⁶ *See infra* nn. 51-54 and accompanying text.

Reclamation's Purpose and Need for the Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

In the Alternatives Report, Reclamation reiterated its detailed purpose of and need for the proposed federal action,¹⁷ which was also included in the June 2023 Scoping Notice for the post-2026 Operations process. At a high level, Reclamation's "need" includes:

- The Secretary is legally required to **coordinate operations** of Colorado River reservoirs;
- 2007 Interim Guidelines are expiring;
- 2007 Interim Guidelines have not sufficiently reduced risk;
- Imbalance between water supply and demand will be exacerbated by **increasingly likely low-runoff conditions**;
- Expanded and innovative use of conservation is needed; and
- Addressing Tribal concerns regarding Colorado River Basin management.

The "purpose" for the proposed federal action is to:

- Update and expand management guidelines for Colorado River reservoirs, particularly for Lake Powell and Lake Mead;
- Provide Colorado River water users a **greater degree of predictability** with respect to the amount of annual water available in future years under anticipated increasing variability, low runoff, and low reservoir conditions;
- Provide **additional mechanisms** for the conservation, storage, and delivery of water supplies in Colorado River reservoirs;
- Provide new or enhanced opportunities for Basin Tribes to benefit from their water rights; and
- Provide flexibility to build resilience and accommodate future needs and growth that are supported by Colorado River water supplies, including the integration of unquantified Tribal water rights once they are resolved.¹⁸

¹⁷ See Alternatives Report § 5, at 6-7.

¹⁸ See Alternatives Report § 5, at 6-7 (emphases added); *see also* 88 Fed. Reg. 72535, 72536 (Oct. 20, 2023) (Reclamation Scoping Notice for the proposed action).

Reclamation's Stated NEPA Approach to Alternatives Development

Reclamation emphasized in its scoping Notice of Intent that “Future operational guidelines and strategies should incorporate a **more holistic approach to Colorado River water management** ...; [d]etermine[] those conditions under which the Secretary would **reduce the annual amount of water available for consumptive use**...; [and] expand[] participation in **conservation and Basin-wide programs**.”¹⁹

The factors that Reclamation said it would consider include the “circumstances under which the Secretary would allocate, **reduce**, or increase the annual amount of water available for **consumptive use** from Lake Mead ...; [s]torage and delivery **of conserved water in Lake Mead and/or Lake Powell to increase . . . flexibility** ...; [a]pproaches that consider **total system storage in all major Colorado River reservoirs** and/or actual inflows ...; [a]pproaches that include opportunities for **conservation, augmentation, demand management**, or other water management strategies...; and [use of] the **best scientific information currently available**; actual operating experience since 2007; updated information on infrastructure considerations at Glen Canyon Dam and Hoover Dam; tradeoffs between the frequency and **magnitude of reductions in water deliveries**; mechanisms to **encourage water conservation**, efficiency improvements, and augmentation.”²⁰

The Lower Basin Alternative accomplishes those objectives and is consistent with Reclamation's stated purpose and need. Reclamation has not shown otherwise. Thus, not carrying forward the Lower Basin Alternative for detailed consideration in the NEPA alternatives analysis would contravene Reclamation's stated purpose and need, objectives, and approach to the NEPA alternatives, and would violate NEPA's alternatives consideration requirements. While this letter does not provide an exhaustive list, the primary deficiencies in the current alternatives analysis are explained further below.

DISCUSSION

I. Lack of Detailed Analysis of the Lower Basin Alternative Violates NEPA

Reclamation must consider a “reasonable range of alternatives,” and identify the more “environmentally preferable alternative” that “best promote[s] the national environmental

¹⁹ 88 Fed. Reg. 39455, 39456-57 (Jun. 16, 2023) (emphases added).

²⁰ 88 Fed. Reg. 72545, 72536 (Oct. 20, 2023) (emphases added).

policy ... by maximizing environmental benefits.”²¹ Moreover, Reclamation must consider an alternative that stakeholders show to be reasonable and distinguishable from other alternatives considered.²²

The Lower Basin Alternative satisfies the reasonable alternative requirement. The Lower Basin States informed Reclamation in their March 6, 2024 Letter as to why the Lower Basin Alternative is viable and environmentally beneficial.²³ A viable alternative includes one that is technically and economically feasible, consistent with the purpose and need statement for the proposed action, and matches the deciding agency’s statutory or congressionally directed duties, which the Lower Basin Alternative does.²⁴

²¹ 42 U.S.C. § 4332(2)(C)(iii); 43 C.F.R. §§ 46.30, 46.450 (2024); 40 C.F.R. § 1502.14(f) (2024) (subject to rescission).

²² *Env’t Def. Ctr. v. Bureau of Ocean Energy Mgmt.*, 36 F.4th 850, 877 (9th Cir. 2022) (“The existence of a viable but unexamined alternative renders the environmental review conducted under NEPA inadequate.”) (invalidating an environmental assessment for failing to consider commenter-proposed alternatives) (cleaned up); *High Country Conservation Advocates v. U.S. Forest Serv.*, 951 F.3d 1217, 1224-27 (10th Cir. 2020) (invalidating an environmental impact statement for failing to consider a commenter-proposed alternative that met the Forest Service’s statutory mandate, its objectives for the project, and was significantly distinguishable from the alternatives considered).

²³ See *Morongo Band of Mission Indians v. FAA*, 161 F.3d 569, 576 (9th Cir. 1998) (A “specific, detailed counterproposal that ha[s] a chance of success” must be considered by agency); *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 711 (10th Cir. 2009) (an agency must evaluate a commenter-proposed alternative that “falls within the agency’s statutory mandate” and meets “the agency’s objectives for a particular project.”).

²⁴ See 43 C.F.R. § 46.420(b) (DOI NEPA regulation defining “reasonable alternatives” to include “alternatives that are technically and economically practical or feasible and meet the purpose and need of the proposed action”); *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 814 (9th Cir. 1999) (non-land exchange options such as outright purchase of lands or placing conditions on land leaving federal ownership were viable alternatives and rendered EIS range of alternatives inadequate where Forest Service failed to consider such options); *WildEarth Guardians v. Bureau of Land Mgmt.*, 870 F.3d 1222, 1237-38 (10th Cir. 2017) (agency coal lease EIS had inadequate range of alternatives where it was premised on “an economic assumption [substitutability of coal from other sources if proposed leases were not approved], which contradicted basic economic principles, as the basis for distinguishing between the no action and the preferred alternative”); *Richardson*, 565 F.3d at 710-11 (agency range of alternatives in land management planning EIS held inadequate and violative of NEPA where it did not consider options of prohibiting surface disturbance in an environmentally sensitive area (Otero Mesa),

The Lower Basin Alternative, including its initial anticipated environmental effects, is “significantly distinguishable” from other alternatives.²⁵ Also, considering the Lower Basin Alternative in detail fosters NEPA’s twin goals of informed agency decision-making and public participation.²⁶ It may also facilitate efforts by the Seven Basin States to make progress on a consensus-based approach.

II. Reclamation’s Alternatives Analysis Failed to Adequately Address Application of the Law of the River and a Reasonably Foreseeable Compact Call

The Lower Basin States endorse the following statement contained in the Alternatives Report:

Since 1970, the Basin States have supported operations and reached agreements among themselves and with the Secretary on various aspects of Colorado River reservoir operations. It is beyond question that, historically, **achieving a consensus-based approach to Basin reservoir operations has proved critical to the long-term operating success of the Basin.**²⁷

which was a reasonable management option); *Utahns v. U.S. Dep’t of Transp.*, 305 F.3d 1152, 1164-66, 1169-71, 1192 (10th Cir. 2002) (range of alternatives in agency highway project EIS was inadequate and violated NEPA where it failed to document cost methodology for eliminating alternative alignment from detailed consideration in EIS, failed to consider alternative of whether public transportation could alleviate “the immediacy of the need for” the highway project, and failed to consider integrating developing new highway capacity with expansion of public transit), *amended on other grounds on partial grant of reh’g*, 319 F.3d 1207 (10th Cir. 2003).

²⁵ See, e.g., *Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1038 (9th Cir. 2008) (range of action alternatives in National Park Service EIS for management of Merced River through Yosemite Valley was “unreasonably narrow because the alternatives are virtually indistinguishable from each other”; “An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, and sufficient to permit a reasoned choice.”) (cleaned up); see also *Headwaters, Inc. v. Bureau of Land Mgmt.*, 914 F.2d 1174, 1181 (9th Cir. 1990) (agency is not required to undertake a “separate analysis of alternatives which are not significantly distinguishable from alternatives actually considered, or which have substantially similar consequences”).

²⁶ *Env’t Def. Ctr. v. Bureau of Ocean Energy Mgmt.*, 36 F.4th 850, 878 (9th Cir. 2022).

²⁷ See Alternatives Report § 7.1, at 12 (emphasis added).

The Lower Basin States remain committed to working with Reclamation and the Upper Basin States towards a consensus-based approach as occurred with the near-term Lower Colorado River operational guidelines.²⁸ However, the Lower Basin States believe that Reclamation must provide all the “relevant information” needed for the Seven Basin States and other stakeholders to fully understand how Reclamation will apply the Law of the River in each alternative.

NEPA’s procedural and analytical requirements are designed to ensure that all “**relevant information**” will be made available to the larger audience that may also play a role in both the decision making process and the implementation of that decision.”²⁹ To do so, Reclamation must identify and interpret legal obligations relating to the proposed action. NEPA itself requires that “to the fullest extent possible ... the policies, regulations, and public laws of the United States shall be **interpreted** and administered in accordance with the policies set forth in this [Act].”³⁰ Nothing in NEPA absolves Reclamation from interpreting and applying other “**specific statutory obligations**,” such as the Law of the River.³¹ These provisions require that “unless there is an exemption from NEPA compliance, [Reclamation] must comply with NEPA” and other applicable laws, and the NEPA decision-making process analysis must reflect the same.³² Similarly, courts will hold unlawful agency actions, findings and conclusions if the agency’s decision is “arbitrary, capricious, an abuse of discretion, or otherwise not in **accordance with law**,” “in excess of **statutory jurisdiction, authority, or limitations**,” or “without observance of **procedure required by law**.”³³

For the current NEPA process, the most “**relevant information**” includes how, under each alternative, Reclamation will apply the Law of the River in “accordance with” and subject to the “statutory jurisdiction, authority, or limitations,” and “procedures” set forth in applicable laws governing Colorado River operations. Reclamation’s “operational concepts” common to each alternative that “[r]eleases from Lake Powell may be less than the specified release at

²⁸ See DOI Press Release (May 22, 2023), available [here](#).

²⁹ See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (emphasis added); see also *WildEarth Guardians v. Bureau of Land Mgmt.*, 870 F.3d 1222, 1237 (10th Cir. 2017) (“NEPA has two purposes: prevent uninformed agency decisions and provide adequate disclosure to allow public participation in those decisions.”) (citing *Methow Valley*, 490 U.S. at 349).

³⁰ NEPA § 102, 42 U.S.C. § 4332 (emphasis added).

³¹ NEPA § 104, 42 U.S.C. § 4334 (emphasis added).

³² See, generally, Daniel R. Mandelker et al., NEPA Law & Litig. § 2:22 (2d ed., 2024 update) (online edition).

³³ Administrative Procedure Act (“APA”), 5 U.S.C. § 706(2)(A), (C), (D).

elevations below 3,490 feet” and “[a]dditional Lower Basin shortages (and potential additional reductions in water deliveries to Mexico) may be necessary under future hydrologic scenarios” mandate full consideration of how the Law of the River factors into each alternative.³⁴ If Reclamation fails to explain its interpretation of the key components of the Law of the River and how they apply to each alternative especially during low-flow conditions, the EIS analysis will be incomplete and lack transparency.

While the Lower Basin understands that the Alternatives Report is not Reclamation’s full EIS analysis, assuming that it accurately reflects the direction of the DEIS, the alternatives analysis is legally deficient and falls short of providing the most **relevant information**, as explained below:

First, Reclamation commits in the Alternatives Report that it “will follow all relevant provisions of federal law to implement the proposed federal action, including relevant provisions of the Law of the River.”³⁵ Reclamation further acknowledges that its decisions are governed by the following legal requirements comprising the “Law of the River”:³⁶

- 1922 Colorado River Compact;³⁷
- Colorado River Basin Project Act § 602(a);³⁸

³⁴ Alternatives Report § 7.2, at 12.

³⁵ *Id.* § 7.1.1, at 11.

³⁶ Alternatives Report § 4, at 5, n. 5 (“[I]t is the intent of the Department to adopt and implement the guidelines in a manner consistent with the Law of the River....”).

³⁷ *Id.* § 7.1.1, at 12 (“Reclamation’s goal in providing detailed information on the potential flow of the river at Lee Ferry under all analyzed alternatives is to ensure that all entities, including the Upper and Lower Division States, **can use the relevant flow information to assess how potential future operations under the various alternatives comply with their respective views of the 1922 Colorado River Compact.**”) (emphasis added).

³⁸ *Id.* § 7.3.2.1, at 15 n. 18 (“For modeling purposes, Reclamation intends that the equalization line concept used in the 2007 Interim Guidelines be applied and extended **in the same manner as adopted in the 2007 Interim Guidelines with reference to 602(a) considerations.**”) (emphasis added); § 7.4.2.1, at 18, n. 20 (repeating the same footnote for the Federal Authorities Alternative). Ironically, while the Alternatives Report claims that Reclamation is seeking to avoid weighing in on disputes among the States regarding the Law of the River, this assumption evolved from a contentious dispute in Fall 2007, when one State invoked consultation under the April 2007 Seven States’ Agreement. The matter is still likely subject to dispute among the States, and the Lower Division States have not consented to the use of this assumption for implementation purposes after 2026. Reclamation’s choice to use this

- Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs (“LROC”);³⁹
- 2006 Consolidated Decree in *Arizona v. California*, 574 U.S. 150 (2006);⁴⁰ and
- 1944 Water Treaty.⁴¹

Based on Reclamation’s commitments above, one anticipates that Reclamation would explain how the Law of the River will be applied to each alternative. But Reclamation avoids this NEPA analysis and disclosure obligation and claims that it does not need to do so, stating “The proposed federal action is not designed to provide interpretation of the 1922 Colorado River Compact or resolve **differing interpretations** by Basin States, Basin Tribes, and other stakeholders.”⁴²

Reclamation’s unwillingness to disclose application of the Law of the River to each alternative and modeled scenario contradicts Reclamation’s own admission that Reclamation itself is legally obligated to apply the Law of the River to future Colorado River operations. Reclamation’s posture seems to be “kick the can down the road.” NEPA forecloses such an approach.⁴³

particular assumption for modeling purposes is effectively an interpretation of the Law of the River with which the Basin States disagree.

³⁹ *Id.* § 7.1.1, at 11 (“Reclamation recognizes that, under Article II(2) of the LROC, the ‘objective shall be to maintain a minimum release of water from Lake Powell of 8.23 [maf].’ Reclamation also recognizes that variation in releases of water above and below the minimum objective release of 8.23 maf can, in **appropriate circumstances**, be adopted.”) (emphasis added).

⁴⁰ *Id.* § 4, at 4 n. 4 (“intends to meet any consultation requirements identified in Article II(B)(3) of the Supreme Court Decree in *Arizona v. California* through the ongoing NEPA process initiated by the Federal Register Notice of June 16, 2023 (88 Federal Register 39455), and the annual implementation of guidelines developed through this process”) (emphasis added).

⁴¹ *Id.* § 7.2, at 12-13 (“Modeling assumptions that identify water deliveries to Mexico pursuant to the **1944 Water Treaty** would be developed after all necessary and appropriate discussions have been completed with the United States International Boundary and Water Commission in consultation with the Department of State.”) (emphasis added).

⁴² *Id.* § 7.1.1, at 11 (emphasis added).

⁴³ See *Methow Valley Citizens Council*, 490 U.S. at 349 (“NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast.”); see also 43 C.F.R. §§ 46.200(a), 46.235(a) (2024) (requiring “as early as feasible” coordinating and “integrating other environmental reviews”); 40 C.F.R. § 1501.2(a) (2024) (subject to rescission) (“Agencies should integrate the NEPA

Second, while the Lower Basin States believe that Reclamation must provide in the alternatives analysis an analysis of application of the Law of the River to each alternative, it is imperative that Reclamation include a detailed analysis of Law of the River impacts in the “Federal Authorities Alternative” because it “does not presume water users within the Basin would voluntarily agree to depart from the priority system for water use reductions, give their consent to water conservation mechanisms, or enter into other voluntary agreements.”⁴⁴ The following excerpt from Reclamation’s description of the “Federal Authorities Alternative” illustrates the incompleteness of the analysis:

This action alternative would represent **specific decisions** by Reclamation about how to best operate the system to meet the purpose and need while informing the public about the environmental effects and **operational challenges** that would result under existing federal authorities **without the development and adoption of new authorities or water management mechanisms**.⁴⁵

Reclamation acknowledges that it must make “specific decisions” to address “operational challenges,” but currently lacks legal authority to do so—without disclosing what additional authority is needed:

The full extent of Reclamation’s operational authority has not been tested to date—either operationally or through legislative or judicial review. Accordingly, Reclamation’s description of how this alternative would be implemented relies on **legal, operational, and engineering judgment** regarding future operations under a broad range of hydrologic conditions. To mitigate the reasonably foreseeable undesirable consequences if authorities are limited to those already existing, **Reclamation would**

process with other planning and authorization processes **at the earliest reasonable time** to ensure that agencies consider environmental effects in their planning and decisions, to avoid delays later in the process, and to head off potential conflicts.”) (emphasis added).

⁴⁴ Alternatives Report § 7.4, at 16. Although Reclamation correctly assumes that this alternative does not constitute “Reclamation’s version of a **potential consensus alternative**,” Reclamation asserts, without analysis or explanation, that the Federal Authorities Alternative “provides environmental compliance for a specific set of operations as a NEPA alternative that Reclamation could implement beginning in WY 2027 (that is, beginning October 1, 2026) if either no consensus among relevant entities in the Basin is developed or no additional congressional authorizations are adopted.” *Id.* at 17 (emphasis added).

⁴⁵ *Id.* at 17 (emphases added).

actively seek additional authorities from Congress (and potentially the Supreme Court) to protect critical infrastructure if this alternative were to be selected in the ROD.⁴⁶

Based on the above, Reclamation has in fact evaluated its existing “legal authority” and concluded that without additional authority from Congress or the Supreme Court, it cannot protect “critical infrastructure.” Yet, Reclamation fails to explain:

- The contours of the “legal, operational, and engineering judgment” Reclamation must exercise under its Federal Authorities Alternative;
- What specific authority Reclamation believes it currently lacks;
- What additional authority Reclamation believes it needs to protect critical infrastructure;
- What specific “critical infrastructure” Reclamation refers to and what other means Reclamation could use to protect such infrastructure (e.g., major repairs, structural changes, or other “water management mechanisms”) without additional legal authority.

The fact that the “full extent of Reclamation’s operational authority has not been tested” in the courts does not relieve Reclamation from explaining its understanding of its current operational authority and how it will be exercised under low-flow scenarios. Otherwise, the alternatives analysis is incomplete, and the Basin States and other stakeholders are left to speculate regarding operations under low-flow conditions in the absence of a consensus agreement. In contrast, as mentioned above, a complete analysis could provide a needed foundation for the Seven Basin States to develop a new consensus approach.

Moreover, Reclamation asserts that it is not possible to provide additional details regarding this alternative:

While Reclamation has had experience with high-flow Flood Control operations at Lake Powell and Lake Mead, the agency does not have experience at these reservoirs with **extreme low-flow conditions** threatening critical infrastructure, which **makes it impossible to predict outcomes with any certainty**. Reclamation would need to **balance equity and infrastructure concerns** in real time under such conditions.⁴⁷

⁴⁶ *Id.* at 16-17 (emphases added).

⁴⁷ *Id.* at 17 (emphases added).

Reclamation applies the wrong legal standard to determine how much analysis is required to describe the Federal Authorities Alternative. NEPA does not require “certainty” of the outcome of each alternative analyzed, the ultimate legal authority it will exercise, or how it will be exercised under low-flow conditions.⁴⁸ Rather, NEPA requires that Reclamation “utilize a systematic, interdisciplinary approach” based on “natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man’s environment.”⁴⁹ Moreover, the alternatives analysis “should sharply define the issues for the decision maker and the public and provide a clear basis for choice among options,”⁵⁰ which here requires an explanation of application of the Law of the River to each alternative. Similarly, Reclamation fails to disclose the “equity and infrastructure” concerns and how they will be balanced, all of which relate to Reclamation’s interpretation of the Law of the River and application of the same.

Third, the Lower Basin and Upper Basin States have differing interpretations of key components of the Law of the River and how they would apply especially to the Federal Authorities Alternative and the No Action Alternative, both of which assume no Seven Basin State consensus approach or additional Reclamation legal authority.

The following provides one crucial example of differing interpretations of application of the Law of the River to long-term Colorado River management under low-flow conditions. The LROC requires Reclamation to create annual plans of operation for the Colorado River Storage Project (“CRSP”) units and Lake Mead. Such plans must include a determination, consistent with Colorado River Basin Project Act § 602(a)(3), as to how much water is needed in storage to satisfy future delivery requirements to Mexico and the Lower Basin States under 602(a)(1) and (2).⁵¹ Importantly, the Upper Basin States have asserted that Section 602(a) “allow[s] the

⁴⁸ See NEPA § 102(2)(A), 42 U.S.C. § 4332(2)(A); 40 C.F.R. § 1502.15(b) (2024) (subject to rescission) (requiring agencies to “use high-quality information, including reliable data and resources, [and] models.”).

⁴⁹ NEPA § 102(2)(A), 42 U.S.C. § 4332(2)(A).

⁵⁰ See 40 C.F.R. § 1502.14 (2024) (subject to rescission).

⁵¹ The relevant statutory language provides: “In order to comply with and carry out the provisions of the Colorado River Compact [of 1922], the Upper Colorado River Basin Compact, and the Mexican Water Treaty, the Secretary shall propose criteria for the coordinated long-range operation of [the CRSP reservoirs and Lake Mead] **The criteria shall make provision for the storage of water in [CRSP Reservoirs] and releases of water from Lake Powell in the following listed order of priority:** (1) releases to supply one-half the deficiency described in article III(c) of the Colorado River Compact, if any such deficiency exists and is chargeable to the States of the Upper Division . . . ; (2) releases to comply with article III(d) of the Colorado River

Upper Division States to continue to meet their obligations under the [Compact] without impairing their ability to consumptively use the waters of the Colorado River System apportioned to them in perpetuity by the Compact” notwithstanding the annual releases prioritized in 602(a)(1)-(2).⁵² However, nothing in Section 602(a) or the LROC suggests the conditions under which less than 8.23 maf would be released each year for the Lower Basin and Mexico.⁵³ In the reasonably foreseeable event of ongoing low-flow conditions, it is certain that Reclamation will be required to render its own interpretation of the Colorado River Basin Project Act and other elements of the Law of the River. Reclamation can and must analyze the same in the alternatives analysis.

Fourth, if low-flow conditions continue to occur in the future, which the Alternatives Report seems to assume, it is then reasonably foreseeable that Compact curtailment (also known as a “Compact Call”) will result if the Basin States do not reach a consensus approach. The Lower Basin States have already submitted comments to Reclamation emphasizing the need to analyze the impacts of a Compact Call under each alternative and why a Compact Call is reasonably foreseeable.⁵⁴ A core NEPA requirement is that an EIS include consideration of reasonably foreseeable effects and actions, such as the Compact Call.⁵⁵ To ensure a legally sufficient analysis of a reasonably foreseeable Compact Call, the Lower Basin States request

Compact, less such quantities of water delivered into the Colorado River below Lee Ferry to the credit of the States of the Upper Division from other sources; and (3) **storage of water not required for the releases specified in clauses (1) and (2) of this subsection to the extent the Secretary . . . shall find this to be reasonably necessary to assure deliveries under clauses (1) and (2)** without impairment of annual consumptive uses in the upper basin pursuant to the Colorado River Compact: Provided, That water not so required to be stored shall be released from Lake Powell: (i) to the extent it can be reasonably applied in the States of the Lower Division to the uses specified in article III(e) of the Colorado River Compact [except when] the active storage in Lake Powell is less than the active storage in Lake Mead, (ii) to maintain, as nearly as practicable, active storage in Lake Mead equal to the active storage in Lake Powell....” CRBPA § 602(a), 43 U.S.C. § 1552(a) (emphases added).

⁵² See Upper Basin States, Letter regarding “Reclamation’s Consideration of 602(a) Storage in the No Action Alternative,” at 1 (Jun. 11, 2024).

⁵³ For more information regarding the disagreement between the Upper and Lower Basin States on this issue, see Lower Basin States Letter to Reclamation re “Upper Division States’ June 11, 2024 Letter Regarding 602(a) Storage Considerations in the No-Action Alternative” (June 25, 2024).

⁵⁴ See Lower Basin Letter to Reclamation re “Upper Division States’ June 11, 2024 Letter Regarding 602(a) Storage Considerations in the No-Action Alternative” (June 25, 2024).

⁵⁵ See NEPA § 102(2)(C)(i),(ii), 42 U.S.C. § 4332(2)(C)(i),(ii).

that Reclamation include the following assumptions regarding a Compact Call in the analysis of each alternative other than the Lower Basin Alternative:⁵⁶

- **Required deliveries pursuant to Article III of the Compact:** The Compact requires the delivery of the following at Lee Ferry: 75 MAF every 10 years, on a rolling basis, plus the Upper Basin States' share of the Mexico Treaty obligation.
- **Compact call by the Lower Division States:** As stated above, it is reasonably foreseeable that if deliveries at Lee Ferry fail to satisfy the Compact requirements, the Lower Basin States will make a Compact Call for delivery of the deficit.
- **Upper Basin curtailment or other reductions:** It is reasonably foreseeable that, in the event of a Compact Call, the Upper Basin States will take, or be compelled to take, the necessary steps to comply with the Compact requirements, whether through curtailment, demand management storage in Lake Powell, or voluntary conservation measures. If a particular alternative incorporates a demand management storage program in Lake Powell or other conservation measures, it would be appropriate to assume utilization of that program according to its terms. Otherwise, it should be assumed that the Upper Basin States will curtail users as necessary (i.e., implement reductions) to satisfy their obligation. The Lower Basin States would support modeling of curtailment consistent with the requirements of the 1948 Upper Colorado River Basin Compact and the 1922 Colorado River Compact.
- **Actions by the United States in management of federal reservoirs:** Congress directed Reclamation to operate all federal infrastructure, including federal reservoirs, consistently with the 1922 Colorado River Compact, and Section 602(a) of the Colorado River Basin Project Act directs the Secretary to manage Upper Basin federal reservoirs to prioritize releases for Compact compliance, second only to releases to satisfy the Treaty obligation to Mexico. The 1970 Long Range Operating Criteria provide for minimum annual releases of 8.23 maf to meet these priorities. Given this, it is reasonably foreseeable the United States will comply with these and other related elements of the Law of the River in operating the reservoirs.
- **Actions needed in advance of a Compact Call:** In addition to releasing water from Upper Basin reservoirs in response to a Compact Call, we expect that the United States will take actions necessary to release water from those reservoirs in advance of a Compact Call. Recognizing that the existing environmental compliance, or even physical capacity, of the reservoirs may not permit single-year releases on the scale

⁵⁶ See *Save the Colorado v. U.S. Army Corps of Eng'rs*, No. 18-cv-03258, 2024 WL 4519201, at *14 n.24, 2024 U.S. Dist. LEXIS 189322 (D. Colo. Oct. 16, 2024) (Court, in concluding that the agency violated NEPA for other reasons, stated that given the "last few decades of severe aridity . . . it is perplexing . . . that the Corps dismissed the possibility of a [1922 Colorado River] compact call in its analysis of a proposed water management project.").

necessary to satisfy a Compact Call, the United States should prepare by moving water through the reservoirs in advance, to satisfy any potential, near-term Compact Call. These anticipatory measures will be particularly important considering the need to protect critical infrastructure.

III. Reclamation's Failure to Consider an Alternative that Addresses the Long-term Infrastructure Limitations from Glen Canyon Dam Violates NEPA

Reclamation identifies the first (and apparently most important in Reclamation's judgment) operational constraint "common to all alternatives" as follows: "Releases from Lake Powell may be less than the specified release at elevations below 3,490 feet **due to Glen Canyon Dam infrastructure limitations.**"⁵⁷ Regarding "infrastructure limitations," the Alternatives Report further states under each action alternative that "[i]f Lake Powell is projected to fall below 3,490 feet after additional releases are made from CRSP Upper Initial Units..., Lake Powell releases would be reduced to protect 3,490 feet. If a monthly release is reduced to protect 3,490 feet, subsequent months' releases within the WY would be increased to make up the volume if possible."⁵⁸

Elsewhere, Reclamation has explained the basis of the 3,490-elevation needed to address infrastructure limitations. Specifically, in April 2023 Reclamation conducted a "High Flow Experiment" ("HFE") release to rebuild beaches and sandbars in the Colorado River. Thereafter, Reclamation discovered damage in the Glen Canyon Dam "river outlet works" (also known as "bypass tubes").⁵⁹

The river outlet works consist of four steel pipes that move water from Lake Powell directly downstream into the Colorado River, bypassing the hydropower generating units. Reclamation explained that the river outlet works are the "only means for releasing water below elevation 3,490 ft" because "[w]ater cannot be released from the spillways below elevation 3,648 ft, nor through the penstocks below elevation 3,490 ft. Water can theoretically be released from the outlet works down to elevation **3,370 ft**, which is the intake invert and dead pool elevation."⁶⁰

⁵⁷ Alternatives Report § 7.2, at 12 (emphasis added).

⁵⁸ *Id.* § 7.4.2.2, at 19.

⁵⁹ Reclamation Press Release, "Glen Canyon Dam begins relining project as part of the President's Investing in America agenda" (Sept. 3, 2024).

⁶⁰ Reclamation, "Technical Decision Memorandum: Establishment of Interim Operating Guidance for Glen Canyon Dam during Low Reservoir Levels at Lake Powell," at 3-4 (Mar. 26, 2024) (emphasis added) ("Technical Decision Memorandum"), available here.

On March 26, 2024, Reclamation released a “Technical Decision Memorandum,” explaining that the April 2023 release and other HFE releases in 1996, 2004, 2008, 2012, 2013, 2014, 2016, 2018, and 2023 from the river outlet works, combined with flood control releases in 1984-1987 had over time damaged the original coal tar enamel lining as a result of “cavitation.”⁶¹

Reclamation further explained in the Technical Decision Memorandum that it planned to replace the original coal tar enamel lining with a “solvent borne epoxy” at a cost of \$8.9 million from the Bipartisan Infrastructure Law.⁶² Importantly, Reclamation explained that the removal and replacement of the lining of the river outlet works was a short-term fix, not a long-term solution for ensuring “continuous long-term operation” of Glen Canyon Dam:

“[T]here is concern with using the outlet works to provide long-term releases, particularly at high flows.... In order to achieve a high level of confidence for continuous long-term operation of the outlet works, a **major overhaul or replacement of the hollow-jet valves should be considered**.... A value planning study is currently planned to inform whether to refurbish or replace the hollow-jet valve hydraulic operating system.”⁶³

On September 3, 2024, Reclamation reiterated in a press release that the relining project will not address the risks to Glen Canyon Dam from cavitation: “While relining the outlets won’t prevent the risk of additional cavitation when operating at low reservoir levels, Reclamation is working on reducing that risk through the recent development of interim operating guidance for the outlets and additional analyses.”⁶⁴

Reclamation’s approach to addressing the Glen Canyon Dam infrastructure limitations caused by damage to the river outlet works is inconsistent with NEPA’s requirements for the following reasons:

First, Reclamation does not include addressing the Glen Canyon Dam infrastructure limitations in the statement of “Purpose and Need” contained in both the October 2023 Scoping Report and January 2025 Alternatives Report.⁶⁵ However, the Alternatives Report

⁶¹ *Id.* at 6.

⁶² *Id.* at 4; Reclamation Press Release, *supra* note 59.

⁶³ *Id.* at 7 & n. 4 (emphasis added).

⁶⁴ Reclamation Press Release, *supra* note 59.

⁶⁵ *See Scoping Report for the Post-2026 Colorado River Reservoir Operations* § 5.2, at 60-61 (Oct. 2023); Alternatives Report § 5, at 6-7. Perhaps not coincidentally, because Reclamation’s

elevates to the highest de facto purpose of the proposed action maintaining the Lake Powell elevation above 3,490 feet “**due to Glen Canyon Dam infrastructure limitations.**”⁶⁶ Reclamation imposes this constraint in all the action alternatives without including any alternative which provides a long-term design, reparation, or other solution to allow long-term use of the river outlet works at below the 3,490 ft elevation in order to deliver water to the Lower Basin “under a wide range of potential future system conditions due to a changing climate.”⁶⁷ By not including an action alternative that resolves Glen Canyon infrastructure limitations, Reclamation impermissibly limits the range of reasonable alternatives.⁶⁸

Second, Reclamation is currently considering alternatives to eliminating the infrastructure limitations in a “value planning study” outside the NEPA process to ensure a “high level of confidence for continuous long-term operation of the outlet works” by overhauling or replacing the hollow-jet valves and other possible solutions (which may also include reengineering the dam or routing water through bypass tunnels).⁶⁹ A central purpose of the Post-2026 Operational Guidelines analysis is to evaluate “additional mechanisms for the ... delivery of water supplies in Colorado River reservoirs,” including use of “different operational approaches,” and to “inform the public about “operational challenges” and “water

Purpose and Need descriptions fail to include addressing Glen Canyon Dam infrastructure limitations through mechanical alterations, they also fail to include all other reasonable actions that might address those limitations including, without limitation, conservation in the Upper Basin, curtailment in the Upper Basin, and revised operation of upstream reservoirs.

⁶⁶ Alternatives Report § 7.2, at 12 (emphasis added). The de facto elevation of maintaining Lake Powell elevation above 3,490 feet – which is also the minimum elevation to operate the hydropower (“power pool”) – also appears inconsistent with governing law and Reclamation’s duty to operate “regulatory structures controlled by the United States and from releasing water controlled by the United States other than in accordance with the following order of priority: (1) For river regulation, improvement of navigation, and flood control; (2) For irrigation and domestic uses, including the satisfaction of present perfected rights; and (3) For power.” See *Arizona v. California*, 547 U.S. 150, 154–56 (2006); see also 43 U.S.C. § 1501(a) (per the “Congressional declaration of purpose and policy..., the generation and sale of electrical power [is] an incident of the ... purposes” of the management of the “Colorado River Basin Project” to provide “adequate water supplies” to water users).

⁶⁷ Alternatives Report § 4.0, at 4.

⁶⁸ See, e.g., *Env’t Def. Ctr. v. Bureau of Ocean Energy Mgmt.*, 36 F.4th 850, 877 (9th Cir. 2022) (agencies fail to meet their NEPA obligations when they do not “give full and meaningful consideration to all reasonable alternatives,” including the reasonable alternatives presented by stakeholders).

⁶⁹ See Reclamation, Technical Decision Memorandum, *supra* note 60, at 7.

management mechanisms ... within any operational framework.”⁷⁰ Reclamation purports to evaluate “better operational protection for Lake Powell ... and associated infrastructure,”⁷¹ yet fails to address measures to resolve the infrastructure limitations caused by river outlet works damage. Addressing the infrastructure limitations may be the one long-term measure that would best achieve operation and management improvements to the Glen Canyon Dam. Accordingly, Reclamation in this NEPA process must evaluate the impacts of infrastructure repairs, modifications and enhancements at Glen Canyon Dam, including overhauling or replacing the hollow-jet valves and other possible solutions, which Reclamation acknowledges are feasible.⁷²

Third, it is unclear whether Reclamation is relying on a NEPA categorical exclusion to separately evaluate long-term repairs, modifications and enhancements to the Glen Canyon Dam.⁷³ Even if it is, separately evaluating infrastructure repairs, modifications and enhancements in a separate planning process (i.e., the “value planning study”) contravenes the requirement that “[t]he agency shall evaluate, in a single review, proposals or parts of proposals that are related closely enough to be, in effect, a single course of action.”⁷⁴ Evaluating Glen Canyon Dam infrastructure limitations fixes to allow more water deliveries to the Lower Basin States during low Lake Powell elevations cannot be teased out of the “course of action” establishing rules for coordinated operation of Lakes Powell and Mead. Moreover, it is difficult to envision how significant changes to Glen Canyon Dam resulting from the uncorrected infrastructure limitations that directly impacts how much water is released to the Lower Basin States during low-flow conditions does not constitute a “major federal action”

⁷⁰ Alternatives Report §§ 5, 6, and 7, at 6-8, 17.

⁷¹ *Id.* § 7.7, at 29.

⁷² NEPA’s 2023 Amendments direct agencies to discuss in an EIS “a reasonable range of alternatives to the proposed action ... that are technically and economically feasible, and meet the purpose and need of the proposal.” NEPA § 102(2)(C)(iii), 42 U.S.C. § 4332(2)(C)(iii).

⁷³ Reclamation has a legal obligation to maintain federal water delivery infrastructure in good repair and operation, and no categorical exclusion permits Reclamation to ignore NEPA compliance with respect to the evaluation and implementation of major reparations of federal infrastructure that have significant consequences to downstream users. See Department of the Interior, 516 Department Manual Chap. 14, § 14.5 (Reclamation Categorical Exclusions) (Dec. 2020).

⁷⁴ 40 C.F.R. § 1501.3(b) (2024) (subject to rescission); 43 C.F.R. §§ 46.430(b) (“The environmental analyses for these related permits, licenses, and approvals should be integrated and performed concurrently.”).

subject to preparation of an EIS.⁷⁵ Accordingly, the failure to consider the Glen Canyon Dam infrastructure limitations and potential reparations of the same as part of the alternatives analysis in any Post-2026 Operational Guidelines Final EIS would violate NEPA.

CONCLUSION

As detailed above, if Reclamation proceeds on the course set in its Alternatives Report and does not carry forward a detailed analysis of the complete Lower Basin Alternative in the Post-2026 Operations EIS, it will render the EIS legally deficient. Without a detailed analysis of the Lower Basin Alternative, the EIS will not have considered a reasonable range of alternatives, and will leave unevaluated a viable alternative that meets the project's purpose and need and is distinguishable from the other alternatives that Reclamation has carried forward for detailed analysis. Reclamation must comply with NEPA in this process and must revise its alternatives accordingly.

The Lower Basin States have demonstrated here that Reclamation's range of alternatives in the ongoing NEPA process is improperly constrained by Reclamation's required assumption to protect elevation 3,490 ft in Lake Powell for every action alternative included for detailed consideration to date. Reclamation's own admissions show that options to protect Glen Canyon Dam infrastructure other than a hard-protect elevation of 3,490 ft for Lake Powell may exist but are impermissibly under consideration outside the NEPA process. Reclamation's unsupported assumption to protect Glen Canyon Dam infrastructure in only one way impermissibly elevates a narrow, artificially constrained infrastructure protection priority over the congressional purposes for project operation and the requirements of the Compact and 1944 Treaty with Mexico to supply water. Reclamation's failure to identify and consider options for the Glen Canyon Dam infrastructure situation in its DEIS will—if not corrected—render the resulting Final EIS and Record of Decision invalid.

⁷⁵ NEPA § 102(2)(C)(A), 42 U.S.C. § 4332(2)(C)(iii); *See also San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 646, 695 (9th Cir. 2014) (“[M]ajor federal actions significantly affecting the quality of the human environment” require an EIS, 42 U.S.C. § 4332(2)(C). Under applicable case law, when faced with operational or structural changes which “change the status quo” operation of an existing dam to reduce flows to downstream users “where there are substantial questions about whether [the changes] ... may cause significant degradation of the human environment,” NEPA requires that Reclamation consider such changes in an EIS) (remanding to Reclamation to prepare an EIS to evaluate changes in a dam's operation that “reduce the flow rate ... in times of less precipitation”), *aff'g Delta Smelt Consol. Cases v. Salazar*, 686 F. Supp. 2d 1026, 1030, (E.D. Cal. 2009) (holding that “impact of coordinated operations of the Central Valley Project” in a manner that changed the “water delivery operations ... to restrict project water flows ... substantially alters the status quo in the Projects' operations” requiring Reclamation to consider such changes).

Further, Reclamation's alternatives analysis must include the effects of a Compact Call on each alternative and discuss why a Compact Call is reasonably foreseeable. Failure to consider a likely Compact Call on the Upper Basin States and their users not only violates NEPA's requirements to evaluate reasonably foreseeable effects, it does a disservice to all stakeholders who deserve to understand the real-world implications of a Compact Call likely to arise from a lack of consensus among the Seven Basin States regarding the requirements of the Law of the River. The serious process and analytical deficiencies documented here by the Lower Basin States are not mere technical or legal requirements that ultimately will result in Reclamation having to start over; rather, they reflect a deliberate, inadvisable departure from NEPA's fundamental twin purposes—to (1) evaluate the significant environmental impacts of Reclamation's actions and (2) give the public a voice regarding the consequences of Reclamation's action. Reclamation can and must do better.

The Lower Basin State Representatives look forward to discussing these items with the Secretary as soon as practicable, and to working with Reclamation, the Upper Basin States, the Colorado River Tribes, and other stakeholders to ensure an EIS process that conforms with NEPA and can help support the development of a consensus approach for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead.