March 2, 2026

Bureau of Reclamation, Department of the Interior
Attn: Post-2026 Colorado River Reservoir Operations (EIS No. 20250184)
CRBpost2026@usbr.gov

Re: *Joint Comment Letter on the Draft Environmental Impact Statement for Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead.*

On behalf of our respective organizations, we appreciate the opportunity to provide comments on the Draft Environmental Impact Statement (Draft EIS) for the *Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead*, as noticed in the Federal Register at 91 Fed. Reg. No. 11 (2026).

This joint comment letter reflects the shared interests of the undersigned conservation organizations (Conservation Groups) at this critical stage of the National Environmental Policy Act (NEPA) process for post-2026 operations of the Colorado River system. Our organizations have a deep history of engagement in Colorado River Basin management. To advance our missions, we remain committed to working collaboratively with Basin states, Tribal Nations, federal agencies, Mexico, water users, and other stakeholders to develop science-based solutions capable of managing the Colorado River under increasingly hot, dry, and hydrologically uncertain conditions.

The Conservation Groups occupy a unique position in the Basin. Our interests span state and national borders, Tribal and federal jurisdictions, Upper and Lower Basin dynamics, and multiple water use sectors. This vantage point requires us to understand the interconnected nature of the river and how actions (or inactions) in one part of the Basin reverberate throughout the entire system. Because ecological health, water quality, supply reliability, and community resilience are deeply interconnected, our organizations regularly focus on the system-wide implications of operational decisions.

The Colorado River Basin is at a defining moment. After more than two decades of persistent drought, compounded by rising temperatures and increasing hydrologic variability, the Basin has entered a fundamentally different operating reality. Declining snowpack, higher evapotranspiration, depleted reservoir storage, and reduced streamflows are no longer intermittent challenges; they represent systemic, compounding risks that will intensify absent effective, adaptive post-2026 operations. As supplies decline, the Basin must adjust to living with less water. Stabilizing the system will require not only allocating shortages and improving reservoir coordination, but also achieving sustained reductions in consumptive use aligned with long-term hydrologic realities.

The Draft EIS appropriately recognizes this shift. It confirms that the Basin's core challenge is how to operate Colorado River reservoirs to preserve functionality and sustain communities, economies, and ecosystems under highly variable and increasingly constrained conditions. The decision before the Department of the Interior and the Bureau of Reclamation is not between "impact" and "no impact," but between operational frameworks that deliberately manage risk and those that allow it to cascade through increasingly frequent emergency interventions.

The Draft EIS represents an important step forward. By moving beyond assumptions of near-term hydrologic recovery and applying a Decision Making Under Deep Uncertainty (DMDU) framework, it evaluates operational tools in the context of a hotter, drier Basin. It demonstrates that continued reliance on crisis-driven, temporary measures is not a viable long-term strategy and that post-2026 operations must improve predictability, minimize dependence on emergency authority, and embed flexibility capable of managing a wide range of plausible futures. Failure to do so risks regional and national economic disruption, increased uncertainty for hydropower and grid reliability, heightened threats to Tribal resources and ecological systems, and recurring year-to-year instability for Basin communities.

Importantly, the Draft EIS also makes clear that not all paths forward are equally effective. Alternatives that rely on rigid rules, delayed responses, or limited coordination increase the likelihood of rapid storage decline and escalating emergency actions. By contrast, frameworks that incorporate proactive action, flexible tools deployed at useful scales, coordinated reservoir management, aligned mitigation, and intentional participation by Tribal Nations and both Upper and Lower Basin States show the greatest potential to stabilize the system under sustained stress.

This finding has profound implications. It underscores that the Basin's future does not depend on selecting a single standalone alternative as defined in the Draft EIS. Rather, specific strategies and tools from several alternatives are what drive performance, depending on how early, flexibly, and coherently they are applied. It also reinforces that ecological integrity, inclusion of Tribal Nations, and investment in mitigation and water security are not secondary considerations but core system objectives that directly influence operational viability, legal risk, and long-term resilience.

This moment demands clarity and resolve for the Basin and its communities. The Colorado River reservoir system cannot be stabilized simply by reallocating scarcity. A viable operational

framework must also create incentives to reduce overall water use as supplies decline. An approach that preserves minimum operability while allowing unmanaged harm would neither meet the Purpose and Need nor be defensible under NEPA. Nor can the Basin withstand a framework that institutionalizes emergency management as a substitute for proactive planning.

Accordingly, this joint comment letter urges Reclamation to use the Final EIS not to select among discrete alternatives, but to synthesize a preferred post-2026 framework built from the operational elements that the analysis shows actually work. This includes operations that:

- **Provide clarity and predictability** so Basin stakeholders can understand future risk, move away from crisis management, and plan accordingly.
- **Incorporate flexible, adaptive tools for conserving, storing, and managing water** across a wide range of hydrologic conditions, including extreme and sustained drought.
- **Embed environmental stewardship into operations**, recognizing that long-term water security is inseparable from the health of the River and its ecosystems.
- **Provide for meaningful and voluntary Tribal participation** grounded in sovereignty and self-determination regarding Tribal perspectives, water rights, and interests in decision-making, and
- **Preserve pathways for advancing in-basin mitigation** and resilience-building opportunities as well as **binational cooperation with Mexico**.

In furtherance of these objectives, this letter focuses on relevant findings regarding the Draft EIS and the elements necessary to stabilize the Basin under variable and drier, low-flow conditions.[1] It is organized into sections as follows:

[1] These comments focus on the issues and recommendations the undersigned organizations consider most relevant at this stage of the Draft EIS process. They do not necessarily reflect the full range of observations, analyses, or conclusions that the organizations may draw from review of the Draft EIS and supporting technical materials. The undersigned request and reserve the right to provide additional comments, analyses, or recommendations in response to the Final EIS, any identified Preferred Alternative, or subsequent related decision documents.

- ➢ Appendix A: Technical Comment
- ➢ Appendix B: Flexible Tools Concept Paper, *The Case for Innovative Tools and a Savings Pool Program in Lake Powell*.

I. Priority Takeaways

The Draft EIS offers clear signals about which operational approaches reduce systemic risk, and which defer consequences until crisis conditions force action. An effective post-2026 framework preserves system operability, reduces reliance on emergency interventions, manages risk across users and resources, and sustains ecological integrity and Tribal values under the hydrologic conditions the Basin is most likely to face.

The priority takeaways below distill the policy-relevant conclusions from the Draft EIS and identify the core elements that should be advanced and strengthened in the Final EIS to support a coherent and defensible operating framework capable of managing continued climate stress.

1. Early, proactive action consistently outperforms delayed or emergency-driven management. Modeled results indicate that planned contributions and reductions in consumptive use approaching approximately 3 million acre-feet (MAF) may be required under sustained low-flow conditions. Delayed or insufficient responses increase the likelihood of deeper, less predictable deadpool-avoidance reductions and greater uncertainty for water users. While any reduction is consequential, appropriately scaled, policy-based shortages[2] reduce exposure to abrupt emergency measures. Emergency authority may remain necessary as a backstop, but it cannot substitute for proactive management. This is borne out not only by the modeling, but also by the experience over the last 25 years, during which temporary or emergency measures have proven inadequate to prevent the steady decline in system storage.

2. Focus on deadpool and deadpool-related reductions in isolation masks escalating risk. While deadpool elevation represents a critical threshold, severe impacts to communities, economies, infrastructure, and ecosystems occur well before that endpoint is reached. Prolonged operation near critical elevations as highlighted in the Draft EIS impacts hydropower reliability, reduces operational flexibility, strains infrastructure, and increases ecological and delivery uncertainty, even when deadpool is technically avoided. Evaluating alternatives based solely on deadpool-related reductions obscures escalating risks of sustained low storage and masks meaningful differences among alternatives that defer impacts rather than reduce them.

3. The value of Decision Making Under Deep Uncertainty depends on its policy application. The DMDU framework provides a robust, science-based platform for evaluating risk under deep uncertainty. Its value lies not only in modeling a broad range of futures but in using those results transparently to compare alternatives and identify strategies capable of withstanding prolonged drought and uncertain water futures. The Draft EIS's vulnerability analyses help identify the hydrologic conditions under which alternatives begin to breach critical

[2] For purposes of this letter, "policy-shortages" refers to the proactive, intentional shortages deployed as part of system operations as compared to reactionary reductions and shortages that are imposed to avoid deadpool, which are referred to as "deadpool-avoidance reductions."

reservoir thresholds. This information can be used to frame what level of stress a post-2026 operating framework should withstand without triggering destabilizing outcomes. Executive Summary Tables ES-6 and ES-7 provide near-term context, while ES-4, ES-5, and Vol. 3, Technical App. 4, Figure TA 4-3 helps characterize longer-term vulnerability and robustness under sustained altered hydrology.

4. Effective operations must anchor to Basin trends - not optimistic recovery assumptions. The Draft EIS appropriately evaluates a broad range of hydrologic futures. However, robustness metrics effectively assign equal analytical weight to scenarios with high starting storage assumptions and wetter hydrologic futures, both of which are increasingly inconsistent with observed Basin conditions and trends. Current reservoir storage levels and recent water year hydrology make clear that these risks are not theoretical. Recent 24-Month Study projections indicate that critical infrastructure at Lakes Powell and Mead remains vulnerable under low-inflow conditions, with the likelihood of emergency actions prior to implementation of new operating guidelines growing. Because system performance is highly sensitive to initial reservoir elevations, assumptions of rapid, multi–million acre-foot recovery in 2026 can mask near-term vulnerabilities and understate the risk of early emergency actions.

Near-term system stability will depend heavily on operational decisions related to storage preservation, reliability, and risk management under realistic inflow assumptions. A focused five-year stress test using plausible post-2026 starting elevations and plausible yet critically low hydrologic conditions (as was conducted by Reclamation in 2022) would help identify the tools and authorities necessary to protect critical reservoir elevations, reduce reliance on emergency measures, and stabilize the system during its most constrained implementation period. Aligning analysis with observed trends and realistic initial conditions will better illuminate strategies capable of managing a hotter, drier, and more variable Basin future.

Over the longer term, meaningful performance differences among alternatives emerge under average-to-critically dry condition categories. For the Final EIS, greater emphasis should be placed on clearly presenting alternative performance across key metrics within the range of preceding three-year average Lees Ferry Natural Flows of approximately 8–13 MAF. Highlighting results in this planning-relevant band will better inform the development of practical operating guidelines that reflect prevailing Basin trends—without defaulting to worst-case assumptions—and support sound, risk-aware Post-2026 policy decisions.

5. Flexible tools are the linchpin of system reliability and should form the backbone of any selected framework. Near-term system functionality and long-term system reliability depend on scalable tools and strategies that can be activated before crisis conditions emerge. Verifiable conservation reserves or savings pools, hydrology-informed triggers, and operationally neutral exchanges between Lakes Powell and Mead can materially improve performance under sustained stress while creating structured opportunities for Tribal Nations and Basin water users to participate directly in stabilization efforts.

Alternatives lacking flexibility face greater risk of rapid storage decline and recurring emergency intervention. Rather than selecting a standalone alternative wholesale, the Final EIS should

synthesize the most effective risk-reducing elements across alternatives into a coherent, tools-based preferred framework, and clearly identify the federal actions and authorities it will rely on to operate the system. Properly structured and deployed, flexible tools can preserve critical elevations and reduce reliance on emergency releases—demonstrating how proactive management stabilizes the system before crisis conditions force reactive action.

6. Ecological integrity is foundational to system functionality, not a secondary impact. Declining storage, altered release patterns, and persistent low-flow conditions intensify ecological stress with direct consequences for water quality, water quantity, infrastructure reliability, regulatory compliance, and operational flexibility. Post-2026 operations that impair ecological conditions undermine long-term system reliability and increase operational, economic, and legal risk across the Basin.

The Draft EIS demonstrates that ecological outcomes are closely linked to reservoir elevations, release volumes, and temperature management. Flexible tools can serve not only reliability objectives but also ecological integrity and mitigation. Integrating ecological performance into the core design of post-2026 operations, including consideration of obligations under the Endangered Species Act (ESA), the Lower Colorado River Multi-Species Conservation Program (MSCP), and the Grand Canyon Protection Act (GCPA), will also allow ecological objectives to be addressed proactively rather than through emergency measures or supplemental processes.

7. Tribal Inclusion and federal trust responsibilities are essential. Given the scale and seniority of Tribal water rights in the Colorado River Basin and the federal government's trust responsibilities, no operating framework can be effective without structured, meaningful Tribal participation. Post–2026 operations must integrate Tribal Nations into governance, program design, conservation and storage mechanisms, mitigation strategies, and shortage administration in ways that respect sovereignty, protect settled and unsettled rights, and uphold settlement expectations.

8. Mitigation must be a component of post-2026 operations, not a deferred add-on. Deciding the post-2026 operations is about more than avoiding or minimizing the impacts of a federal action. It is about using federal authorities proactively to mitigate the effects of a drier, hotter, and more variable hydrology. A framework that preserves operability while allowing unmanaged harm to communities, Tribal Nations, and ecosystems is neither effective nor defensible under NEPA. Mitigation and resilience must be integrated into the considerations for designing an operating framework through long-term programming, sustained investment, and strong in-basin coordination to reduce compounding impacts, strengthen resilience, and minimize reliance on emergency interventions.

9. A credible framework must reduce risk through planning not emergency distributions. Operational performance within system-level metrics alone does not demonstrate operational success. A resilient framework must account for real-world consequences to municipal and industrial water supply reliability, Tribal water protections, ecological integrity, infrastructure, hydropower, and regional economies. Integrating system performance with resource-level

impacts ensures that risk is transparently evaluated, proportionately managed, and substantively reduced—not simply assigned or transferred under duress.

10. Consensus is absolutely essential to secure stable post-2026 operations. The flexible tools, coordinated reservoir operations, and meaningful participation needed to stabilize the Colorado River system cannot be established or function at scale without agreement among the Basin States, Tribal Nations, the federal government, and key water users regarding how the "Law of the River" will be applied after 2026. A preferred alternative capable of meeting the Purpose and Need must be grounded in such consensus. Where agreement cannot be achieved, Reclamation should clearly identify the authorities it will exercise and those it will seek to secure to operate the system responsibly while preserving pathways for future negotiated solutions.

Whether these priority takeaways can be carried forward into a legally supported and operationally credible Record of Decision depends on the clarity, transparency, and application of the underlying analytical frameworks. Accordingly, the following sections review the strengths of the Draft EIS's analytical foundation and identify targeted refinements that would help to ensure the Final EIS fully informs decision-makers about risk, tradeoffs, and real-world consequences.

II. Analytical Foundation: Strengths and Opportunities for Clarification and Refinement

The Draft EIS reflects substantial analytical effort in Colorado River planning. Supported by extensive system modeling, performance metrics, and robustness and vulnerability assessments, Reclamation's application of a DMDU framework provides a technically useful foundation for evaluating post-2026 operational strategies in a basin defined by climatic non-stationarity and compounding risk.

By moving away from reliance on probabilistic or deterministic futures, the Draft EIS appropriately embraces uncertainty as a central planning condition. The use of large ensembles of hydrologic traces, combined with comparative performance metrics, allows the analysis to stress-test operational elements across a wide range of possible futures and to illuminate where flexibility, early action, and coordination improve system performance. (See e.g., Vol. 1, Ch. 3, pp. 3-10-22; Vol. 2, Apps. E & F). This represents a clear advancement over prior guideline evaluations and aligns with best practices in water resources planning.

The Draft EIS also demonstrates analytical transparency through system-level performance indicators, including reservoir elevations, storage trajectories, release volumes, shortages to water users, and conditions under which these indicators approach or cross critical thresholds. (See Vol. 1, Ch. 3, pp. 3-10 - 3-22; Vol. 2, App. E). These metrics provide a common basis for comparing alternatives and help clarify how different operational approaches influence overall system stability and infrastructure protection. The inclusion of sensitivity analyses examining inflow ranges, starting conditions, and parameter choices further strengthens the analytical

record by acknowledging that outcomes depend on assumptions and boundary conditions. (See Vol. 2, Apps. D, H, J, K, and O).

Importantly, the Draft EIS begins to clarify tradeoffs among operational objectives, including storage preservation, delivery reliability, infrastructure protection, and ecological considerations. (See Figure ES-5, p. ES-21). The comparative presentation of alternatives makes clear that no single alternative analyzed in the Draft EIS eliminates risk under extreme drought, but that certain tools and approaches consistently perform better under these conditions. This insight directly supports the Purpose and Need for post-2026 guidelines and provides a credible platform for identifying risk-reducing operational elements.

Collectively, this analytic framework reflects a clear effort to integrate science-based decision support into federal reservoir management. When rigorously applied and transparently interpreted, the analytical structure adopted in the Draft EIS can support informed decision-making regarding operation of the Colorado River system under prolonged drought and deep uncertainty.

At the same time, the full value of this analytical foundation depends on how modeling choices, assumptions, performance metrics, and results are interpreted and carried forward into comparative evaluations and impact analysis. Certain aspects of the Draft EIS constrain its ability to illuminate the most likely risks facing the Basin and the real-world consequences of alternative operating approaches. The targeted clarifications and refinements identified below are recommendations to help strengthen transparency, sharpen comparative evaluation, and enhance policy relevance and practical application in the Final EIS, supporting a Record of Decision that reflects rigor and clarity consistent with both NEPA's purpose and the Administration's commitment to "Restoring Gold-Standard Science" in policymaking. Detailed technical discussion is provided in Technical Comment Appendix A.[3]

A. Aligning Analysis with Observed Hydrologic Trends

The Draft EIS appropriately employs a broad ensemble of hydrologic futures to evaluate the alternatives. Consistent with DMDU principles, the evaluation does not optimize for a single projected outcome. However, in practice, the analysis risks treating all futures as equally informative, including wetter recovery scenarios that are increasingly inconsistent with observed Basin trends.

The Draft EIS itself acknowledges that "Recent history combined with the increasing temperature trend, which is associated with lower streamflow, suggests that focusing more on the Average and Dry categories is warranted. However, Critically Dry conditions have been

[3] Specific comments on the Draft EIS modeling framework, performance metrics, and interpretation of results are intentionally provided in the Technical Comment Appendix A to avoid overburdening the main narrative while ensuring that reviewers and decision-makers have access to a broad assessment of how analytical choices may influence the reported outcomes.

observed and could become more common" (See Vol. 1, Ch. 3, p. 3-15). This consequential planning judgment should be consistently reflected in the presentation and weighting of results.

Across many figures and summaries of resource impacts, Wet through Critically Dry categories are presented with equal visual and interpretive emphasis, implicitly suggesting equal planning relevance. This framing dilutes focus on the inflow conditions that most clearly differentiate operational performance under sustained low flows. (See Section III, Alternatives Evaluation, below). It consequently risks favoring alternatives that perform well under wetter futures but are less robust under sustained Average-to-Dry and Critically Dry conditions, hydrologic regimes that the Draft EIS identifies as more consistent with recent history and increasing temperature trends.

This issue is compounded by assumptions regarding initial starting reservoir conditions. (See Vol. 2, App. G). The high- and middle- initial storage scenarios assume recovery volumes on the order of multiple million acre-feet increases at Lakes Powell and Mead within short timeframes. Such assumptions are difficult to reconcile with current reservoir levels, hydrologic conditions, and near-term forecasts. (See Technical Comment, App. A, pp. 4-5). As the Basin regularly experiences with the modeling as applied under the present-day guidelines, optimistic assumptions regarding starting points or other aspects of reservoir operations can mask near-term vulnerability and understate the likelihood of exposure to emergency conditions in the next few years.

The Final EIS can improve planning relevance by: (a) elevating and prioritizing analysis and interpretation of Average, Dry, and Critically Dry flow categories in figures and comparative summaries, consistent with the DEIS's own narrative with particular emphasis on sustained average-to-below-average and sustained hot-dry flow ensembles; and (b) constraining initial starting reservoir conditions to reflect current and plausible near-term storage trajectories. (See e.g., U.S. Bureau of Reclamation, *24-Month Study Projections for the Colorado River Basin,* (2026, February); NRCS/NWCC Upper Colorado Region SWE Plot, accessed February 2026), Together, these refinements would sharpen comparisons among alternatives, align the analysis more closely with observed and projected conditions, and better support the Purpose and Need to reduce reliance on emergency actions that have been used to sustain the system over the past 25 years.

B. Deadpool or Deadpool-Related Reductions as Indicators of System Stress

Deadpool and deadpool-related reductions are consequential thresholds, and their inclusion as performance indicators in the Draft EIS modeling provides useful insight into extreme system outcomes. However, significant operational, ecological, Tribal, and socioeconomic impacts occur well before those thresholds are reached. Alternatives may technically avoid deadpool while operating for prolonged periods at elevations just above deadpool, resulting in sustained policy shortages, declining hydropower reliability, infrastructure stress, and reduced operational flexibility. (See Technical Comment App. A, Section III.C).

Because deadpool outcomes and deadpool-related reductions are analyzed separately from policy shortages, the Draft EIS does not consistently show how long the system operates in degraded conditions, how close alternatives remain to critical thresholds, or whether impacts are reduced or merely deferred. As illustrated in Section III - Alternatives Evaluation, below, the separation of policy-based shortages from deadpool avoidance reductions can mask the ways in which system stress accumulates and impacts compound, obscuring tradeoffs between early, managed action and deeper, involuntary cuts imposed under emergency conditions.

Metrics capturing proximity to critical elevations, duration of impaired operations, and the combined magnitude and timing of planned and emergency reductions would provide a more realistic depiction of stress on the system. Presenting policy shortages and deadpool avoidance reductions together as total shortages in single graphs with marked thresholds of where the policy shortages end and the deadpool avoidance reductions begin would also more clearly illustrate tradeoffs among different operating alternatives. (See Technical Comment Appendix A, Section V). Providing this information would better support the identification of a post-2026 operating framework capable of managing under drier conditions rather than deferring systemic risk until crises force action.

C. Translation of Modeled Outcomes to Resource-Level Impacts

While the Draft EIS includes robust system-level modeling, those results are not consistently carried through to resource-specific impact analyses. Modeled shortages, low-elevation operations, and extreme conditions do not regularly translate into impacts described for water supply reliability, ecosystems, Tribal resources, infrastructure, recreation, or local economies.

Concrete examples, which are detailed in Technical Appendix A, Section VI, include:

- Shortage frequency and duration should be used not only to define impacts to irrigated agriculture but also in the assessments of municipal, industrial, and Tribal economic impacts;
- Modeled shortages to National Wildlife Refuges and irrigation districts supplying Lower Colorado River Multi-Species Conservation Program habitats should be consistently reflected in vegetation, wildlife, and refuge analyses;
- Extended operation near minimum power pool should be carried into analyses of water supply reliability for key sectors as well as infrastructure stress;
- Salinity projections should be considered in the alternatives analysis, including evaluation of how salinity management under each alternative influences Lake Mead releases, storage trajectories, and water supply outcomes;
- Modeled outputs should be linked to qualitative and quantitative impact conclusions specific to Grand Canyon National Park, allowing for clearer comparison of ecological risk and long-term resource outcomes across alternatives; and
- Timing and duration of resource impacts should receive as much attention and interpretation as to whether impacts occur at all.

Strengthening the linkages between modeled outcomes and real-world consequences for water supply reliability, Tribal resources, ecosystems, local economies, infrastructure, and public health would offer important insight into who bears risk, when impacts occur, and how long degraded conditions persist under different alternatives.

Together, these topics regarding further clarification and refinement – summarized in Table 1 – represent opportunities to align the analysis more closely with the hydrologic conditions the Basin is most likely to face and clarify tradeoffs between proactive management and deadpool avoidance outcomes in support of selecting a post-2026 operating framework that is both effective and defensible.

Table 1: Analytical Foundation – Summary of Strengths and Opportunities for Clarification and Refinement			
Topic	**Location in Draft EIS**	**Observation and Why It Matters**	**Recommendation for Final EIS**
DMDU Framework & System Modeling (Strength)	Vol. 1, Ch. 3 - Affected Environment, pp. 3-10-22; Vol 2, App. E – DMDU Overview and Approach	Robust application of DMDU with large hydrologic ensembles, performance metrics, sensitivity analysis, and vulnerability assessment. Strong foundation for climate-informed planning.	Maintain and clearly apply DMDU in comparative evaluation; ensure consistent interpretation of modeling outputs; and carry performance insights through to impact conclusions to support transparent and defensible decision-making.
Alignment with Observed Hydrologic Trends	Vol. 1, Ch. 3 (p. 3-15); Vol. 2, App. F - Hydrologic Uncertainty; figures summarizing Wet–Critically Dry categories	All hydrologic futures are presented with equal visual emphasis, including wetter recovery scenarios that are increasingly inconsistent with observed trends. This framing risks obscuring the inflow conditions that most clearly differentiate alternative performance under sustained low flows.	Focus on Average, Dry, and Critically Dry categories (e.g., 8–13 MAF range) in conclusions, figures, and summaries; provide a near-term stress test with plausible post-2026 starting conditions and assuming low-flow conditions to provide a comparative evaluation consistent with observed trends.
Initial Reservoir Starting Conditions	Vol. 2, generally, Apps. B & G specifically; figures and tables in Vol. 1 & technical appendices)	High- and middle-storage scenarios assume rapid multi-MAF recovery, inconsistent with current conditions and forecasts, potentially masking near-term vulnerability.	Constrain starting reservoir conditions to reflect current and plausible near-term storage levels; clearly present declining or constrained starting conditions.
Deadpool as Proxy for System Stress	Vol. 1, Ch. 3 - Affected Environment (Performance Metrics); Vol. 2, App. O, Analysis of Powell Infrastructure Protection Releases	Deadpool and related reductions are emphasized as key thresholds, yet severe impacts occur well before storage approaches deadpool. Focus on this indicator as the proxy for system stress oversimplifies risk and masks resource impacts occurring before deadpool, including loss of flexibility and escalating emergency exposure.	Incorporate metrics showing proximity to critical elevations, duration of impaired operations, and accumulated system stress as central stress tests within DMDU.

Table 1: Analytical Foundation – Summary of Strengths and Opportunities for Clarification and Refinement			
Topic	**Location in Draft EIS**	**Observation and Why It Matters**	**Recommendation for Final EIS**
Separation of Policy Shortages and Deadpool Avoidance Reductions	Vol. 1, Ch. 3 (Performance Results); Vol. 1, Ch. 3 - (Affected Environment - Water Deliveries); see also, Technical Comment App. A, Section III.C	Policy shortages and deadpool avoidance reductions are presented separately, obscuring cumulative water unavailable to users (total reductions) and masking tradeoffs between early managed action and deeper emergency cuts.	Present total shortages (policy + deadpool avoidance) in integrated figures with clear thresholds; compare timing, magnitude, and duration of reductions across alternatives.
Duration and Proximity to Thresholds	Vol. 1, Ch. 3 (Assumptions on Operations Under Extreme Conditions)	Draft EIS does not consistently show how long the system remains near critical elevations or under degraded operations. Duration and proximity are central to evaluating operational fragility and long-term resilience.	Add metrics tracking duration near key elevations, frequency of threshold proximity, and persistence of impaired conditions to better evaluate durability.
Translation to Resource-Level Impacts	Vol. 1, Ch. 3 (Affected Environment and Environmental Consequences - Comparative Analysis); Vol. 3 Resource chapters.	System modeling results are not consistently linked to consequences for municipal & industrial reliability, Tribal resources, ecosystems, infrastructure, recreation, or local economies. This limits understanding of who bears risk, when impacts occur, and whether impacts are reduced or deferred.	Explicitly connect modeled elevations, shortages, and release patterns to sector-specific and geographic impacts, including timing and duration.
Municipal, Industrial & Tribal Economic Impacts	Vol. 1, Ch. 3 (Affected Environment and Environmental Consequences - (Socio Economics); Vol. 2 - Shortage Modeling Appendices (i.e., Apps. C & H)	Economic impacts of shortages beyond agricultural considerations are not included. Understates risks to public health, housing, energy systems, employment, and Tribal economies.	Link modeled shortage, frequency, magnitude, and duration to municipal, industrial, and Tribal economic impacts and resilience indicators.

Table 1: Analytical Foundation – Summary of Strengths and Opportunities for Clarification and Refinement			
Topic	**Location in Draft EIS**	**Observation and Why It Matters**	**Recommendation for Final EIS**
Lower Colorado River & Refuge Impacts	Vol. 1, Ch. 3 pp. 3-89 -3-118 (Biological and refuge sections); Technical Appendix 8 - Fish & Aquatic Resources	Modeled shortages to refuges and MSCP areas are not consistently reflected in vegetation and wildlife analyses.	Integrate modeled flow and elevation outcomes with established refuge and MSCP analytical methods for clearer alternative comparison.
Impacts to Resources in the Grand Canyon	Vol. 1, Ch. 3; Vol. 3, Technical Apps. 5, 8, and 9.	Alternative-specific ecological consequences for Grand Canyon National Park are not consistently synthesized.	Provide clear translation of modeled differences into impact conclusions specific to Grand Canyon resources, including sandbar persistence, riparian condition, ESA species recovery, and cumulative ecosystem stress.
Hydropower & Infrastructure Stress	Vol. 1, Ch. 3, pp 3-160-3-171(Dams & Electrical Power Resources); Vol. 2, modeling figures	Extended operation near minimum power pool not fully carried into reliability and infrastructure risk analyses.	Evaluate infrastructure stress and hydropower reliability implications under sustained low elevations and incorporate into comparative performance summaries.

III. Alternatives Evaluation - Tools-Based Comparison

The Draft EIS presents alternatives as discrete operational packages combining different rules, coordination mechanisms, and shortage responses. However, the results show that long-term system performance might be best under guidelines that incorporate elements and tools from more than one alternative —and that effective operations depend on how early, flexibly, and coherently those tools are applied. The Draft EIS acknowledges that "Reclamation may refine these Draft EIS alternatives or develop additional alternatives for the Final EIS" (Vol. 1, Executive Summary, p. ES-9).

Viewed through a tool-based lens, the Draft EIS offers insights into which operational elements help improve system stability, provide predictability, reduce reliance on emergency operations, and offer opportunities to embed environmental operating considerations under variable conditions. This perspective is particularly relevant for the Final EIS as it allows decision-makers to identify which components should be carried forward, refined, or combined into a preferred alternative capable of meeting the Purpose and Need for any future federal action.

A. Key Emerging Patterns from Draft EIS Results

1. Early, scalable action under average to low annual inflows informs effective system operations. The Draft EIS shows that meaningful performance differences among alternatives emerge under sustained average-to-critically dry conditions, as defined by the preceding three-year average Lee Ferry Natural Flow. Exploring each alternative's performance across key metrics within ~8–13 MAF range of these categories will be informative to develop operating guidelines that reflect reasonable trends in the Basin. This range reflects recent hydrologic experience and avoids assigning equal weight to optimistic recovery scenarios or to rare, multi-year dry extremes that no currently contemplated policy is likely to fully manage. Alternatives that incorporate earlier, scalable actions (such as Maximum Operational Flexibility (MOF) and Enhanced Coordination (EC) alternatives) maintain higher elevations and reduce reliance on emergency interventions under these conditions, while delayed or constrained approaches show steeper storage declines and greater exposure to crisis-driven measures. (See Table ES-4, p. ES-23).

Table G-2 (Vol. 2, App. G) further indicates that average annual Lee Ferry natural flow during the 2020s has been approximately 11.1 MAF, and Water Year 2026 is trending toward potentially record-low inflows that may require federal action prior to issuance of a Record of Decision for Post-2026 operations. These conditions reinforce the conclusion that Basic Coordination (BC) and certain Supply-Driven (SD) configurations may be insufficient to manage a continuation of recent hydrologic trends over the Post-2026 operating period (see Executive Summary, Table ES-6).

Accordingly, the Final EIS would benefit from a complementary five-year stress test using plausible post-2026 starting elevations and representative average annual inflows of approximately 9.5, 11, and 13 MAF. This focused analysis would help identify the operational tools and authorities necessary to stabilize reservoirs, protect hydropower production and

regulatory compliance, and minimize reliance on emergency measures during the most constrained implementation period. Such refinement would not replace the long-term DMDU framework; rather, it would strengthen it by ensuring that Post-2026 guidelines are resilient in the near term—when storage is limited, risks are elevated, and policy decisions carry the greatest consequence.

2. Tradeoffs between policy shortages and deadpool risks are relevant to operational decisions—and must be evaluated together. Alternatives that incorporate earlier policy-based shortages—most notably MOF and EC—are substantially more effective at limiting deep, emergency interventions, particularly under dry and critically dry hydrologies. Conversely, alternatives that limit policy shortages (including No Action, BC*,* and SD variants) experience significantly greater exposure to deadpool-related risks and reductions, exceeding in some cases the magnitude of policy shortages applied under MOF and EC. (See Vol. 1, Ch. 3, Figures 3-12, 3-13, and 3-14; Vol. 3, Technical App. Figures 4-1, 4-2 and 4-3). As discussed further in Section VI of Technical Comment Appendix A, the relative risks and benefits of alternatives are confounded or understated if policy shortages and deadpool-related reductions are not considered together. For example:

- Major Lower Basin municipal contractors face increasing constraints on access to and conveyance of water as Lake Mead approaches minimum operating levels, well before deadpool.
- Ecological systems experience compounding stress as altered flow regimes and declining elevations affect riverine, riparian, and refuge-dependent habitats prior to basin-scale failure.
- Tribal trust responsibilities and delivery reliability may be affected by changes in release timing or flexibility not captured by deadpool metrics.
- Hydropower reliability is increasingly compromised as head decreases and reservoir levels decline.

In short, the central question for deciding post-2026 operations must not simply be which approach avoids deadpool, but which tools and framework reduce prolonged exposure to degraded conditions and limit reliance on emergency operations.

3. Shortage distribution methodology materially affects outcomes and implicates unresolved governance questions. The timing of Lower Basin shortages and resulting system performance depends in part on whether shortages are distributed on a priority or pro rata basis (compare impacts of Lake Mead elevations for the Supply Driven (LB Priority) versus Supply Driven (LB Pro Rata) in Vol. 1 Ch. 3, Figure 3-10; Vol. 3, Technical App. 18). However, some alternatives had modeled certain pro rata reductions by assuming individual contractor shortages rather than attributing pro rata reductions at the interstate level while maintaining prior appropriation for intrastate reductions. (See Vol. 2, App. B- Modeling Assumptions; Vol. 3, Technical App. 18). This modeling choice materially influences performance results while implicitly deciding legal, contractual, and governance questions that are not the purview of the Draft EIS.

While this comment letter does not take a position on whether a pro rata or priority-based shortage distribution framework should govern post-2026 operations, the Final EIS should clarify and focus its analysis of any pro rata component on how it would be structured and applied among the states. Any additional pro rata considerations, if required, should be accompanied by expressly stated assumptions that explain the need for and reasoning of assigning pro-rata distributions among water users within a state.

4. Flexible management tools materially improve performance—and their value should be made fully visible in results. As further clarified in Section V below, several flexible tools are important to the efforts needed to stabilize the system and provide opportunities for maintaining social, economic, and ecological integrity of the Basin. These tools are most fully developed in the MOF and EC alternatives (e.g., flexible storage and movement of conservation pool water as needed, including resource management as part of reservoir operations) and are partially incorporated in the SD alternatives. However, the Draft EIS does not consistently report how often these tools are activated, how full conservation pools become, how frequently water is moved between reservoirs, or how environmental objectives modify releases. Nor do they report how the tools can be used to mitigate risk. (See e.g., Figures 1A and 1B in Technical Comment App. Section V). As a result, the performance benefits of flexibility—particularly the conservation pools—are understated in the analysis.

In addition to conservation and storage pools, certain Draft EIS alternatives incorporate hydrology-informed release mechanisms and shortage triggers that respond to observed conditions. Alternatives that integrate recent hydrologic conditions into release decisions and shortage triggers—such as the rolling average approach in EC, the climate response indicator in MOF, and the hydrology-driven structure of SD—demonstrate how responsive, flexible frameworks can reduce reliance on emergency authority. As drying trends continue, operational approaches that factor in observed conditions rather than historical assumptions will become increasingly important.

Recent hydrologic conditions underscore this principle. If comparable conditions arise under new guidelines, verifiable conservation pools combined with coordinated reservoir exchanges could preserve critical elevations at Lake Powell without impairing water rights or deliveries. Such tools would reduce reliance on emergency releases, including measures similar to those adopted under the 2024 Supplemental EIS, demonstrating how integrated flexibility manages risk proactively rather than reactively.

5. Comparative evaluation of conservation/contribution and storage pool design is necessary to identify what works. The Draft EIS includes multiple conservation, contribution, and storage pool strategies across alternatives, but these mechanisms are not directly comparable in structure or application. (See Executive Summary, pp. ES-12-14; Vol. 1, Ch. 2, pp. 2-40-42). For example, MOF is designed to accommodate continued implementation of operations under the Long-Term Experimental and Management Plan (LTEMP) and preserves the greatest capacity to implement future High Flow Experiments. The EC alternative, on the other hand, provides entity-level accounting and explicit provisions for Tribal inclusion, enabling crediting of conservation actions, prioritization of protections, evaluation of Tribal contributions to

system stability, and implementation of compensation or leasing mechanisms. (See Vol. 2, App. B, Tables B-10 - B13 and Vol. 3, Technical App. 18). While the MOF and SD alternatives allow for Tribal participation, they do not provide the same specificity or structural integration of Tribal water into flexible management tools. (See Vol. 2, App. B, Tables B-22, -26, -27, and -30). These alternatives also consider varying levels of Upper Basin contributions to operationalize the pools (SD up to 200 KAF; MOF averaging 200 KAF with a 0–500 KAF range depending on hydrology). (See Vol. 1, Chap. 2, pp. 2-41-42).

A clear, side-by-side comparison of how these different pools function (how water is credited, stored, mobilized, protected, and compensated) would help to avoid overstating parity among alternatives and understating the significance of key design features as part of the EIS analysis. A transparent comparison in the Final EIS would also help decision-makers identify key tools to incorporate into the preferred alternative by determining which elements meaningfully enhance flexibility, participation, and system stability, and which are unlikely to perform as effectively at scale. (See Section I.B of Technical Comment Appendix A for a broader discussion on recommended comparison considerations in the Final EIS).

6. Maximum theoretical shortage caps built into different alternatives do not reflect likely outcomes. While the MOF alternative authorizes up to 4 MAF in policy shortages, modeled results show reductions above 3 MAF are rare and occur only under extreme conditions. Conversely, alternatives that limit early policy-based shortages—such as BC and SD variants—encounter a greater risk of deadpool-related reductions (up to ~6.0 MAF in some scenarios). (See Vol. 1, Ch. 3, Figure 3-12; Vol. 3, Technical App. 4, Figures 4-1 and 4-2). Under critically-dry conditions, all alternatives show similar total shortages to Lower Basin users. When policy shortages and deadpool-related reductions are evaluated together as total water unavailable, the relative risk profile of the alternatives shifts between planned and unplanned responses. The central tradeoff is not the size of authorized policy cuts, but whether early, managed reductions reduce prolonged exposure to degraded conditions and emergency interventions.

7. Deadpool and emergency operations to avoid deadpool are a symptom of framework fragility. The Draft EIS reveals alternatives that regularly approach or trigger critical thresholds, risk loss of entire water supplies for Tribal Nations or municipalities, and create unacceptable and potentially irreversible ecological and socioeconomic consequences. Reliance on such emergency authority signals operational fragility rather than resilience. For the Basin to move beyond perpetual crisis management toward operations that proactively maintain storage, provide predictability, and protect critical infrastructure, alternatives that heavily rely on emergency responses should not be considered viable long-term solutions.

8. Supply-Driven outcomes depend heavily on parameter choices and warrant refinement and potentially additional review. The SD alternative at a 65% parameter improves Lake Mead elevations, but does so largely by transferring risk to Lake Powell, increasing reliance on Initial Units, and accelerating depletion of Upper Basin storage. Sensitivity analyses indicate that lower percentages (e.g., 62–64%) could distribute risk more evenly between reservoirs and reduce reliance on Powell Infrastructure Protection releases, suggesting that the SD framework

has potential value if carefully calibrated. (See Vol. 2, Appendix D – Sensitivity Analysis (Effects of Natural Flow % for SD)).

The SD alternative also relies on "gap water" (See Vol. 1, Ch. 2, pp. 2-35), which underscores the Draft EIS's acknowledgement that integrating the SD options into the final guidelines implicates additional actions that would require affirmative state cooperation and additional NEPA review in the Upper Basin. The use of gap water represents a significant policy and operational choice with potential implications for Upper Basin water users, storage behavior, and environmental conditions that are not fully explored in the current analysis. If the SD alternative elements are carried forward, further refinement and focused evaluation will be necessary to ensure that parameter selection, gap water use, and associated risks are transparent and consistent with NEPA requirements as well as other applicable laws.

9. Basic Coordination requires additional measures to be effective. The BC alternative, as formulated in the Draft EIS, lacks the predictability, flexibility, and resilience needed to manage a continuation of current drought conditions and the uncertainties anticipated in the near term or over the full post-2026 guideline period. As defined, this alternative relies on limited coordination and constrained operational tools, and the analysis indicates this increases the risk of more frequent declines below key elevation thresholds and a greater likelihood of emergency or exigent operations.

The Draft EIS acknowledges that, under BC, Reclamation may need to employ "additional measures to protect critical infrastructure," including further reductions to Lake Powell releases and expanded use of CRSP Upper Initial Units. (See Vol. 1, Ch. 2, p. 2-15). However, as discussed in Section IV, below, the BC alternative must be modified to incorporate additional flexible operations and clearly defined management strategies if it is to function as a credible operational framework—even in the near term. Absent these modifications, BC risks deferring critical operational and governance decisions until crisis conditions force action outside the analyzed framework.

10. Ecological tradeoffs are real but can be managed through flexible tools like the Conservation Reserve or similar storage pools in the Upper and Lower Basins. Most biological resources benefit from higher and more stable Lake Powell and Lake Mead elevations and from larger, more consistent releases. This is particularly true in the Lower Basin, where increased releases improve salinity dilution, support habitat under the MSCP, and enhance delivery reliability to Mexico. Consistent with these dynamics, the MOF and EC alternatives most reliably support basin-wide ecological integrity.

At the same time, the analysis demonstrates that higher reservoir elevations introduce important tradeoffs, including reduced upstream riverine habitat near the Colorado and San Juan River inflows and inundation of the Piute Farms Waterfall above approximately 3,660 feet, which currently limits the spread of non-native warmwater predators. (See Vol. 1, Ch. 3, p. 3-149). Downstream temperature management presents similar tensions, underscoring that ecological outcomes depend on balancing elevation, temperature, habitat availability, and species response. (See Vol. 3, Technical App. 8, p.8-48).

These tradeoffs cannot be resolved through static rule curves alone. Rather it is through operationally neutral tools, such as the Conservation Reserve and storage pools embedded in MOF and EC, that options for navigating these dynamics can be introduced to enable adaptive deployment of conserved water. For example, a verifiable conservation pool in Lake Powell could provide Reclamation with the ability, when hydrologic conditions warrant, to limit maximum annual releases to approximately 10 MAF or below in order to reduce sediment-scouring flows in the Grand Canyon, while preserving infrastructure protections and compact compliance. (See generally, Vol. 1, Ch. 2 – MOF alternative release provisions and coordinated operations; Vol. 3, Technical App. 8 (sediment mass balance and sandbar response to release magnitude)). Such flexibility illustrates how integrated tools can manage ecological objectives proactively rather than through reactive or emergency adjustments.

B. Implications for the Final EIS

The Draft EIS demonstrates that system stability and predictability are achieved through early action, flexibility, and coordinated use of storage across the system. To this end, the Draft EIS analysis supports moving away from a binary comparison of alternatives and toward a tools-based evaluation that identifies which operational elements consistently improve outcomes. It will therefore be important for the Final EIS to:

> *Carry forward operational elements from MOF, EC, and SD alternatives that demonstrably stabilize the system, support ecological integrity, enable Tribal participation, preserve binational cooperation, and reduce reliance on emergency operations.*

To assemble a preferred alternative that reflects what the analysis shows works in the face of an uncertain water future, the Final EIS should also:

- Explicitly compare how individual tools perform across alternatives under sustained low-flow conditions;
- Integrate policy shortages and deadpool-related reductions to reflect the full scope of water unavailable to users;
- Clarify how flexible tools—especially conservation and storage mechanisms—are activated and mitigate risk;
- Refine the parameter-sensitive alternatives in the SD approaches; and
- Integrate ecological tradeoffs into operational design.

IV. Basic Coordination Alternative - A Bridge Operation?

The Draft EIS acknowledges that the BC alternative may be the option Reclamation can implement absent basin-wide consensus. It also recognizes that, as currently formulated, this alternative does not fully meet the Purpose and Need and is unlikely to sustain the Colorado River system over the full post-2026 period. (See Vol. 1, Ch. 2, pp. 2-11). As defined, BC functions at best as a limited operational bridge. If it is to serve that role responsibly, it must be strengthened in the Final EIS.

BC relies on limited shortages, constrained tools, and minimal coordination. (See Vol. 1, Ch. 2, pp. 2-11-15). Without deeper analysis of the operational consequences of this approach, the alternative risks repeated declines below critical elevation thresholds and greater reliance on emergency or exigent operations without evaluating the associated risks to Basin resources. The Final EIS should thoroughly assess the sustained impacts of operating under constrained coordination, including the potential for extended run-of-the-river conditions and the resulting implications for ecological stability alongside effects to storage trajectories, infrastructure reliability, water supply certainty, hydropower production.

While the Draft EIS anticipates that Reclamation may employ "additional measures to protect critical infrastructure" including further reductions in Lake Powell releases and expanded use of CRSP Upper Initial Units (See Vol. 1, Ch. 1, p. 1-31; Ch. 2, pp. 2-11-15), the authorities, decision triggers, and governance processes for implementing such measures are not clearly articulated.

To avoid institutionalizing emergency management as the default operating posture, the Final EIS should explicitly identify the full suite of existing federal authorities that could support more proactive and flexible management under BC and clarify which authorities Reclamation intends to operationalize. In addition to core elements of the Law of the River that govern allocation, appropriation, development, and exportation of the waters of the Colorado River Basin (namely, Colorado River Compact, the Upper Colorado River Basin Compact, the Water Treaty of 1944 with Mexico, the decree of the Supreme Court in *Arizona v. California*, the Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968), this analysis should address whether and how it will execute, at minimum, authorities under the:

- 1902 Reclamation Act (as amended),
- 43 Code of Federal Regulations Part 417, Boulder Canyon Project Act Lower Basin Water Conservation Measures
- Applicable Records of Decision for the Upper Initial Units authorized under the Colorado River Storage Project Act and major Lower Basin facilities,
- Upper Colorado River and San Juan River Recovery Implementation Programs,
- Endangered Species Act,
- Grand Canyon Protection Act and related Long-Term Experimental and Management Plan,
- Authorizing legislation and contracts governing federal facilities, relevant Tribal water settlements and trust responsibilities, and
- Salinity control obligations under the Salinity Control Act and Treaty Minute 242.

Clarifying how Reclamation will invoke these and other authorities (and how they would enable coordinated reservoir management, conservation and storage mechanisms, transactional water sharing, and infrastructure protection) will make clear whether BC can function as a credible interim framework rather than one that defers difficult decisions until crisis conditions force action outside the NEPA-assessed framework.

V. Role and Risks of Emergency and Exigent Operations

Across all alternatives, Reclamation retains the authority to invoke emergency or exigent operations to avoid critical thresholds, including deadpool. (See Vol. 1, Ch. 1, p. 1- 31; Ch. 2, p. 2-11-15). The Draft EIS makes clear, however, that some alternatives rely on this emergency lever far more frequently than others. A post-2026 framework that depends repeatedly on emergency measures is, by definition, not providing the predictability, stability, or durability that the Basin needs—and does not satisfy the Purpose and Need of the proposed action under NEPA.

Even under more resilient operational frameworks, there may be circumstances in which emergency measures remain necessary. For any such measures, transparency regarding the role, scope, and consequences of emergency operations remains essential. The Draft EIS relies on generalized references to emergency authority without clearly disclosing how, when, or how often such measures would be triggered or used, or what their impacts would be. (See Vol. 1, Ch. 2, pp. 2-13-15). This omission limits the ability of decision-makers and the public to evaluate whether an operating framework meaningfully reduces reliance on crisis-driven management—or simply institutionalizes it.

Alternatives should be evaluated in the Final EIS not only based on whether emergency actions could theoretically avert worst-case outcomes, but on how effectively each alternative minimizes the likelihood and frequency of emergency operations. Frameworks that reduce dependence on emergency interventions and clearly define the role, limits, and consequences of those interventions when they remain necessary should be prioritized.

To this end, the updated analysis needs to move beyond generalized references to emergency authority and provide greater clarity on:

- The process that would be implemented to outline emergency measures or specific actions that would be taken under such measures, including how they would interact with existing shortage provisions, release rules, and operational constraints;
- An estimation of the potential duration and scope of emergency actions, and how they would transition back to normal operations; and
- The impacts of emergency measures on water users, Tribal Nations, ecosystems, and critical infrastructure.

The Final EIS would benefit from additional clarity by describing:

1. **Defined triggers and decision points:** Clarifying the quantitative conditions that function as “triggers” or “tiers” (e.g., elevation bands, infrastructure thresholds, minimum power pool proximity, deadpool-related reduction risk) that may prompt consultation, coordination, or consideration of additional measures, rather than referencing unspecified future actions.
2. **Guardrails distinguishing emergency measures from planned operations:** Describing the intended limits on duration, scope, and frequency of emergency

measures (e.g., short-term stabilization objectives; review and transition back to guideline operations; criteria for escalation and de-escalation), to distinguish temporary responses from core operating frameworks.

3. **Impact and mitigation linkage:** Outlining, where practicable, the primary affected resources associated with each trigger or tier and the mitigation approaches that could reasonably be deployed concurrently with or following stabilization actions, to improve transparency regarding potential impacts.
4. **Process transparency and coordination:** Further describing consultation and coordination processes (including with Tribal Nations and Mexico, as well as the Glen Canyon Dam Adaptive Management Work Group, the Upper Colorado River and San Juan River Recovery Programs, and the Lower Colorado River Multi-Species Conservation Program) before and during emergency actions when feasible, along with documentation procedures when immediate action is required.
5. **Integrated reporting tied to performance metrics:** Explaining how emergency actions would be reported in relation to relevant performance metrics—particularly deadpool-avoidance reductions and shortage magnitudes—to support understanding of how such measures influence overall system performance under each alternative.

Providing this information would help inform the potential frequency and implications of deadpool-avoidance and emergency operations and support evaluation of how alternatives address reliance on crisis-driven management.

VI. The Importance of Flexible Tools and Strategies.

The Draft EIS analysis demonstrates that proactive, scalable, and flexible management tools are the linchpin of any successful post-2026 operational framework for the Colorado River system. (See Vol. 1, Ch. 3, pp. 3-50-51, Figure 3-1(dead pool robustness and vulnerability comparisons); Technical App. 8, p. 8-73 (adaptive alternatives achieve preferred performance under drier conditions)). Alternatives that lack these tools place the Basin at the highest risk of system and resource failure and increase the likelihood that Reclamation will be forced to rely on emergency or exigent operations under plausible water futures. (See Vol. 1, Ch. 2, pp. 2-11-15 (absence of conservation/storage tools under BC; reliance on emergency authority)). In contrast, alternatives that incorporate flexible management strategies are the only frameworks that show potential to meet the Purpose and Need while sustaining Basin communities, economies, infrastructure, and ecosystems in the face of uncertain water futures. (See Vol. 1, Ch. 1, pp. 1-19, 1-31 (Purpose and Need; objectives of certainty and flexibility)).

Flexibility is essential not only for managing water-supply risk but also for navigating complex resource tradeoffs. (See Vol. 3, Technical App. 3, pp. 3-21–3-22, with defined critical thresholds that trigger infrastructure, hydropower, and ecological consequences (See Vol. 3, Technical App. 3, Table 3-2). Biological performance metrics summarized in Technical Appendix 8 (Biological Resources) illustrate this dynamic. Alternatives maintaining higher and more stable Lake Powell and Lake Mead elevations generally support more favorable ecological outcomes, particularly in the Lower Basin. At the same time, reservoir elevations influence downstream temperature and water quality conditions (See Vol. 3, Technical App. 4), further reinforcing that no single

elevation regime optimizes all ecological objectives simultaneously. The analyses also demonstrate that high Lake Powell elevations above 3,660 feet introduce tradeoffs, including compromise of upstream riverine habitat near the Colorado and San Juan River inflows and inundation of the Piute Farms Waterfall, which currently limits the spread of non-native warmwater predators. (See Vol. 3, Technical App-8, pp. 8-37, 8-43–44).

Interactions among reservoir elevation, temperature, habitat availability, and species response are complex and, in some cases, inherently conflicting. Elevations that inundate critical riverine habitat (See Vol. 3, Technical App. 8, Tables 8-3 and 8-4) or submerge the Piute Farms Waterfall, altering fish passage dynamics (See Vol. 3, Technical App. 8, pp. 8-43–44), may simultaneously benefit other habitat metrics, while defined elevation bands also trigger hydropower and infrastructure constraints (See Vol. 3, Technical App. 3, Table 3-2). Because reservoir elevations and releases are primary impact drivers across alternatives (See Vol. 3, Technical App. 3, pp. 3-21–22), successfully navigating such tradeoffs requires flexibility. Mechanisms such as the Conservation Reserve incorporated in the MOF or storage and conservation pools in the EC and SD alternatives allow conserved water to be created, stored, and delivered within defined limits without altering Lee Ferry accounting (See Vol. 1, Ch. 2, Table 2-7), providing tools to address ecological considerations while meeting ongoing water-supply obligations consistent with the Law of the River (See Vol. 1, Ch. 1, pp. 1-4).

Several categories of flexible tools that materially improve system performance are distributed across alternatives and are most effective when considered collectively. They include:

- **Dedicated conservation and storage pools**—most fully developed in the MOF alternative through the Conservation Reserve and EC alternative through the Lake Powell Conservation, Lake Mead Protection and Lake Mead user-controlled pools (See Vol. 1, Ch. 2, Table 2-7)—allow conserved or voluntarily contributed water from both the Upper and Lower Basin to be stored across multiple years and to provide opportunities for proactive resource management without being “lost to the system.” (See Vol. 1, Ch. 2, p. 2-30).
- **Transactional water-sharing mechanisms**, emphasized in the MOF, EC, and SD alternatives, enable conserved or contributed water to be moved across users, sectors, and locations in response to changing hydrologic conditions, increasing operational agility under stress. (See Vol. 1, Ch. 2 (discussion of conservation, contribution, and transfer mechanisms of the MOF, EC, and SD alternatives)).
- **Pathways for Tribal Nation participation**, most clearly articulated in the EC alternative (but may also be available within MOF and SD alternatives) (See Vol. 1, Ch. 2, p. 2-16), provide opportunities for Tribal Nations to voluntarily contribute water and receive operational or economic value from settled water rights. Our groups have worked with Tribal Nations to outline key steps for integrating Tribal participation into conservation/contribution pools in the Upper Basin. See Flexible Tools Concept Paper, *The Case for Innovative Tools and a Savings Pool Program in Lake Powell,* attached as Appendix B.

- **Consideration of storage from multiple reservoirs**, reflected in the EC and MOF alternatives (Vol. 3, Technical App. 3, Table 3-2; Vol. 1, Ch. 2, p. 2-16), shifts management away from isolated reservoir targets in accordance with relevant state and federal authorities toward protecting critical infrastructure and maintaining reliable deliveries across the system as a whole, if accomplished through shared authority and jurisdiction.
- **Opportunities for coordinated engagement with Mexico**, building on existing binational mechanisms and most apparent in MOF, EC, and SD alternatives (See Vol. 1, Ch. 2, Tables 2-7 and SD summary), support shared system resilience and reduce the risk of unilateral actions under low-flow conditions.

By contrast, alternatives that defer difficult legal and operational questions, delay responses, or limit coordination—such as No Action and BC—lack structured conservation and storage mechanisms (See Vol. 1, Ch. 2, pp.2-10, 2-16). The BC alternative is the only action alternative that does not incorporate mechanisms for the storage and delivery of conserved water (Vol. 3, Technical App. 3, p. 3-21). In the absence of flexible tools, these alternatives are forced to modify operations to protect critical infrastructure, including measures whose outcomes are uncertain (Vol. 1, Ch. 2, pp. 2-10, 2-16; Vol. 3, Technical App. 3, p. 3-5). Such structures provide limited capacity to manage sustained low-flow conditions and increase the likelihood that emergency interventions would be required.

The Draft EIS further shows that the scale of these flexible tools must be substantial and that none can function effectively in isolation. Their success depends on coordination and consensus among Basin states, Tribal Nations, federal agencies, and, in some instances, key water contractors. Where consensus cannot be achieved, system viability will depend on Reclamation's ability to clearly identify and, if necessary, rely upon existing federal and state authorities (or secure additional authorities) sufficient to implement flexible strategies capable of withstanding legal scrutiny in the face of continued hydrologic decline. (See Basic Coordination Alternative, Section IV, above).

However, the performance of flexible tools within each of the alternatives is not fully visible in the Draft EIS analysis. It is difficult to identify how frequently the Conservation Reserve in the MOF or storage pools in the EC and SD alternatives are activated, how full those reserves become or remain under sustained stress, how often water is moved between reservoirs, or whether and how environmental objectives could influence releases across alternatives.

Rather than informing the selection of a single alternative as defined in the Draft EIS, the Final EIS should focus analyses on the tools that demonstrably improve performance, and define a preferred alternative that employs these tools to optimize outcomes. Evaluating how the tools embedded in the MOF, EC, and SD alternatives compare and perform at scale—in combination with rule curves, release strategies, and contingency measures—will better inform selection of a viable post-2026 framework. The tools and flexibility identified in the Draft EIS have been the subject of unresolved negotiations for over two years. Because agreement is required to implement many of these tools, Reclamation has the opportunity to use the Final EIS to identify

a package of tools and resources grounded in analytical rigor that can form the basis for necessary agreements.

The Final EIS should also identify the pathways through consensus and/or federal authority by which Reclamation will ensure these appropriate tools are available to manage the risks identified in the analysis. Ultimately, the Draft EIS indicates that flexibility is not an optional enhancement; it is the defining feature of any operational strategy capable of sustaining the Colorado River system and its dependent communities and ecosystems under prolonged drought conditions and uncertain water futures.

VII. Meaningful Tribal Inclusion and Considerations

Basin Tribes hold rights to millions of acre-feet of Colorado River water, including both resolved and unresolved claims, many with senior or otherwise highly protected priority. As climate variability continues to reduce runoff and increase the frequency and severity of shortages, Tribal water rights will both be affected and increasingly shape system functions. Effective post-2026 operations, therefore, require direct involvement of Tribal Nations as sovereign partners in decision-making, governance, and implementation.

The Draft EIS appropriately recognizes that Tribal participation—when paired with flexible management tools—can improve system performance while creating pathways for Tribal Nations to protect water in storage, realize value consistent with Tribal priorities, and participate fully in Basin-wide programs. This is reflected most clearly in Technical Appendix 18, as well as in Chapters 3 and 4, which demonstrate expanded effort by Reclamation to evaluate how storage, conservation, and operational flexibility could support Tribal water management in both the Upper and Lower Basins.

The Draft EIS, however, does not yet provide a complete assessment of how post-2026 operations would affect Tribal rights, resources, and priorities. Certain analytical gaps limit the ability of Tribal Nations, decision-makers, and the public to evaluate how operational choices translate into real-world consequences or whether alternatives meaningfully reduce risk or merely defer it. They include:

A. Moving From Analytical Recognition to Meaningful Inclusion

While Technical Appendix 18 and related Draft EIS analyses reflect progress in identifying how Tribal water may interact with post-2026 operations, they do not clearly explain how Tribal Nations would participate in operational elements in practice. Past Basin programs have demonstrated that program design, eligibility criteria, administrative requirements, and risk allocation can unintentionally limit Tribal participation, even where nominally available. (See, e.g., GAO-20-52 (2019); Colorado River Basin Ten Tribes Partnership Tribal Water Study (2018)).

As the Final EIS carries forward key elements and flexible tools, particularly conservation and storage pools, it is critical that program design explicitly enables robust Tribal participation and removes barriers that have constrained Tribal engagement in prior efforts. Without this clarity,

the analytical benefits identified in Technical Appendix 18 risk remaining theoretical rather than actionable for Tribal Nations.

B. Federal Trust Responsibilities and Post-2026 Operations

Post-2026 operational decisions will directly influence the reliability, protection, and practical usability of Tribal water rights, as well as Tribal economies, and cultural and natural resources. Many Basin Tribes entered into treaties and settlements based on representations regarding access to land and water and the long-term value of those resources. As such, Tribal inclusion is not solely a matter of participation but a core operational consideration that should be integrated into the design, evaluation, and implementation of reservoir operations.

To strengthen the Final EIS and decision-making in the Basin, the analysis needs to more clearly disclose how different operational frameworks affect Tribal trust resources under sustained low-flow and extreme conditions, including how alternatives diminish a Tribal Nation's ability to protect water in storage or realize the value contemplated by treaties and settlements. Clarifying these effects would inform efforts to build mitigation as needed and support more resilient post-2026 operations that reduce the risk that system stability is achieved at the expense of Tribal rights and interests.

C. Tribal Water Rights, Deliveries, and Storage

Although the Draft EIS incorporates Tribal water in multiple alternatives and reports system-level risks such as deadpool-related reductions, it does not clearly disaggregate developed and undeveloped Tribal water, identify how assumptions about developed and undeveloped water influence modeled outcomes, or evaluate how specific alternatives affect Tribal water rights, delivery reliability, storage protections, or conservation opportunities. Without transparent, alternative-specific disclosure of volumes, modeling assumptions, and potential shortages to developed and undeveloped water rights, Tribal Nations and decision-makers cannot meaningfully assess tradeoffs or relative risks across futures.

The Final EIS would benefit from including an assessment of potential shortages and deadpool–related impacts to both developed and undeveloped Tribal water rights under each alternative using explicit modeling assumptions, accompanied by clear disclosure of uncertainty, so Tribal Nations and decision-makers can meaningfully compare outcomes across futures. Clearer reporting and explicit evaluation of Tribal water outcomes will be important to both informed participation and responsible post-2026 decision-making.

D. Socioeconomic Impacts on Respective Rights

The Draft EIS's socioeconomic analysis is primarily centered on agricultural production, farm income, and related employment within defined river reaches and irrigation service areas affected by modeled shortages (Vol. 1, Ch. 3; Technical Appendix 17). While the analysis quantifies economic effects associated with reductions in irrigated acreage and crop output, it does not provide a comparably detailed evaluation of broader community-wide, Tribal, or off-river economic impacts that may result from operational decisions.

For many Basin Tribes, Colorado River water supports municipal and domestic water supplies, economic development, employment, housing, public health, energy access, cultural and spiritual resources, and the provision of essential governmental services. Reductions in water deliveries, increased exposure to deadpool–related risks, or constraints on storage protection may limit Tribal water systems, future development tied to settled or developing rights, and revenues from water-dependent enterprises. These impacts are not captured by acreage-based agricultural production metrics or regional modeling tied primarily to irrigated crop reductions. In addition, the consolidation of socioeconomic impacts across broad geographic areas, rather than disaggregating results by individual Tribes, may obscure meaningful differences in exposure, vulnerability, and adaptive capacity. Without clearer Tribe-specific analysis, it is difficult to assess how alternative operating frameworks may differentially affect Tribal communities or to evaluate whether impacts are proportionately managed.

E. Cultural Resources and Traditional Cultural Places (TCP)

With respect to analysis of cultural resources and TCPs, the Draft EIS frames potential effects largely in relation to reservoir elevations and shoreline exposure. Issue 1 in Technical Appendix 11 is explicitly structured around how changes in dam operations affect lake elevations and downstream flows that may, in turn, affect cultural resources. Tables 11-15 and 11-16 categorize archaeological sites by elevation ranges at Lakes Powell and Mead, reinforcing that reservoir elevation is a primary analytical lens. Similarly, Technical Appendix 13 defines TCPs associated with the Colorado River and its canyons and evaluates how operational changes may affect those resources.

While this elevation-based modeling appropriately evaluates preservation risk associated with shoreline exposure and erosion, the Draft EIS does not yet clearly articulate how higher pool elevations, prolonged inundation, or fluctuating hydrology may affect TCPs and other culturally significant landscapes beyond exposure-related risk. Strengthening this linkage in the Final EIS would improve transparency regarding how alternative operating frameworks may affect cultural resources across the full range of hydrologic and operational conditions.

F. Effects to Natural Resources of Importance to Tribal Nations

The Draft EIS does not clearly evaluate how dam operations affect riparian vegetation, wildlife, and other natural resources of cultural and subsistence importance to Tribal Nations. Technical Appendix 13 recognizes that Tribal resources include habitats, plants, wildlife, and other natural resources essential to traditional culture and sovereignty, and expressly frames Issue 3 as evaluating how changes in dam operations may affect riparian vegetation and wildlife important to Native Americans. However, the analysis is presented at a high level and does not consistently provide spatially explicit, alternative-specific evaluation of downstream riverine and riparian conditions relied upon by Tribal communities.

Vegetation and wildlife analyses are largely structured around reservoir elevations and release variability. For example, Technical Appendix 11 frames effects in terms of how dam operations

influence lake elevations and downstream flows that may affect cultural resources, and categorizes sites and risk by elevation ranges relative to Lake Powell and Lake Mead pool levels. While elevation-based exposure modeling is appropriate for certain preservation risks, the Final EIS should more explicitly link operational decisions to riverine and riparian habitat conditions and natural resources relied upon by Tribal communities along the corridor.

G. Indian Trust Lands and Disaggregation of Impacts

The Draft EIS aggregates Tribal impacts when reporting land fallowing and land use changes. For example, Technical Appendix 18 compares key factors affecting Tribal water deliveries across alternatives but does so by priority group rather than Tribe-specific outcomes. (See Vol. 3, Technical App. 18, Table 18-5). Similarly, reliability modeling is presented by categories such as Present Perfected Rights and CAP Indian priorities rather than by Tribe. While this approach aligns with the structure of the Shortage Allocation Model, it masks materially different effects on individual Tribal Nations. Where feasible, impacts should be disaggregated by Tribe or otherwise clearly described to reflect differentiated outcomes and support equitable mitigation. (See Vol. 3, Technical App. 18, Table 18-5).,

H. Consultation for Culturally Significant Places

The Draft EIS appropriately acknowledges ongoing government-to-government consultation as Reclamation continues compliance with NHPA and entities.

With respect to TCPs, Technical Appendix 13 defines TCPs associated with the Colorado River and its canyons and evaluates potential effects of dam operations on those resources. Technical Appendix 11 similarly structures cultural resource analysis around reservoir elevations and shoreline exposure. While this approach evaluates preservation risks tied to inundation and exposure dynamics, the Final EIS should more clearly commit to engagement with Tribal Historic Preservation Offices and Tribal cultural protection departments, including for culturally significant places that may not yet be formally listed, nominated, or fully identified within the developing Area of Potential Effect.

Overall, meaningful Tribal inclusion is a foundational pillar to post-2026 operations. The issues summarized in Table 2 below reflect core elements necessary to ensure that Tribal sovereignty, trust responsibilities, and water rights are fully integrated into post-2026 operations. Addressing these considerations will strengthen legal defensibility, improve operational resilience, and support meaningful Tribal participation in Basin operations.

Table 2: Tribal Inclusion and Trust Integration - Key Considerations for the Final EIS				
Key Consideration	**What the Draft EIS Shows**	**Gap or Limitation Identified**	**Why It Matters for Decision-Making**	**Recommendation for Final EIS**
From Recognition to Meaningful Participation	Tribal participation in storage and conservation tools and potential system performance benefits associated with such participation.	Does not clearly describe how Tribal Nations would participate in program design and implementation, operational decisions or risk management.	Absent operational clarity, Tribal participation may remain analytical rather than actionable, limiting both effectiveness and trust integration.	Clearly operationalize voluntary Tribal participation in conservation and storage tools, including governance structure, eligibility criteria, accounting protections, and protection of stored water.
Federal Trust Responsibilities	Recognizes Tribal water rights and potential interaction with post-2026 operations.	Lacks alternative-specific analysis of how operations affect Tribal trust resources under sustained low-flow or extreme conditions.	Operational choices may impair reliability, storage protection, or economic value tied to settlements and treaties.	Disclose how each alternative affects Tribal trust resources and water reliability under low-flow conditions; affirm safeguards for Tribal sovereignty and settlement protections.
Tribal Water Rights, Deliveries & Storage	Includes Tribal water in modeling and reports system-level risks (e.g., deadpool-related reductions).	Does not clearly disaggregate developed vs. undeveloped Tribal water or quantify alternative-specific shortages and storage impacts.	Without transparent, Tribe-specific reporting, risks and tradeoffs cannot be meaningfully evaluated.	Provide alternative- and Tribe-specific analysis of developed and undeveloped Tribal water volumes, delivery reliability, storage protection, and potential shortages with clear modeling assumptions and uncertainty disclosure.
Socioeconomic Impacts to	Socioeconomic analysis	Does not fully evaluate	Aggregation obscures	Expand and disaggregate

Table 2: Tribal Inclusion and Trust Integration - Key Considerations for the Final EIS				
Key Consideration	**What the Draft EIS Shows**	**Gap or Limitation Identified**	**Why It Matters for Decision-Making**	**Recommendation for Final EIS**
Tribal Nations	primarily focuses on agricultural impacts within the river corridor.	impacts to Tribal municipal systems, economic development, housing, energy, public health, or governmental services; impacts are often aggregated.	differentiated vulnerability and adaptive capacity among Tribes.	socioeconomic analysis by Tribe; evaluate impacts beyond agriculture, including municipal, energy, housing, and economic development effects.
Cultural Resources & Traditional Cultural Places	Acknowledges ongoing consultation; focuses largely on shoreline TCPs and elevation-based exposure modeling (e.g. TA-11; TA-13).	Does not demonstrate full evaluation of river corridor, floodplain, spring, or upland culturally significant places within Area of Potential Effects.	Reservoir and release changes may cause adverse effects beyond shoreline inundation, or erosion, including impacts associated with fluctuating hydrology and prolonged inundation.	Broaden and substantiate analysis of TCPs; commit to continued consultation with Tribal Historic Preservation Offices (THPOs) and cultural departments.
Natural & Subsistence Resources Important to Tribes	Biological analysis emphasizes reservoir elevations and release variability.	Limited linkage between dam operations and riparian vegetation, wildlife, and subsistence resources relied upon by Tribal communities.	Cultural, subsistence, and natural resource impacts may occur prior to deadpool or reservoir endpoints.	Explicitly connect operational choices to downstream riverine and riparian habitat conditions important to Tribal Nations.
Disaggregation of Tribal Land & Impact Data	Reports Tribal land fallowing and land-use changes in aggregate (e.g., TA-18-5).	Aggregation masks materially different impacts across individual Tribes.	Equity and mitigation planning require Tribe-specific understanding of exposure and impact.	Disaggregate impacts by Tribe where feasible; clearly describe differentiated outcomes to support equitable mitigation and participation.

Table 2: Tribal Inclusion and Trust Integration - Key Considerations for the Final EIS				
Key Consideration	**What the Draft EIS Shows**	**Gap or Limitation Identified**	**Why It Matters for Decision-Making**	**Recommendation for Final EIS**
Consultation & Government-to-Government Engagement	Notes ongoing consultation during Draft EIS development.	Does not clearly commit to continued, structured engagement during Final EIS and implementation phases.	Effective post-2026 operations depend on sustained sovereign-to-sovereign engagement.	Commit to structured, ongoing government-to-government consultation through Final EIS development and implementation, including consultation on preferred alternative design.

VIII. Ecological Integrity Is a Core System Objective

The Colorado River is not solely a water delivery system; its ecological condition underpins the Basin's social, economic, and operational stability. The Draft EIS demonstrates that declining reservoir storage, altered flow regimes, and hotter and drier conditions are already affecting riparian and aquatic ecosystems, water quality, recreation, and cultural resources across the Basin. These conditions are not peripheral. They directly influence whether water supplies remain usable, infrastructure remains operable, regulatory obligations remain manageable, and Basin communities remain resilient to ongoing change.

The Draft EIS makes clear that post-2026 operations cannot focus solely on reallocating scarcity among users. An operational framework that redistributes limited supplies without sustaining ecological integrity will ultimately fail to meet the Purpose and Need of the action as well as destabilize the Basin. Ecological impacts feed back into system risk through water quality impairments, infrastructure constraints, loss of operational flexibility, and increased regulatory and legal exposure. In this sense, the Basin cannot be protected by managing deliveries alone.

Several environmental trends identified in the Draft EIS are directly linked to operational choices. Hydrologic modeling is the driver of environmental consequences across resource areas, including biological resources and recreation (See Vol. 1, Ch. 3, p. 3-7). Because alternative operating rules determine reservoir elevations, releases, and river flows, they directly shape downstream environmental conditions, including:

- **Riparian and terrestrial habitat impacts** are closely tied to changes in river flows and reservoir elevations. Technical Appendix 3 explains that changes in river flows and reservoir elevations affect groundwater elevations where hydraulic connectivity exists. (Vol. 3, Technical App. 3, p. 3-105). The same appendix documents that alternatives produce materially different median annual flows in Lower Basin reaches (Vol. 3, Technical App. 3, p. 3-113). These linkages and others demonstrate that operational differences among alternatives translate directly to documented losses of marsh and woody riparian vegetation, with additional losses projected under multiple alternatives.
- **Stress on aquatic ecosystems and native species** within Lakes Powell and Mead National Recreation Areas, Grand Canyon National Park, and downstream refuges and conservation sites, driven by warmer water temperatures, reduced flows, and habitat impacts associated with low reservoir elevations and altered release patterns. (See Vol. 3, Technical App. 8, p. 8-82).
- **Water quality impacts**, including increasing salinity and temperature stress under lower storage conditions, affect municipal, agricultural, industrial, and ecological uses. (see Vol. 1, Ch. 3, pp. 3-22, 3-153).
- **Recreation and cultural resource impacts**, as declining reservoir elevations reduce recreational access, impair facilities, and expose or degrade culturally significant sites. (See (Vol. 1, Ch. 3, p. 3-153; Vol. 3 Technical App. 16, p. 16-64).

Environmental impacts are most acute under drier, low-flow conditions, which are the same hydrologic regimes where operational differences among alternatives are highly informative. (See Vol. 1, Ch. 3, p. 3-22). Alternatives that delay action or rely on optimistic reservoir recovery assumptions experience sharper storage declines and greater release variability, intensifying ecological stress. Importantly, extended run-of-the-river operations at Lake Powell, and potentially at Lake Mead, are no longer merely theoretical boundary conditions. Under persistent low inflows and constrained coordination, reservoir storage could provide little operational buffering, fundamentally altering temperature regimes, sediment transport, habitat availability, and downstream water quality.

Ecological conditions are also shaped by binding statutory and programmatic requirements. The ESA, the MSCP, and the GCPA as implemented in part through the Long-Term Experimental and Management Plan (LTEMP), establish obligations, some of which overlay and influence reservoir operations. As hydrologic stress intensifies, compliance with these authorities increasingly becomes a determining factor in operational decision-making.

While the Draft EIS acknowledges ongoing and anticipated Biological Opinions and MSCP and LTEMP implementation in conjunction with Post-2026 operations (See Vol. 1, Chap. 3, pp. 3-7, 3-9, 3-22, and Vol. 3, Technical App. 8, p. 8-82 and Technical App. 9, p. 9-41), the impacts to threatened and endangered species, MSCP conservation areas, and GCPA resources as a result of different operating alternatives are not readily identifiable. How mitigation and adaptive management may be deployed to help ensure continued compliance under a range of plausible futures also needs to be made more evident.

More broadly, ecological objectives need to be fully integrated into the comparative evaluation of alternatives. Several analytical gaps illustrate the need for a stronger linkage between operational choices and environmental outcomes in the Final EIS:

- **Lower Colorado River ecology and refuges:** Vegetation and wildlife analyses in the Draft EIS rely primarily on release variability rather than river stage and groundwater response, despite established methodologies in prior MSCP Biological Assessments. Risks to refuges such as Cibola, Havasu, and Imperial National Wildlife Refuges under sustained low flows are acknowledged but not quantified or compared across alternatives. (see Section VI.D in Technical Comment Appendix A);
- **Grand Canyon resources:** Consequences of operating measures on the Grand Canyon ecosystem are not synthesized in a way that allows for straightforward comparison of ecological risk across alternatives. (See Section VI.E in Technical Comment Appendix A).
- **Groundwater systems:** Analysis is largely limited to alluvial aquifers and relies on assumed responses, without evaluating deeper basin-fill aquifers, tributary basins, or increased pumping triggered by surface water shortages. (see Section VI.F in Technical Comment Appendix A);
- **Salinity management:** Salinity management in compliance with Treaty delivery obligations, particularly in the Yuma area, can materially affect Lake Mead releases, yet

salinity modeling is not fully integrated into system performance comparisons. (see Section VI.G in Technical Comment Appendix A); and
- **Air quality:** Agricultural fallowing is evaluated for socioeconomic effects, but associated air quality and public health impacts—particularly in rural and Tribal communities—are not assessed. (see Section VI.H in Technical Comment Appendix A).

To address these gaps and strengthen the analysis relevance, the Final EIS should:

- **Elevate ecological integrity as a core performance objective, not just an impact category.** Environmental conditions should be evaluated as drivers that directly shape system functionality and risk, and not just consequences of different operations. As discussed in the Alternatives Evaluation Section III, above, tools such as conservation and storage pools demonstrate how ecological objectives can be structurally embedded within guideline design rather than deferred to reactive processes.
- **Explicitly link environmental conditions to performance metrics and operational outcomes.** The ecological consequences of reservoir elevations, storage volumes, shortage frequency, and deadpool risk should be consistently connected to avoid obscuring whether apparent system "performance" is achieved at the expense of long-term viability.
- **Focus environmental analyses on flow conditions consistent with observed trends and projections.** While system performance differences are most pronounced under prolonged low flows, environmental analyses often span broad hydrologic ranges that should more clearly identify ecological thresholds crossed under variable stress.
- **Strengthen spatially explicit, process-based analyses in key reaches.** In highly regulated reaches—particularly the Lower Colorado River—the Final EIS should rely on more than proxies such as release variability to also include analysis of river stage, groundwater connectivity, and habitat response directly.
- **Evaluate environmental impacts and degradation as an indicator of future system risk.** The Final EIS should more fully assess how continued ecological decline and prolonged run-of-the river operations could constrain future operations, trigger regulatory or legal actions, or increase reliance on emergency measures, linking impacts to mitigation and adaptive management strategies.
- **Compare performance relative to ESA, MSCP, and GCPA objectives.** Include a side-by-side analysis of how each alternative supports or constrains compliance with the ESA, MSCP, and GCPA. The evaluation should explicitly link, where possible, reservoir elevations, release patterns, and operational flexibility to effects on listed species, habitats, and environmental and cultural resources under drier low-flow conditions.
- **Clarify process for complying with environmental overlays to Post-2026 operations.** The Final EIS should clarify whether ecological compliance is structurally embedded within an alternative or deferred to reactive measures that will be described in different compliance documents. Including these analyses in the Final EIS will improve transparency and ensure ecological durability is assessed alongside water supply and infrastructure performance.

The observations and recommendations discussed above are summarized in Table 3.

Table 3: Ecological Integration and Compliance Matrix			
Ecological Integration Issue	**Draft EIS Limitation**	**Why It Matters for Decision-Making**	**Recommendation for Final EIS**
Ecological Integrity as a Core Objective	Ecological impacts are primarily presented as consequences rather than as conditions that directly shape system performance and risk.	Environmental conditions influence whether water supplies remain usable, compliance remains manageable, and infrastructure remains operable. Sustained low flow conditions or prolonged run-of-river conditions, accelerate ecological impacts, increase regulatory exposure, constrain operations, and elevate long-term system risk.	Elevate ecological integrity as a core performance objective alongside storage, reliability, and infrastructure protection. Evaluate the environmental, infrastructure, and economic consequences of sustained run-of-the-river operations as a stress-test scenario, and explicitly link ecological degradation to future operational constraints, regulatory risk, and emergency reliance.
Lower Colorado River & Refuge Conditions	Analyses rely heavily on release variability rather than river stage, groundwater connectivity, and habitat response. Modeled water supply shortages to National Wildlife Refuges and to irrigation districts delivering water to MSCP habitat areas are not consistently translated into vegetation and wildlife impact comparisons across alternatives.	River stages, groundwater responses, and water delivery shortages to refuges and irrigation districts supplying MSCP sites can reduce habitat maintenance, restoration success, and compliance with programmatic biological commitments.	Incorporate spatially explicit, process-based analyses (river stage, groundwater response, habitat metrics) and quantify and compare water supply shortages to refuges and irrigation districts serving MSCP habitat sites across alternatives under sustained low flows. Clearly link modeled shortages to habitat condition, restoration feasibility, and compliance risk.
ESA, MSCP, and GCPA Compliance	Compliance obligations are referenced but not consistently integrated into comparative performance evaluation.	ESA, MSCP, and GCPA requirements will materially constrain operations under prolonged drought and shape	Provide side-by-side evaluation of how each alternative supports or constrains ESA, MSCP, and GCPA compliance under low-flow

Table 3: Ecological Integration and Compliance Matrix			
Ecological Integration Issue	**Draft EIS Limitation**	**Why It Matters for Decision-Making**	**Recommendation for Final EIS**
		future release decisions.	conditions.
Proximity to Ecological Thresholds	Emphasis on deadpool overlooks ecological stress occurring well before critical elevations.	Species, habitats, and water quality degrade long before infrastructure thresholds are reached.	Add metrics capturing duration near ecological and recreational thresholds (e.g., temperature bands, invasive species risks, sand mass balance loss, habitat triggers, groundwater separation points).
Groundwater & Connected Systems	Focus is on alluvial aquifers; assumes responses without evaluating deeper or tributary systems or shortage-driven pumping.	Surface water shortages may increase groundwater extraction, affecting riparian ecosystems and Tribal resources.	Expand groundwater analysis to include basin-fill aquifers, tributary impacts, and shortage-induced pumping scenarios.
Salinity Management	Salinity compliance (esp. in Yuma area) is not fully integrated into system performance comparisons.	Salinity obligations can materially influence release decisions and international commitments.	Integrate salinity modeling into alternative comparisons, showing operational effect to compliance.
Air Quality & Public Health	Agricultural fallowing is analyzed for socioeconomic impacts but not associated air quality or public health consequences.	Dust and particulate impacts disproportionately affect rural and Tribal communities.	Evaluate air quality impacts associated with land fallowing and incorporate mitigation as needed.
Flexible Management & Mitigation Linkage	Flexible tools are referenced but not clearly embedded within alternative structures.	Without embedded flexibility, compliance may rely on reactive emergency measures.	Clarify how adaptive management and mitigation tools are triggered, governed, and integrated into operations across alternatives.

Table 3: Ecological Integration and Compliance Matrix			
Ecological Integration Issue	**Draft EIS Limitation**	**Why It Matters for Decision-Making**	**Recommendation for Final EIS**
Ecological Tradeoffs at Higher Elevations	Tradeoffs (e.g., Piute Farms Waterfall or Pearce Ferry inundation, and upstream habitat impacts) are identified but not operationalized within flexible tools.	Reservoir elevation strategies create competing ecological outcomes.	Evaluate how conservation reserves or storage pools can be strategically deployed to manage elevation-related ecological tradeoffs.

The Draft EIS demonstrates that the Basin's future cannot be secured by managing deliveries alone. Ecological integrity underpins reliable operations, resilient infrastructure, regulatory stability, and sustainable communities. Elevating ecological objectives as a central selection criterion will strengthen both environmental outcomes and long-term system viability under deep uncertainty.

IX. Mitigation and Parallel Resilience Investments

Mitigation and water security must be treated as core components of any post-2026 action—not ancillary or deferred considerations. Under all Draft EIS alternatives, significant impacts to communities, Tribal Nations, ecosystems, and regional economies are likely as the Basin continues to experience hotter and more variable conditions. A framework that preserves minimum operability while allowing unmanaged harm, or fails to incentivize reduced water use, would not be effective or defensible under NEPA.

Although the Draft EIS acknowledges mitigation tools and related programs, it does not present a coherent strategy for deploying mitigation alongside post-2026 operations. Nor does it fully recognize that mitigation must extend beyond short-term impact management to include long-term, Basin-wide resilience-building and water security programming in support of post-2026 operations. Even under the most resilient operating framework, prolonged low reservoir elevations, sustained shortages, and emergency operations will generate impacts that require proactive and parallel mitigation.

Effective mitigation must be structured to operate in tandem with reservoir management to support sustained reductions in consumptive use and address impacts to Basin resources. This includes helping minimize effects from Colorado River Storage Project operations through Grand Canyon National Park to the Lower Basin reservoirs and recreation areas and downstream refuges. It also requires attention to Tribal water rights and trust responsibilities, municipal and industrial reliability, agricultural transitions, recreation losses, and community economic disruption. Resilience in this context means not only buffering harm but reducing system stress by aligning water use with long-term supply realities. Because these impacts are likely to intensify and persist under prolonged low flows, one-time measures will be insufficient; long-term, adaptive, and adequately resourced approaches are required.

Durable mitigation programs should be supported by long-term funding, transparent governance, and accountability mechanisms. These could include ecosystem restoration, conservation and water savings programs, infrastructure modernization, Tribal water development and valuation support, municipal adaptation investments, and economic transition assistance, among others. It should also include the important monitoring and verification activities needed to successfully implement the operational framework and mitigation activities going forward. Designed in coordination with in-basin expertise, such efforts can reduce system stress, limit reliance on emergency authorities, and strengthen adaptive capacity across the Basin.

To align mitigation with the realities identified in the Draft EIS, the Final EIS should: (1) expressly recognize the need for long-term mitigation programs aligned with the duration of the post-2026 guidelines; and (2) evaluate mitigation opportunities as an integral, parallel component of each alternative, rather than as a generalized or deferred commitment; and (3) build in long-term management practices and adequately resourced approaches for adjusting to changing conditions.

Connecting mitigation and resilience investments with reservoir operations is fundamental to stabilizing the system and transitioning the Basin from crisis response toward long-term reliability.

X. Continued Engagement and Path Forward

The Conservation Groups acknowledge and appreciate the extensive consultation and engagement that Interior and Reclamation have undertaken throughout the scoping, alternatives development, and Draft EIS preparation process. (See Vol. 1, Ch. 1, Public Involvement and Scoping; see also Vol. 1, Ch. 1, pp. 1-5 – 1-8). Engagement with Basin states, Tribal Nations, stakeholders, and the public has meaningfully informed the range of alternatives analyzed, improved transparency, and strengthened the analytical foundation of the Draft EIS. (See Vol. 1, Ch. 1; Ch. 3, p. 3-7) These efforts reflect the intent of NEPA to promote informed decision-making through early and meaningful participation.

Given the significance and long-term implications of post-2026 operating decisions for the Colorado River System, this engagement should be carried forward through the development of the Final EIS, analysis of any future state consensus proposal, identification of a preferred alternative, and issuance of the Record of Decision. The Draft EIS evaluates a broad suite of operational tools, tradeoffs, and analytical results that will necessarily be refined, combined, or modified in the Final EIS. Continued engagement will help ensure that these refinements are well understood, implementable, and aligned with the legal, operational, and practical realities faced by Basin states, Tribal Nations, and affected stakeholders.

Additional engagement is critical as a preferred alternative is developed. Providing states, Tribal Nations, and stakeholders an opportunity to review and comment on the preferred alternative and the supporting analyses will improve understanding of how the framework is intended to function under a range of hydrologic conditions, identify important implementation considerations, and inform targeted refinements that can enhance effectiveness and reduce future conflict.

For Tribal Nations, continued government-to-government consultation is particularly important to ensure that Tribal perspectives, water rights, and interests are fully incorporated into final operational decisions. For Basin states and other stakeholders, ongoing engagement will be needed to clarify how any preferred alternative interacts with existing authorities, agreements, and operational constraints, and whether additional tools or safeguards are necessary.

Maintaining this inclusive and transparent approach through the Final EIS will strengthen decision-making, reduce the risk of unintended consequences or litigation, and increase the likelihood that post-2026 operations can be implemented effectively.Moreover, incorporating the comments and suggestions provide Interior and Reclamation an opportunity to use this process to help the Basin states and stakeholders advance the necessary consensus that has thus far proven difficult to achieve. Far from delaying action, continued engagement will build the shared understanding and trust needed to support timely, effective, and defensible decisions.

Reclamation must advance the robust engagement and consultation practices established during scoping and Draft EIS development by providing additional opportunities—at the state, Tribal, and stakeholder levels—to review and comment on the preferred alternative, the Final EIS analyses, and the proposed operational frameworks before final decisions are made.

XI. Summary of Findings and Recommendations

Through this comment letter, the Conservation Groups identify findings about what drives operational performance under sustained low-flow conditions, what limits the relevance of the current analysis, and what modifications would improve alignment of the Final EIS with the Purpose and Need. Table 4 distills those findings and corresponding recommendations into a consolidated framework of suggested actions.

Table 4: Findings and Recommendations Summary - Post-2026 Colorado River Operations – Final EIS Priorities			
Strategic Theme	**Core Finding from Draft EIS**	**Why It Matters**	**Final EIS Priority Action**
Anchor Decisions in Plausible Hydrology and Initial Reservoir Conditions	Meaningful performance differences emerge under Average-Dry-Critically Dry inflows. Equal emphasis on wetter futures and optimistic starting storage dilutes decision relevance.	The Basin will require active management under persistently dry conditions. Planning should factor in observed trends and avoid undue reliance on recovery assumptions.	Center comparative evaluation of alternatives and tools on the drier, low-flow conditions; constrain starting reservoir storage assumptions to plausible near-term elevations; elevate the drier hydrology categories in conclusions and summaries.
Prioritize Early, Managed Reductions Over Crisis Cuts to Inform the Preferred Alternative	Alternatives with earlier policy-based shortages (MOF, EC, partial SD) preserve storage and reduce emergency reliance; delayed approaches experience deeper deadpool avoidance reductions.	Predictability and system stability improve when reductions are deliberate rather than crisis-driven.	Present total reductions (policy + deadpool avoidance) together; evaluate magnitude, timing, and duration of shortages; prioritize a preferred alternative that reduces emergency exposure.
Elevate Stress Indicators Beyond Deadpool Metrics	Significant impacts occur well before deadpool; deadpool and deadpool-related reductions framing, by itself, masks duration near critical elevations and escalating impacts.	Heavy focus on deadpool related metrics masks prolonged stress and escalating harm.	Elevate metrics for proximity to thresholds, duration of impaired operations, hydropower reliability loss, and escalation frequency toward emergency conditions.
Reduce Structural Reliance on Emergency Authority	Some alternatives depend heavily on emergency/exigent operations to avoid critical thresholds.	Recurring emergency intervention signals operational fragility and increases legal, economic, and operational risk.	Define clear triggers, guardrails, duration limits, consultation commitments, and reporting requirements for any emergency actions.
Make Flexible Tools Fully Visible and Comparable	Conservation/contribution pools, coordinated reservoir management, and transactional	Flexibility drives system resilience, yet performance benefits are understated without transparency.	Provide side-by-side comparison of tool design; disclose activation frequency, pool utilization, volumes mobilized, and

Table 4: Findings and Recommendations Summary - Post-2026 Colorado River Operations – Final EIS Priorities			
Strategic Theme	**Core Finding from Draft EIS**	**Why It Matters**	**Final EIS Priority Action**
	tools materially improve performance, but tool activation and scale are not consistently assessed.		performance under sustained stress.
Identify and Synthesize Effective Tools Across Alternatives to Inform Preferred Alternative	No single alternative performs best across all conditions. Performance differences are driven by specific tools (early policy shortages, flexible conservation/storage pools, coordinated operations, and Tribal participation) within alternatives rather than any individual alternative as a complete package.	Selecting one alternative in its entirety risks carrying forward weaker components while overlooking operational features that more effectively reduce risk under variable flow conditions. A tools-based synthesis better aligns with the Draft EIS's analytical findings.	Explicitly evaluate which operational elements demonstrably reduce systemic risk and integrate those elements into a preferred alternative. Clearly explain which tools are adopted, modified, or excluded and why.
Ensure Meaningful Tribal Inclusion and Satisfaction of Trust Responsibilities	Tribal water assumptions (developed vs. undeveloped) are not clearly articulated; participation mechanisms vary structurally across alternatives.	Tribal rights, sovereignty, and trust responsibilities are materially relevant to the sustainable operation of Colorado River reservoirs.	Clearly describe outcomes for Tribal water volumes and impacts to Tribal resources separately; provide alternative-specific shortage analysis showing how Tribal water rights would be affected; operationalize Tribal participation in decision making and implementation of conservation/storage tools.
Elevate Ecological Integrity as a Relevant Performance Objective	Ecological impacts intensify under the drier, low flows conditions and feed back into system risk; ESA, MSCP, and GCPA overlays are not clearly evaluated.	Ecological stability underpins regulatory compliance, infrastructure operability, and long-term water security.	Provide side-by-side analysis of legal compliance considerations; link elevations and release patterns to listed species, refuges, groundwater, salinity, and cultural resources; strengthen process-based analyses in regulated reaches.
Ensure Modeling Outcomes and Qualitative Assessments are	Modeled shortages and low elevations are not consistently	System-level "performance" may shift risk rather than reduce it.	Explicitly connect modeled outcomes (quantitatively or qualitatively) to

Table 4: Findings and Recommendations Summary - Post-2026 Colorado River Operations – Final EIS Priorities			
Strategic Theme	**Core Finding from Draft EIS**	**Why It Matters**	**Final EIS Priority Action**
Translated into Real-World Impacts	carried into municipal, Tribal, hydropower, or socioeconomic impact analyses.		sector-specific reliability, infrastructure stress, Tribal economies, and ecological consequences.
Integrate Mitigation and Resilience as Parallel Components	Impacts occur under all alternatives; mitigation is acknowledged but not structurally embedded to ensure effective post-2026 operations.	Effective reservoir stabilization and management require anticipating and addressing harm—not simply preserving operability.	Treat mitigation as an integral, long-term element of post-2026 operations with defined funding pathways and decision-making.
Clarify Decision-Making and Implementation Pathways	Consensus is essential to effective operations, but it is not guaranteed. Shortage distribution modeling, conservation assumptions, and SD parameter choices implicate unresolved governance questions.	Effective implementation requires clarity on authority and pathways if agreement falters.	Clarify interstate vs. contractor shortage assumptions; refine SD parameters; identify federal authorities available or needed if consensus cannot be achieved.
Maintain Transparent Engagement and Sovereign to Sovereign Consultations	Continued engagement fulfills obligations, bolsters credibility, and strengthens defensibility.	Trust, equity, and reduced litigation risk depend on meaningful consultation, participation, and engagement.	Provide opportunity to review any state consensus proposal, the preferred alternative, and the Final EIS; commit to ongoing Tribal consultation and transparent reporting.

The Draft EIS demonstrates that early, managed reductions; flexible conservation and storage tools; coordinated reservoir operations; integration of ecological objectives; and meaningful Tribal participation are the elements that most effectively reduce systemic risk under continued aridification. The Final EIS should build on this record by synthesizing these elements into a coherent and transparent post-2026 operating framework, one that minimizes reliance on emergency authority, embeds mitigation and resilience investments as integral components of operations, and aligns decision-making with the hydrologic conditions the Basin is most likely to face.

XII. Preferred Alternative Considerations

This comment letter is not intended to advance a single, standalone alternative. Instead, the Conservation Organizations recommend that the Final EIS synthesize the most effective operational components across alternatives into a tools-based preferred alternative capable of managing trending low-flow conditions, protecting Basin resources, and reducing reliance on emergency interventions.

Based on the Draft EIS analysis and modeled performance across hydrologic futures, the following elements should factor into Reclamation's selection of a preferred alternative to stand the best chance of securing the Basin's future:

1. **Operationally neutral conservation/contribution pools for Lakes Mead and Powell.** The preferred alternative should include conservation and storage pools with broad participation from Tribal Nations and water users in both the Upper and Lower Basins. Accumulation limits should be comparable in scale to those modeled under the EC and MOF alternatives to provide meaningful buffering capacity while maintaining system accounting integrity. These pools should be structured to preserve Lee Ferry accounting, as appropriate, and include transparent activation, accounting, and reporting provisions so that performance benefits are measurable and comparable across hydrologic conditions.
2. **Operational determinations informed by recent hydrology trends**. The preferred alternative should incorporate elements drawn from the EC, MOF, or SD frameworks—such as rolling hydrologic averages, climate response indicators, or flow-percentage approaches—to inform release volumes, shortage triggers, coordinated reservoir operations, and near-term stress testing under plausible starting elevations.
3. **Meaningful Tribal inclusion and fulfillment of federal trust responsibilities.** The preferred alternative should include clear pathways for Tribal Nations to participate in operational decision-making and to voluntarily contribute conserved water through conservation or savings pools. Federal trust responsibilities should be reflected in both operational design and mitigation programming, including transparent modeling of developed and undeveloped Tribal water and management of stored Tribal water protection and management of stored Tribal water.
4. **Robust mitigation with long-term programming and sustained investment.** The preferred alternative should incorporate mitigation as a parallel and durable component of post-2026 operations, not defer or treat it as ancillary, and should establish long-term

programming, defined funding pathways, and monitoring and verification mechanisms to address impacts to communities, Tribal Nations, economies, and ecosystems while supporting sustained reductions in consumptive use and overall system resilience.

5. **Plausible policy shortages and conservation commitments to address the risk of deadpool and deadpool-related reductions.** Consistent with modeled performance outcomes, the preferred alternative should be structured to accommodate conservation/contribution commitments and policy-based shortages approaching approximately 3 MAF under critical conditions in order to reduce the likelihood of deadpool and deadpool-related reductions.
6. **Opportunities for both Upper Basin and Lower Basin water conservation and contributions**. The preferred alternative should define and make available clear pathways for conservation and contributions in Upper and Lower Basin reservoirs, aligned with state, Tribal, and local priorities and capable of strengthening overall system performance under drier, low-flow conditions.
7. **Flexibility to accommodate future binational agreements with Mexico.** The preferred alternative should be structured to accommodate operations that may arise as a result of a successor agreement with Mexico. Embedding this flexibility will preserve opportunities for binational cooperation, reduce legal and operational uncertainty, and ensure that the preferred alternative remains effective as negotiations with Mexico evolve.
8. **Transparent triggers and guardrails for emergency operations.** The preferred alternative should define clear quantitative triggers, scope, duration limits, consultation expectations, and accounting provisions for any emergency or exigent actions. Emergency authority may remain necessary as a backstop, but explicit guardrails should ensure that it supplements—rather than substitutes for—planned operations.
9. **Transactional water-sharing mechanisms.** The preferred alternative should include mechanisms similar to those modeled under the MOF and SD alternatives to enable conserved or contributed water to move across users, sectors, and locations. Such flexibility increases operational agility, incentivizes participation, and allows water to be deployed where it provides the greatest system benefit during stress without impairing compact compliance or Lee Ferry accounting.

XIII. Conclusion

The Draft EIS confirms that the Colorado River Basin has entered a period of sustained and compounding risk, driven by persistent drought, declining storage, and increasing operational stress. The question before Reclamation is no longer whether impacts can be avoided, but whether post-2026 operations will manage risk deliberately and transparently or default to recurring emergency intervention. The latter path is neither effective nor defensible.

The analysis makes clear that system stability depends on early, proactive management; flexible and coordinated use of storage; meaningful Tribal participation; and integration of ecological integrity and mitigation into operational considerations. Frameworks that delay action, rely on rigid rules, or institutionalize emergency operations consistently perform worse under the

hydrologic conditions the Basin is most likely to face. Alternatives that deploy flexible tools early and at scale are more likely to preserve operability, reduce compounding harm, and sustain communities, Tribal Nations, and ecosystems.

The Final EIS, therefore, presents a critical opportunity—not merely to select among discrete alternatives, but to synthesize a preferred post-2026 framework built from the operational elements the analysis shows reduce risk. Doing so will require sharpening the focus on sustained low-flow conditions, clarifying authorities and guardrails, strengthening linkages between modeled outcomes and real-world impacts, and pairing operational reform with effective mitigation and resilience investments. These steps are necessary to meet NEPA's purpose, reduce legal and operational risk, and provide the predictability the Basin urgently needs.

Our organizations remain committed to constructive engagement as Reclamation moves toward a preferred alternative and Record of Decision. Continued, transparent consultation with Basin states, Tribal Nations, Mexico, and stakeholders—particularly once a preferred framework is identified—will be essential to ensuring that post-2026 operations are implementable and resilient. The opportunity to move beyond crisis-driven management is narrowing. The Final EIS must seize this moment to chart a path toward effective, adaptive, and science-based operations capable of sustaining the Colorado River system under deep uncertainty.

Matt Rice
Director, Southwest Region
American Rivers

Jennifer Pitt
Colorado River Program Director
National Audubon Society

Sara Porterfield
Colorado River Program Director
Western Water Policy Advisor
Trout Unlimited

Kevin Moran
Associate Vice President,
Regional Affairs
Environmental Defense Fund

Celene Hawkins
Colorado River Program Director
The Nature Conservancy

Bart Miller
Director, Healthy Rivers Program
Western Resource Advocates

Alex Funk
Senior Counsel & Director
Water Resources Program
Theodore Roosevelt Conservation
Partnership