THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Colorado River Resources Group

- **Colorado River Management Report**

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for February 18, 2026 – March 23, 2026.

Purpose

Informational

Attachments

MWD post-2026 guidelines Draft Environmental Impact Statement comment letter

Detailed Report

Develop Post-2026 Guidelines and Negotiate Implementation Agreements: Provide Input that Shapes Reclamation's Selected Alternative

National Environmental Policy Act (NEPA) Process

The Bureau of Reclamation's (Reclamation) comment period on the Draft Environmental Impact Statement (DEIS) for Post-2026 Colorado River Operational Guidelines closed on March 2, 2026. Metropolitan submitted a comprehensive comment letter addressing five core priorities: dry year reliability and access to Intentionally Created Surplus storage, broad shortage sharing across the basin, authorization for interstate water exchanges to facilitate potential interstate partnerships in Pure Water SoCal, protection of Hoover Dam hydropower generation, and water quality safeguards for Southern California deliveries.

Metropolitan's comments recognized the significant effort made by Reclamation to put together the draft document, but also highlighted significant deficiencies in the DEIS, including inadequate modeling of hydrologic uncertainty, failure to analyze Compact compliance, and gaps in the socioeconomic analysis affecting the region.

All seven basin states and lower basin contractors filed comments by the deadline. Compact compliance emerged as a central and contested theme. The Lower Basin states, Metropolitan, and Central Arizona Project each raised Compact compliance concerns, arguing that Reclamation must analyze whether the Upper Basin is complying with its Compact obligations in each of the alternatives. Upper Basin states, by contrast, focused on the limits of secretarial authority, arguing that Reclamation lacks the legal power to impose operational requirements that effectively compel Upper Basin curtailment, and framing Compact obligations as a matter of future Compact administration rather than near-term operational issues to be addressed in the post-2026 guidelines.

Reclamation is currently reviewing all submitted comments. Two states have requested that the DEIS be withdrawn or substantially redone, which could lead Reclamation to withdraw the current document and develop a Supplemental DEIS rather than proceed directly to a Final Environmental Impact Statement. The path forward remains uncertain. Metropolitan staff are monitoring the progress of this NEPA process closely and will continue to update the Board on future developments.

Date of Report: 4/13/2026

2024 California Forbearance Agreement Amendment

Following board authorization, staff moved forward with executing an amendment to the November 13, 2024, California Forbearance Agreement. The amended forbearance agreement was signed on March 20, 2026 and covers Metropolitan's amended System Conservation Implementation Agreements (SCIA) related to both the Palo Verde Irrigation District (PVID) fallowing program and the Bard Water District (Bard) seasonal fallowing program. Under the amended SCIA for the Bard seasonal fallowing program, the conservation activities covered by the SCIA expanded from a potential 3,000 acres to a potential 6,000 acres, increasing the conservation volume from up to 5,700 acre-feet per year to up to 11,400 acre-feet per year in both 2025 and 2026. Under the amended SCIA for the PVID fallowing program, conservation activities covered by the SCIA were extended to cover the period of August 1, 2026, through December 31, 2026. Combined, this will cover the addition of almost 60,000 acre-feet of conserved water to Lake Mead, or approximately 1 foot.

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

March 2, 2026 **VIA ELECTRONIC SUBMITTAL**

United States Department of the Interior
Bureau of Reclamation
Upper and Lower Colorado Regions
Attn: BCOO-1000
P.O. Box 61470
Boulder City, Nevada 89006-1470
Crbpost2026@usbr.gov

Attention: U.S. Department of the Interior-Bureau of Reclamation

Draft Environmental Impact Statement for the
Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

The Metropolitan Water District of Southern California (Metropolitan) submits these comments on the Draft Environmental Impact Statement (DEIS) for the Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead (Post-2026 Guidelines). Metropolitan is a political subdivision of the State of California and the largest wholesale water provider in the nation, serving 19 million residents across a 5,250-square-mile service area in Southern California. Metropolitan holds Priority 4 water rights from the Colorado River under the Seven-Party Agreement of 1931, delivered through the Colorado River Aqueduct, and is both a water contractor and a power contractor under the Boulder Canyon Project Act. The reliability of Colorado River operations under the Post-2026 Guidelines directly effects Metropolitan's ability to fulfill its statutory mission.

Metropolitan's comments address legal and analytical deficiencies in the DEIS that bear directly on the Bureau of Reclamation's (Reclamation's) obligations under NEPA and the Law of the River. They are offered in a spirit of constructive engagement. We recognize the difficulty of preparing a comprehensive environmental review under compressed timelines, while active interstate negotiations are ongoing, and during a period of unprecedented system stress. Our comments are intended to strengthen the Final EIS's analytical foundation and to ensure it provides a legally durable basis for decision-making — one that fully discloses the consequences of different operational choices for all users of the Colorado River system, particularly large municipal contractors whose service areas depend on the system for public health and economic stability.

We note that Reclamation has not identified a preferred alternative in the DEIS. Metropolitan expressly reserves the right to supplement or expand these comments once a preferred alternative is identified.

Metropolitan's Interest in the Post-2026 Guidelines

Metropolitan's interest in the Post-2026 Guidelines is direct and substantial. Colorado River water has been Metropolitan's most secure imported water supply since the district was formed in 1928. Metropolitan delivers Colorado River water to its service area through the Colorado River Aqueduct (CRA), a 242-mile conveyance system extending from the river through the Mojave Desert and into Lake Mathews that can deliver up to 1.25 million acre-feet annually. Reliable operations at Lake Mead are essential to this delivery system, as Hoover Dam hydropower supplies the energy for Metropolitan's five CRA pumping plants.

Since the adoption of the 2007 Interim Guidelines, Metropolitan has invested heavily in Colorado River system conservation and has been an active partner in responding to deterioration condition on the Colorado River: the 2014 Drought Response Memorandum of Understanding, the Pilot System Conservation Program, Minutes 319 and 323 with Mexico, the 500+ Plan, the 2019 Drought Contingency Plan, and the 2023 Lower Basin Conservation Plan. Per capita water use in Metropolitan's service area has declined approximately 40 percent from its peak. Metropolitan has invested $976 million in conservation programs and is exploring a partnership with Southern Nevada Water Authority (SNWA) and Central Arizona Water Conservation District (CAWCD) on the development of Pure Water Southern California, which could be one of the largest regional recycled water projects in North America. Metropolitan has been Reclamation's partner throughout this period and remains committed to that partnership.

Metropolitan is also one of approximately 57 permittees and the largest non-federal funding partner of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP), a 50-year multi-stakeholder federal and non-federal partnership that provides long-term Endangered Species Act take authorizations for existing and future water and power operations on the Lower Colorado River.

Recommended Principles for Final Agency Action

The DEIS did not identify a preferred alternative. As Reclamation develops the Final EIS and Record of Decision, Metropolitan urges that the selected alternative be consistent with the following principles:

1. Dry-Year Reliability and ICS Access

The selected alternative must ensure adequate municipal and industrial water supplies for the 19 million residents of Southern California, particularly in dry State Water Project years when Colorado River deliveries are most critical. This includes preserving Metropolitan's ability to create and access Intentionally Created Surplus (ICS) stored in Lake Mead. Metropolitan's ICS

represents conservation investments made in direct reliance on the 2007 Interim Guidelines and the 2019 Colorado River Basin Drought Contingency Plan (DCP) Authorization Act. Any modification to ICS storage terms or delivery access that is inconsistent with the 2019 DCP requires either a negotiated agreement with Metropolitan or additional statutory authority.

The post-2026 guidelines should include a new program for storing conserved water in Lake Mead for later use. Any new ICS-type program should: (1) allow Metropolitan and other Lower Basin contractors as appropriate to create and deliver ICS under terms no less favorable than those applicable under the 2019 DCP Authorization Act; (2) permit delivery of existing and new ICS to offset required reductions in any year that ICS is available, including during shortage conditions, with access preserved to the extent consistent with Lake Mead operational constraints; (3) establish accumulation limits, annual creation and delivery rules, and operational neutrality provisions through a transparent process conducted in consultation with affected contractors before Water Year 2027; and (4) authorize interstate exchange of augmentation water stored in Lake Mead to support the types of inter-jurisdictional partnerships described in Principle 3 below. Storage of conserved water has been an essential risk-management tool for Metropolitan and other junior Lower Basin users; any new program should preserve and expand that tool rather than constrain it.

2. Equitable Shortage Distribution Consistent with the Law of the River

The selected alternative should distribute shortages equitably across both the Upper and Lower Basins, consistent with the Colorado River Compact's apportionment and delivery obligations, which are federal law. The Post-2026 Guidelines should not result in Reclamation operating its facilities in a manner that is inconsistent with existing law, placing the full burden of drought, aridification, treaty deliveries to Mexico, and infrastructure protection on the Lower Basin alone.

Lower Basin shortage provisions must be consistent with the 1928 Boulder Canyon Project Act, the 1968 Colorado River Basin Project Act, the Supreme Court's 2006 consolidated *Arizona* v. *California* decree, and the relevant agreements among Lower Basin states and contractors.

3. Interstate Exchange Authority

The selected alternative should authorize interstate exchange of augmentation water that could be stored in Lake Mead to facilitate interstate partnerships in water supply development. SNWA, CAWCD, and the State of Arizona have been partnering with Metropolitan in the planning effort for Pure Water Southern California and are exploring future exchange agreements to share the augmented water supply. The ability to exchange augmentation water in Lake Mead would provide critical operational flexibility to support partnerships of this kind and would encourage investment in new, sustainable water supply that reduces reliance on existing natural flows.

4. Hoover Dam Hydropower Generation

The selected alternative should operate Lake Mead in a manner that protects hydropower generation capability at Hoover Dam, recognizing that Hoover power is essential not only to

energy costs for Metropolitan but to reliable operation of the Colorado River Aqueduct and its five pumping plants. . Metropolitan's detailed comments on hydropower generation impacts, including the significance of the 1,035-foot elevation threshold and the outdated turbine issue at the Hoover powerplant, are provided in Appendix D to this letter.

5. Water Quality

The selected alternative should account for water quality impacts, recognizing that salinity and other water quality degradation significantly increase treatment costs for Metropolitan and its member agencies. Reservoir operations under the selected alternative will influence the water quality conditions delivered to Lower Basin contractors. Metropolitan's detailed comments on salinity, perchlorate, PFAS, and turbidity are provided in Appendix C to this letter.

Project Understanding

The Secretary of the Department of the Interior (Secretary), acting through the Bureau of Reclamation, proposes adoption of new guidelines and coordinated management strategies to address Lake Powell and Lake Mead through their full operating range to take effect when the current agreements expire in 2026. The management strategies primarily focus on the operation of Glen Canyon Dam and Hoover Dam but may include actions upstream and downstream of these facilities to protect critical reservoir elevations such as releases from the Colorado River Storage Project Upper Initial Units and approaches to enhance opportunities for Lower Basin water users to reduce water use. The Secretary intends that the guidelines be interim in nature and extend for the same duration as the 2007 Interim Guidelines (approximately 20 years).

Legal Framework

In preparing an EIS, an agency's focus is on the proposed action at hand. *Seven County Infrastructure Coalition* v. *Eagle County*, 605 U.S. 168, 182 (2025); 42 U.S.C. § 4332(C). Once the proposed action is described, the agency must identify: (1) reasonably foreseeable environmental effects of the proposed action; (2) effects of reasonably foreseeable adverse environmental effects that cannot be avoided and any means identified to mitigate them; and (3) a reasonable range of alternatives to the proposed action. *Id.*; *see also* USDOI Handbook of NEPA Implementing Procedures (June 2025) §§ 2.3, 6.1(q). Here, Reclamation has not identified a preferred alternative, making it impossible for stakeholders to assess which foreseeable adverse effects will occur. Metropolitan therefore reserves the right to provide further comments once Reclamation selects its proposed action.

The Secretary's authority to adopt operating guidelines for Lake Powell and Lake Mead arises primarily under the Boulder Canyon Project Act of 1928 and the Colorado River Storage Project Act of 1956. The Bureau of Reclamation's operation of Glen Canyon Dam and Hoover Dam must be conducted consistently with the Colorado River Compact (Compact), which following *Texas* v. *New Mexico and Colorado* (2023) constitutes binding federal law. Some alternatives may require interstate agreement or additional statutory authority to implement regardless of how

they perform on the criteria assessed in the DEIS. The DEIS should clearly identify which elements of each alternative are legally compelled by the Compact, which are discretionary policy choices, and which may require legal authority that does not yet exist.

The Final EIS Must Include the Federal Government's Interpretation of Compact Obligations

Metropolitan requests that the Final EIS include Reclamation's interpretation of the Colorado River Compact provisions that govern the operations of Lake Powell and Lake Mead. The Compact is federal law binding on federal agencies. The Bureau's operations under the Boulder Canyon Project Act and the Colorado River Storage Project Act must be conducted consistently with the Compact's apportionment and delivery obligations. Without a clear federal statement of what the Compact requires, the range of alternatives cannot be properly defined and evaluated, and decision-makers cannot assess whether the modeled alternatives are legally permissible.

The DEIS does not clearly distinguish between legal requirements and policy assumptions embedded in the modeling of alternatives. This is particularly consequential with respect to shortage allocation, priority administration, and deliveries to Mexico. Modeling choices that embed particular interpretations of the Law of the River, including assumptions about how Upper Basin delivery obligations are satisfied and how Lower Basin priorities are administered, materially affect the projected impacts of each alternative. Without transparency about which elements reflect legal requirements and which reflect discretionary choices, stakeholders cannot adequately assess whether the modeled alternatives are consistent with existing law.

Specifically, Metropolitan requests that the Final EIS address the following:

- **Article III(d) of the Compact** requires the Upper Division States not to cause the flow of the Colorado River at Lee Ferry to be depleted below an aggregate of 75 million acre-feet for any period of ten consecutive years. The DEIS does not analyze alternatives that account for this delivery obligation or its implications for Upper Basin depletions over the period of analysis. The Final EIS should include Reclamation's interpretation of this obligation and its relationship to modeled operations.
- **Priority administration within California** should be modeled consistently with the Seven-Party Agreement of 1931, the Federal Quantification Settlement Agreement of 2003 (QSA)and the Boulder Canyon Project Act. Metropolitan's detailed comments on specific modeling inconsistencies in the Shortage Allocation Model (SAM) and Alternative Distribution Model (ADM) — including the treatment of California Priorities 1–3 relative to the QSA — are provided in Appendix A to this letter.
- **The Compact's non-interference clause (Article IV(b))** establishes that hydropower generation is subservient to agricultural and domestic water uses. This hierarchy must be reflected in any operational guidelines that address tradeoffs between power generation and water deliveries.

Metropolitan further requests that to support evaluation of alternatives implicating Law of the River compliance, the Final EIS highlight in Tables TA3-17 and TA3-18 any negative values, highlight values below 82.3 million acre-feet in Table TA3-15, and highlight values below 82.5 million acre-feet in Table TA3-16, consistent with the approach used for critical release volumes in Tables TA3-3 and TA3-6.

The Shortage Allocation Model (SAM) and Alternative Distribution Model (ADM) apply California priority rules inconsistently with existing agreements. The 1931 Seven Party Agreement limits total consumptive use under priorities 1, 2, and 3 to 3,850,000 acre-feet per year. The DEIS acknowledges this limit in Table TA4-8, Footnote 1, but the SAM and ADM assume combined consumptive use for these priorities that exceeds 3.85 MAF. While this may be intended to reflect provisions of the 2003 Quantification Settlement Agreement (QSA), the models only incorporate this single QSA element. Other major QSA components such as roughly 500,000 acre-feet per year of conservation and transfer agreements are not included. The models should either incorporate the full QSA or limit priorities 1–3 to 3.85 MAF as required by the 1931 Agreement; otherwise, the assumptions effectively reduce Metropolitan's priority 4 rights. In addition, the SAM for Continued Current Strategies includes shared DCP contributions between Metropolitan and Coachella Valley Water District, consistent with the DCP, but does not include Imperial Irrigation District's 3% sharing requirement under the 2021 Settlement Agreement.

The DEIS Fails to Analyze a Reasonable Range of Alternatives — No Alternative Includes Upper Basin Reductions

NEPA requires Reclamation to consider a reasonable range of alternatives to the proposed action. See 42 U.S.C. § 4332(C). Every alternative analyzed in the DEIS imposes shortage obligations exclusively on the Lower Basin. Not a single alternative includes reductions in Upper Basin depletions or requires any affirmative Upper Basin contribution to address system shortfalls. This omission is legally significant because the Colorado River Compact places delivery obligations on the Upper Division States at Lee Ferry, and because the Secretary's proposed guidelines govern the operation of both Glen Canyon Dam and Hoover Dam and may include upstream actions.

The failure to analyze any alternative that incorporates Upper Basin reductions is not merely an analytical gap — it constitutes a fundamental deficiency in the range of alternatives NEPA requires. An EIS's alternatives analysis must fully analyze a range of "reasonable alternatives." 42 U.S.C. § 4332. An alternatives analysis that places the full burden of Compact compliance and drought response on the Lower Basin, while excluding alternatives that reflect the Upper Basin's Compact obligations, does not meet this standard.

Metropolitan requests that the Final EIS analyze at least one alternative that includes Upper Basin reductions consistent with the Compact's delivery obligations. At a minimum, the Final EIS should explain, with legal and factual support, why no alternative with Upper Basin reductions was considered reasonable. If Reclamation concludes that it lacks authority to impose Upper Basin reductions in the Post-2026 Guidelines, that conclusion should be stated expressly and supported with analysis of what authority would be required and what alternatives exist within Reclamation's current authority.

Upper Basin Depletion Assumptions Undermine the Analytical Integrity of the DEIS

The DEIS bases all alternatives on Upper Colorado River Commission (UCRC) Depletion Demand Schedules that assume and continue growth in Upper Basin depletions that has not materialized over the past 20 years. The use of this schedule creates a cascade of modeling distortions that undermine the analytical foundation of the DEIS.

First, the inflated depletion schedule overstates the 602(a) storage requirement. The 602(a) storage requirement is calculated against a depletion baseline that assumed growth that has not occurred; starting depletions used in this analysis therefore exceed actual current Upper Basin depletions, and this gap widens over the analysis period. As a result, the equalization line in the modeling approaches full pool within the analysis period; effectively eliminating any equalization zone between Powell and Mead and distorting operational decisions across all alternatives.

Second, inflated Upper Basin depletion assumptions bias modeling of Lake Powell and Upper Initial Unit operations. When Upper Basin depletions are overstated, the model produces Powell elevations that understate the reservoir's actual storage capacity under realistic demand conditions, which in turn biases Lower Basin shortage frequency projections upward. The DEIS itself acknowledges this in Appendix I: lower Upper Basin depletions consistently produce better outcomes for Lake Mead elevations and Lower Basin water supply.

Third, NEPA requires that environmental analysis be based on reasonable assumptions reflecting probable future conditions. When the Upper Division States have publicly acknowledged that their own demand schedule exceeds available supplies, continuing to model all alternatives against that schedule — without analysis of a more realistic scenario — is not consistent with that requirement.

Metropolitan requests that the Final EIS: (1) recalculate the 602(a) storage requirement using realistic Upper Basin depletion assumptions; (2) analyze at least one alternative that reflects the Upper Division States' own acknowledged supply-demand constraints; and (3) disclose the sensitivity of Lower Basin shortage projections to Upper Basin depletion assumptions across the range of alternatives.

Glen Canyon Dam Infrastructure Protection Releases Require More Rigorous Analysis

The DEIS assumes substantial releases from Colorado River Storage Project Upper Initial Units (UIUs) to protect Glen Canyon Dam infrastructure, ranging from median volumes of 69,000 to 172,000 acre-feet in critically dry conditions to maximum releases up to 1.1 million acre-feet in some modeled scenarios. Appendix O acknowledges these are "modeling assumptions" that are "simplifications" and that "actual releases may be lower, higher, or may not occur," but the DEIS does not analyze how these releases relate to and interact with the Colorado River Storage Project Act's authorized purposes.

Infrastructure protection releases (PIP releases) materially affect Lower Basin shortage projections. In critically dry conditions, median PIP releases of 100,000 to 170,000 acre-feet, and maximum releases exceeding 1 million acre-feet, reduce the water available to the Lower Basin through a mechanism whose legal basis and operational parameters are not clearly disclosed. The DEIS does not analyze: (1) whether and to what extent PIP releases are required by the Secretary's legal obligations to protect federal infrastructure as distinct from discretionary operational choices; (2) whether PIP releases count toward the Upper Basin's Compact delivery obligations at Lee Ferry or are otherwise operationally neutral; and (3) how PIP release volumes were determined and validated for each alternative.

Metropolitan requests that the Final EIS explicitly analyze the statutory basis for PIP releases, their relationship to the Upper Basin's Compact delivery obligations, and their effect on Lower Basin shortage projections across all alternatives. The Final EIS should also disclose the sensitivity of Lower Basin shortage frequencies to different PIP release assumptions.

The DEIS Inadequately Analyzes Impacts to Municipal Water Supply Reliability

The DEIS identifies alternatives under which Metropolitan would receive 90 percent or less of its normal deliveries more than 10 percent of the time, yet the DEIS does not meaningfully analyze the socioeconomic consequences of those modeled reductions for Metropolitan's service area. The socioeconomic analysis focuses primarily on agricultural production losses and recreation impacts, and the population and land use analysis does little more than identify delivery reliability frequencies without translating them into economic outcomes for a service area of 19 million people that supports one of the largest regional economies in the United States.
This gap is compounded by a modeling inconsistency: the SAM and ADM models allocate delivery reductions based on place of entitlement, not place of use. This approach fails to account for the hundreds of thousands of acre-feet annually transferred from agricultural use to municipal use through conservation and transfer programs in California, including IID transfer and fallowing agreements. As a result, the models overstate agricultural impacts in IID's service area while materially understating reductions to municipal water use. Metropolitan's detailed technical comments on these modeling issues are provided in Appendix E to this letter.

Metropolitan requests that the Final EIS: (1) expand the socioeconomic analysis to evaluate urban and municipal economic impacts associated with modeled delivery reductions in Metropolitan's service area, including effects on employment, commercial and industrial activity, housing development, and regional economic output; (2) provide an explicit analytical linkage between modeled domestic shortage impacts in Technical Appendix 4 and population, land use, and economic conditions in the affected California counties; and (3) clarify whether the absence of quantified urban economic impacts reflects data limitations, a modeling choice, or a determination of non-significance, and provide the basis for that determination.

The Final EIS Must Assess Impacts to the LCR MSCP

Metropolitan is one of approximately 57 permittees and the largest non-federal funding partner of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP), a 50-year multi-stakeholder federal and non-federal partnership established to balance the use of Lower Colorado River resources with conservation of native species and their habitats, while providing long-term Endangered Species Act take authorizations for existing and future water and power operations on the Lower Colorado River. The LCR MSCP currently includes authorization for incidental take of covered species for reductions in flow of up to approximately 3 million acre-feet through January 2028.

The DEIS identifies that alternatives may result in significant impacts to LCR MSCP habitat and covered species but does not describe the extent to which such impacts would be avoided, minimized, or mitigated, or whether existing take coverage would be sufficient to address those impacts. In the absence of a preferred alternative, this assessment cannot be completed in the DEIS but it must be completed before Reclamation issues a Record of Decision.

Metropolitan requests that the Final EIS provide: (1) explicit analysis of consistency between the selected alternative and the LCR MSCP Biological Opinions and associated take authorizations; (2) an evaluation of the extent to which the selected alternative's operational changes would result in impacts on LCR MSCP conservation areas; and (3) a description of whether additional take coverage or programmatic amendments to the LCR MSCP would be required under the selected alternative, and how Reclamation intends to address any such need.

Technical Appendix Comments

Metropolitan's detailed technical comments on the following topics are provided in the appendices to this letter. These comments identify specific modeling assumptions, analytical methodologies, and data errors in the DEIS that Metropolitan requests be addressed in the Final EIS.

- **Appendix A – Shortage Allocation Model and Alternative Distribution Model:** Detailed comments on the inconsistent application of California priority agreements in

the SAM and ADM, including the Seven-Party Agreement priority cap, QSA provisions, and the 2021 IID Settlement Agreement.

- **Appendix B – Decision Making Under Deep Uncertainty Methodology:** Comments on the inconsistent use of "reference hydrology" as a basis for assessing the likelihood of future conditions under a DMDU analytical framework.
- **Appendix C – Water Quality:** Comments on salinity impact significance findings, perchlorate loading from the Las Vegas Wash, PFAS dilution capacity, and turbidity impacts on surface water treatment.
- **Appendix D – Hydropower Resources:** Comments on impacts to Hoover Dam powerplant operations, including the significance of the 1,035-foot elevation threshold, Metropolitan's power contractor rights under the Boulder Canyon Project Act and the Parker Dam Cooperative Contract, and the outdated turbine issue.
- **Appendix E – Socioeconomic and Modeling Technical Detail:** Detailed comments on the socioeconomic analysis methodology, including treatment of intra-California agricultural-to-municipal transfers, and specific data corrections.
- **Appendix F – Technical Corrections:** Specific corrections to figures, tables, and cross-references, including Map 3-1, Table C-16, Figures J-3 and J-4, Figure TA4-3, and Appendix B modeling assumptions.

Metropolitan appreciates Reclamation's efforts to develop the Post-2026 Guidelines under challenging circumstances and remains committed to working constructively toward a durable, Compact-consistent framework for the Colorado River system. We respectfully request that the Final EIS address each of the comments set forth above and in the attached appendices.

We look forward to receiving future plans and documentation for this project. If we can be of further assistance, please contact Shanti Rosset at (213) 217-6030 or at srosset@mwdh2o.com.

Very truly yours,

Shivaji Deshmukh
General Manager

Enclosures:

1. Appendix A – Hydrologic Resources and Shortage Allocation Model and Alternative Distribution Model Comments
2. Appendix B – Decision Making Under Deep Uncertainty Methodology Comments
3. Appendix C – Water Quality Comments

4. Appendix D – Hydropower Resources Comments
5. Appendix E – Socioeconomic and Modeling Technical Detail
6. Appendix F – Technical Corrections

Technical Appendices to the Comments of The Metropolitan Water District of Southern California on the Draft Environmental Impact Statement for the Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Bureau of Reclamation, Upper and Lower Colorado Regions
Attn: BCOO-1000 | Crbpost2026@usbr.gov

Table of Appendices

APPENDIX A

Hydrologic Resources and Shortage Allocation Model and Alternative Distribution Model
Comments of the Metropolitan Water District of Southern California

The following comments address inconsistencies in the Shortage Allocation Model (SAM) and the Alternative Distribution Model (ADM) with respect to the application of California priority agreements. These modeling inconsistencies affect the projected impacts of each alternative on Metropolitan's Priority 4 water rights and must be corrected in the Final EIS.

I. Inconsistent Treatment of California Priority 1–3 Consumptive Use

The 1931 Seven-Party Agreement establishes an explicit cap on total beneficial consumptive use under California Priorities 1, 2, and 3: "The total beneficial consumptive use under priorities stated in sections 1, 2, and 3 of this article shall not exceed 3,850,000 acre-feet of water per annum." The DEIS recognizes this limitation in Table TA4-8, Footnote 1. However, the collective consumptive use of Priorities 1, 2, and 3 assumed in the SAM and ADM models exceeds 3,850,000 acre-feet.

Metropolitan understands that the excess above 3.85 MAF may be intended to reflect provisions of the 2003 Quantification Settlement Agreement (QSA). However, if so, this would be the only QSA provision incorporated into the SAM and ADM models. The QSA also includes agreements for the conservation and transfer of approximately 500,000 acre-feet per year from agricultural to municipal use — agreements that are not modeled. Selectively incorporating only the QSA element that increases Priority 1–3 consumptive use, without incorporating the QSA's conservation and transfer provisions, introduces a systematic bias that effectively reduces Metropolitan's Priority 4 rights.

Metropolitan requests that the Final EIS correct this inconsistency by taking one of the following approaches:

1. Incorporate the full scope of the QSA in the SAM and ADM models, including the conservation and transfer agreements covering approximately 500,000 acre-feet per year; or
2. Limit the consumptive use of Priorities 1, 2, and 3 to 3,850,000 acre-feet per annum as required by the 1931 Seven-Party Agreement, and explain in the Final EIS why the QSA is not incorporated.

Failure to adopt one of these approaches results in modeling assumptions that produce an effective reduction to Metropolitan's Priority 4 rights across all alternatives, without legal or analytical justification.

II. Omission of IID's 3% DCP Contribution Under the 2021 Settlement Agreement

The SAM model for the Continued Current Strategies (CCS) alternative correctly includes shared DCP contributions between Metropolitan and the Coachella Valley Water District (CVWD), consistent with the 2019 Drought Contingency Plan (DCP). However, the SAM does not include the Imperial Irrigation District's (IID) 3% sharing requirement under the 2021 Settlement Agreement between IID, Metropolitan, CVWD, and the State of California.

Metropolitan requests that the Final EIS correct the SAM for the CCS alternative and all other alternatives where the 2021 Settlement Agreement is applicable to include IID's 3% DCP contribution obligation. The omission of this obligation skews the modeled distribution of shortage obligations among California contractors and understates IID's contribution to system management under existing agreements.

III. Table Highlighting to Support Law of the River Evaluation

To support evaluation of the alternatives as they relate to the Colorado River Compact's delivery obligations and California priority administration, Metropolitan requests that the Final EIS present the following data in a manner that highlights critical values, consistent with the approach used for critical release volumes in Tables TA3-3 and TA3-6:

1. Highlight negative numbers in Tables TA3-17 and TA3-18;
2. Highlight values below 82.3 million acre-feet in Table TA3-15; and
3. Highlight values below 82.5 million acre-feet in Table TA3-16.

These highlights would allow decision-makers to readily identify modeled conditions that approach or breach the Upper Basin's Compact delivery obligation at Lee Ferry, facilitating a more transparent assessment of Compact compliance risk across the range of alternatives.

IV. Inconsistency between California Priority 4 Volume in Appendix C and Appendix N

In Appendix C, Table C-7 shows that after PPRs grow to their full apportionments in 2040, there is 388,002 AF left for Metropolitan's 4th priority. In Appendix N, Table N-2a shows that in 2040, there is only 295,501 AF left for Metropolitan's 4th priority. Metropolitan requests that the Final EIS reconcile this discrepancy.

APPENDIX B

Decision Making Under Deep Uncertainty Methodology
Comments of the Metropolitan Water District of Southern California

The following comments address inconsistencies between the DEIS's stated analytical approach — Decision Making Under Deep Uncertainty (DMDU) — and specific statements in the document that rely on historical hydrologic data to assess the likelihood or probability of future conditions. These inconsistencies affect the validity of the impact assessments and significance determinations in the DEIS.

I. The Use of "Reference Hydrology" to Assess Likelihood Is Inconsistent with DMDU
Section 3.2.6 of the DEIS states: "The 'reference hydrology' panel…is included in every vulnerability bar plot to provide context for interpreting the likelihood of the conditions associated with vulnerability. The historical reference lines are the first component of the context, and anytime an alternative is vulnerable to conditions that have already been observed, it is reasonable to assume these conditions can occur again." (p. 3-21).

The use of "reference hydrology" — that is, historical hydrologic data — to assess the "likelihood" of conditions associated with vulnerability is directly inconsistent with the DMDU methodology the DEIS purports to apply. A foundational tenet of DMDU is that historical data cannot be used to assign probabilities or likelihoods to future conditions. The deep uncertainty that justifies the DMDU framework is precisely the recognition that past patterns are insufficient to characterize the future distribution of hydrologic conditions.

While it may be "reasonable to assume" that conditions that have occurred historically can occur again in some qualitative sense, DMDU does not permit statements about the "likelihood" or "probability" of future conditions based on historical reference data. Moreover, historical data tell us nothing about conditions that are part of the modeled hydrology set but have not been observed in the historical record. Vulnerable conditions that fall outside historical ranges are not appropriately characterized as unlikely simply because they have not yet occurred.

Impact assessments based on likelihood judgments derived from reference hydrology comparisons are therefore methodologically inappropriate given the DMDU approach and should not be used to support significance determinations in the Final EIS.

II. Application of the Inconsistency: Supply Driven Alternatives Example
Technical Appendix Section 6.2.2 states: "…the hydrologic conditions associated with undesirable performance for the Supply Driven Alternatives…(6.8 maf), are less than that of any previously observed conditions in the reference hydrology (7.8 maf)." (p. 6-23).

The implication of this statement is that it would not be reasonable to anticipate, in the future, the hydrologic conditions to which the Supply Driven Alternatives are vulnerable — because those conditions (6.8 maf inflow) fall below the minimum observed in the historical record (7.8 maf). The further implication appears to be that the Supply Driven Alternatives would not cause significant impacts because their vulnerability threshold has never been reached historically.

Both implications are inappropriate under the DMDU framework. The fact that 6.8 maf inflows have not occurred in the historical record does not mean they are unlikely in the future — particularly under projected climate conditions in the Colorado River Basin, which the DEIS itself acknowledges include continued warming and declining snowpack. The use of historical non-occurrence as a basis for minimizing impact significance is precisely the kind of judgment that DMDU methodology is designed to avoid.

III. Vulnerability Bar Plots and "Reasonably Anticipated" Range

TA Section 6.2.1 states that "[t]he primary purpose of the vulnerability bar plot is to clarify the conditions under which an alternative is likely to fail and to determine whether those conditions fall within the range of what can reasonably be anticipated" (p. 6-10). The use of vulnerability bar plots — specifically the comparison of vulnerability results to "reference hydrology" — to determine whether conditions fall within a "reasonably anticipated" range is inconsistent with the DMDU approach for the same reasons described above.

Under DMDU, deep uncertainty about the future means that past "reference hydrology" conditions do not represent the full range of possible future conditions. Comparing vulnerability results to the historical range therefore provides no meaningful information about whether a given condition is "reasonably anticipated" to occur — particularly for conditions that fall outside that historical range.

Metropolitan requests that the Final EIS either: (1) revise all impact and significance assessments that rely on reference hydrology comparisons to assign likelihood or probability to future conditions, replacing them with assessments that are consistent with the DMDU framework; or (2) if Reclamation intends to retain the reference hydrology comparison as a contextual tool, clearly disclaim that it cannot be used to assess likelihood or probability and revise all language implying otherwise.

APPENDIX C

Water Quality

Comments of the Metropolitan Water District of Southern California

The following comments address deficiencies in the DEIS's treatment of water quality impacts, including salinity, perchlorate, PFAS, and turbidity. These contaminants and conditions directly affect the water quality delivered through Metropolitan's Colorado River Aqueduct to 19 million Southern California residents and are not adequately analyzed in the DEIS or its technical appendices.

I. Salinity Impacts

A. DEIS Section 3.6.2 and TA Section 6.2.7 — Significance Not Clearly Stated

Section 3.6.2 of the DEIS (p. 3-72) discusses several measures by which salinity was evaluated but does not clearly state what would constitute a significant impact on salinity, nor does it reach a clear conclusion about whether salinity impacts under any alternative are significant. Similarly, TA Section 6.2.7 (p. 6-36) fails to make a clear significance finding for salinity impacts attributable to the alternatives. The section implies that salinity impacts are not significant but leaves the reader to assume this conclusion rather than stating it expressly.

Metropolitan requests that the Final EIS clearly state, for each alternative, whether salinity impacts would be significant, and explain the reasoning and criteria supporting that determination.

B. TA Section 6.2.1 — Salinity Economic Impact Model and CCS Baseline Comparison

The methodology described in DEIS Sections 3.16.1 (p. 3-171) and TA Section 16.2.1 (p. 16-34 to 16-41) should include use of Reclamation's Salinity Economic Impact Model (SEIM) to analyze the socioeconomic impacts related to salinity. This analysis should include a comparison of the salinity-related economic impacts of each alternative to the Continued Current Strategies (CCS) Baseline scenario. Section TA 6.2.1 should include a cross-reference to this salinity-related economic analysis.

TA Section 6.2.1 states that "[i]n this section, salinity is analyzed as it relates to the salinity criteria set by the Colorado River Salinity Control Forum" (p. 6-9). While comparing modeled salinity values to the Forum's criteria is valuable, it is insufficient on its own. The salinity impacts of each alternative should also be evaluated against the CCS Comparative Baseline scenario to allow a meaningful assessment of the incremental salinity impact attributable to each alternative.

Metropolitan further notes that the use of vulnerability bar plots in TA Section 6.2.1 to determine whether salinity conditions fall within a "reasonably anticipated" range is inconsistent with the DMDU methodology, for the reasons described in Appendix B above.

II. Perchlorate

A. TA Section 6.1.6 — Characterization as "Not a Typical Concern" Is Inaccurate

TA Section 6.1.6 states that "[w]hile there is a historical issue with perchlorate, this point source is not a typical concern." Metropolitan disagrees with this characterization on three grounds.

First, Metropolitan has sampling results showing sudden increases in perchlorate loading into the Las Vegas Wash that are not reflected in the DEIS. The characterization of perchlorate as "not a typical concern" is based entirely on the existence of ongoing ex-situ remediation efforts at the Henderson site. Those remediation efforts can be and have been interrupted: during the 2022 drought, the remediation system came close to being disconnected from its water supply, which would have halted treatment and left Lake Mead unprotected. Final implementation of remediation at the Henderson site will take close to a decade. There is no permanent mitigation in place. Perchlorate remains an active and ongoing concern for approximately 26 million Colorado River water users over the 20-year period these operational guidelines will govern.

Second, Metropolitan disputes the characterization of the contamination source as a "point source." Perchlorate-laden groundwater enters the Las Vegas Wash through a nearly three-mile stretch of riverbanks in Henderson, Nevada — a diffuse loading pattern that does not meet the conventional definition of a point source.

Third, perchlorate is an acute contaminant capable of affecting human health with short-term exposure — a fundamentally different risk profile from PFAS, which is a chronic contaminant requiring longer exposure times. The DEIS's relative treatment of these contaminants does not adequately reflect this distinction.

B. TA Section 6.1.6 — Decreasing Trend and Depth-Dependent Concentrations

The DEIS states that "[t]he Nevada Division of Environmental Protection and the Southern Nevada Water Authority show a decreasing trend in perchlorate concentrations over the last decade, especially after point source remediation efforts began in 2002." Metropolitan notes that this decreasing trend has leveled off. More importantly, Metropolitan has sampling results showing that downstream perchlorate concentrations vary with Colorado River flows and with Hoover Dam operational decisions.

Concentrations also vary by sample depth. Past modeling has shown that perchlorate concentrates in the epilimnion — the top approximately 50 feet of the lake. However, Lake Mead sampling has recently begun to detect higher perchlorate concentrations in the lower portions of the lake. As Lake Mead elevations decline and the intake depth relative to total water

column depth changes, this pattern creates risk for Lower Colorado River drinking water users. The DEIS does not analyze this depth-dependent dynamic.

C. TA Section 6.2.6, Issue 5 — Dilution Capacity

TA Section 6.2.6, Issue 5 asks: "How would reservoir storage and reservoir releases affect reservoir dilution capacity?" Metropolitan requests that the response to this question be expanded to explicitly address perchlorate, given that perchlorate loading into Lake Mead from the Las Vegas Wash is ongoing and active, and no permanent mitigation is in place. The dilution capacity concern for perchlorate is more acute than for PFAS in the near term, because of perchlorate's acute toxicity and the active loading dynamic.

III. PFAS

TA Section 6.1.7 states that "[d]ecreased dilution capacity from lower reservoir elevations could result in greater concentrations of pollutants of concern, such as PFAS." Metropolitan agrees with this general concern but notes that the more immediate dilution capacity risk is perchlorate, not PFAS, given the active loading from the Las Vegas Wash and the acute human health impact timeline for perchlorate exposure versus the chronic exposure timeline for PFAS. The DEIS should present a comparative analysis of these two contaminants' risk profiles in the context of declining reservoir elevations.

IV. Turbidity

TA Section 5.1.5 discusses turbidity and notes that higher turbidity is undesirable, characterizing its impacts primarily in terms of fishing and recreational conditions. The section does not address the impact of elevated turbidity on surface water treatment — a direct operational concern for Metropolitan, which treats and delivers Colorado River water through the Colorado River Aqueduct. Higher turbidity increases treatment costs, complicates coagulation and filtration processes, and can require operational adjustments at Metropolitan's treatment facilities.

Metropolitan requests that TA Section 5.1.5 be revised in the Final EIS to include analysis of turbidity impacts on surface water quality and treatment operations for Lower Basin water contractors.

APPENDIX D

Dams and Electrical Power Resources
Comments of the Metropolitan Water District of Southern California

The following comments address Metropolitan's interests as both a water contractor and a power contractor under the Boulder Canyon Project Act, and identify specific analytical issues related to hydropower generation at Hoover Dam that the Final EIS should address. Metropolitan also notes a cross-reference error in TA 14 that should be corrected.

I. Metropolitan's Power Contractor Rights
Metropolitan is both a water contractor and a power contractor pursuant to Section 5 of the Boulder Canyon Project Act. For hydropower generated at the Hoover Dam Powerplant, Metropolitan holds a contractual right to 249,948 kW of contingent capacity, representing 12 percent of the powerplant's capacity, and to 1,227,375 kWh of firm energy, representing 27 percent of powerplant energy. These entitlements are integral to Metropolitan's operations, as Hoover Dam power supplies the energy necessary to operate the five pumping plants along the Colorado River Aqueduct.

Metropolitan is also entitled to 60 MW, or one-half, of the capacity of the Parker Dam Powerplant (TA 15-20). Metropolitan's rights to capacity at the Parker Dam Powerplant derive from the Cooperative Contract executed with the United States on February 10, 1933. Under that contract, Metropolitan paid the entire capital cost of construction of Parker Dam, while the United States retained one-half of the power privilege. Metropolitan received the remaining one-half. These contractual rights are relevant to the assessment of hydropower impacts under each alternative and should be explicitly reflected in the hydropower analysis of the Final EIS.

II. Compact Hierarchy: Hydropower Is Subservient to Water Deliveries
Article IV(b) of the 1922 Colorado River Compact provides that "[w]ater of the Colorado River System may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes." This Compact hierarchy applies to any guidelines governing the operation of Colorado River facilities. The Final EIS must reflect this hierarchy: it would be legally impermissible for the preferred alternative to protect hydropower generation at the expense of water deliveries to agricultural or domestic water contractors.

However, it is both appropriate and necessary for the Final EIS to fully disclose the impact of each alternative on hydropower generation. The following comments identify specific issues that require additional analysis.

III. The 1,035-Foot Elevation Threshold and Outdated Turbines

The DEIS states that the minimum power pool for operation of the Hoover Powerplant is 950 feet (TA 15-9). However, twelve of the seventeen turbines in the powerplant cannot be used when Lake Mead's elevation falls below 1,035 feet (TA 15-11). The document states that "if the elevation drops below 1,035 feet, operating costs will exceed the value of the hydropower produced" (DEIS, p. 3-162; TA 15-11), due to "excessive cavitation damage" to the twelve older turbines (TA 15-11). The loss of capacity at the 1,035-foot threshold is substantial — 922 MW, representing approximately 70 percent of the capacity that would otherwise be available at that elevation (Figure TA 15-6).

Technical Appendix 15 includes graphics showing the impact on power generation at both the minimum power pool elevation (950 feet) and the 1,035-foot threshold (Figures TA 15-11 and TA 15-13). Comparison of these charts illustrates the significant impact of the outdated turbines on Hoover powerplant output. While this capacity loss does not affect water delivery obligations — and water deliveries must remain the priority under Article IV(b) — it represents a substantial infrastructure deficiency that Reclamation can address independently of operational guideline decisions, by replacing the twelve older turbines with new wide-head turbines as noted in TA 15-11.

Metropolitan requests that the Final EIS: (1) clarify whether the hydropower loss figures presented for the Hoover Dam Powerplant across the alternatives include the capacity loss attributable to the 12 outdated turbines at elevations below 1,035 feet; and (2) describe Reclamation's plans, if any, to replace the outdated turbines, and the timeline for doing so.

IV. CO_2e Emissions and Air Quality

The DEIS addresses the impact of hydropower losses on CO_2e emissions as an air quality issue (DEIS, p. 3-83). Metropolitan does not disagree with the DEIS's analysis that greenhouse gas emissions attributable to hydropower losses would vary across the alternatives. However, the appendix discussion should clarify whether the hydropower loss figures for the Hoover Dam Powerplant include the capacity loss associated with the 1,035-foot threshold and the twelve outdated turbines, as described above. Without this clarification, it is unclear whether the CO_2e emissions analysis reflects the full magnitude of potential hydropower losses.

V. Western Area Power Administration

Technical Appendix 15 describes the role of the Western Area Power Administration (WAPA) as the balancing authority operator for the Western Area Colorado-Missouri Region and the Western Area Lower Colorado Region. In that role, WAPA may call upon Colorado River hydropower resources to address grid emergencies (TA 15-16 to 15-18). The DEIS correctly notes that the alternatives do not address WAPA emergency dispatch issues "and there are no anticipated impacts on these from the alternatives" (TA 15-18, fn. 7). Metropolitan agrees that the preferred alternative should not include operating guidelines that would require or permit

protection of hydropower generation at the expense of water deliveries, including in the WAPA emergency context.

VI. Omission of California from List of States Served by Hoover Hydropower

Metropolitan requests that California be added to the list of states served by Colorado River hydropower in the last sentence of the first paragraph on page TA 15-2. California is served by both Hoover Dam and Parker Dam hydropower and is the largest non-federal power contractor at Hoover Dam. Its omission from this list is a factual error that should be corrected in the Final EIS.

VII. Cross-Reference Error in TA 14 (Recreation)

In TA 14, page 14-7, the Water Quality technical appendix is incorrectly referenced as TA 4. The correct reference is TA 6 (Water Quality). Metropolitan requests that this error be corrected in the Final EIS.

APPENDIX E
Comments of the Metropolitan Water District of Southern California

Socioeconomic Impacts and Modeling Technical Detail
The following comments address two related deficiencies in the socioeconomic analysis: (1) the failure to translate modeled reductions in municipal water deliveries into quantified economic impacts for Metropolitan's urban service area; and (2) a modeling error in the SAM and ADM that allocates shortage reductions based on place of entitlement rather than place of use, causing the analysis to overstate agricultural impacts and understate municipal impacts. A data error in Table TA17-14 is also identified.

I. The SAM and ADM Fail to Account for Intra-California Agricultural-to-Municipal Transfers
The reduction allocations produced by the SAM and ADM models are based on entitlement — that is, the place to which water rights are held — rather than the actual place of use. These reduction allocations are then carried forward into the analysis of socioeconomic impacts and population and land use impacts. This approach fails to account for the extensive conservation and transfer programs in California that result in the transfer of hundreds of thousands of acre-feet per year from agricultural entitlement holders to municipal use.

By assuming that all water held under Priority 3 agricultural entitlements is put to agricultural use at its place of entitlement, when a substantial portion is in fact currently being put to municipal use through IID conservation and transfer agreements, the models overestimate agricultural impacts in IID's service area and significantly underestimate the volume of reductions to municipal water use that would result from shortages reaching California's Priority 3a. While there is uncertainty about how transfer agreements would be affected if reductions reached Priority 3a, that uncertainty is a reason to analyze the issue more rigorously, not to assume the most favorable scenario.

Metropolitan requests that the Final EIS revise the SAM and ADM to account for current patterns of consumptive use and transfer, or at minimum analyze the sensitivity of socioeconomic impact results to different assumptions about the distribution of shortage reductions between agricultural and municipal uses in California.

II. Inadequate Analysis of Municipal Supply Reliability Impacts
The DEIS identifies alternatives under which Metropolitan would receive 90 percent or less of its normal deliveries in more than 10 percent of modeled years. Despite identifying these delivery reliability outcomes, the DEIS does not meaningfully analyze their economic consequences for Metropolitan's service area. The socioeconomic resource category focuses primarily on agricultural production losses, recreation-related impacts, ecosystem services, and nonmarket values. The Population and Land Use resource category merely identifies the frequency at which

municipal users could expect normal deliveries, without translating those frequencies into quantified economic outcomes.
The DEIS's assessment of municipal impacts is brief and speculative, noting only that lower reliability "…could limit opportunities for residential and commercial growth, particularly areas experiencing high population growth, intensive development, or elevated municipal water demand, and could influence land use patterns or delay new construction." This level of analysis is inadequate given the scale of the affected population and the magnitude of the modeled delivery reductions.

Metropolitan's service area of 19 million people supports one of the largest regional economies in the United States. Even relatively small changes in municipal supply reliability can have outsized economic implications for employment, commercial and industrial activity, housing development, public service delivery, and regional economic output. The DEIS defines a California analysis area that includes the counties within Metropolitan's service area — Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Imperial Counties — but does not produce quantified economic impact estimates for these counties in the context of municipal delivery reductions.

Metropolitan requests that the Final EIS:

- Expand the socioeconomic analysis to explicitly evaluate urban and municipal economic impacts associated with modeled domestic delivery reductions in Metropolitan's service area, including effects on employment, commercial and industrial activity, housing development, public services, and regional economic output;
- Provide an explicit analytical linkage between: (a) the domestic shortage impacts modeled in Technical Appendix 4; and (b) the population, land use, and economic conditions in the California counties within Metropolitan's service area; and
- Clarify whether the absence of quantified urban economic impacts in the current DEIS reflects data limitations, a modeling choice, or a determination that such impacts would not be significant, and provide the basis for that determination.

III. Data Error in Table TA17-14

Table TA17-14 shows that the percent of irrigated water withdrawal for crops from surface water is 30 percent in each of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties. This uniform figure appears to be erroneous. IID's only source of water is the Colorado River, and IID represents a significant fraction of total agricultural irrigation in Imperial County; one would expect the surface water percentage for Imperial County to be substantially higher than 30 percent. The identical value across counties with very different water supply characteristics also suggests a data processing error. Metropolitan requests that Reclamation review and correct the data in Table TA17-14 in the Final EIS.

APPENDIX F

Technical Corrections
Comments of the Metropolitan Water District of Southern California

The following comments identify specific factual errors, data inconsistencies, missing information, and cross-reference errors in the DEIS and its technical appendices. Metropolitan requests that each of these items be corrected in the Final EIS.

1. Map 3-1 should be revised to include the service areas of both the Coachella Valley Water District and the Imperial Irrigation District. Both agencies are Lower Basin contractors with direct interests in the post-2026 operational guidelines, and their omission from the service area map is an unexplained gap in the description of the affected environment.

2. Table C-16 contains an apparent error in the "County" column: numerical values appear in that column beginning in the "Summary by County" section of the table. It is not clear what these numbers represent. If they are intended to represent a county count, it is not clear how the counting logic applies to rows where more than one county is listed. Metropolitan requests that Reclamation clarify and correct these entries in the Final EIS.

3. Figure J-3 contains a legend-to-figure mismatch. The figure includes a red line that does not appear in the legend. The legend contains a thin pink line and a thick pink line, while the figure contains only one pink line. Metropolitan requests that the figure and legend be reconciled so that all plotted lines are identified in the legend.

4. Figure J-4, Footnote: The footnote to Figure J-4 should reference the CRSS assumption for depletion, not the critical period. The figure presents depletion amounts, not critical period characterizations, and the footnote should be revised accordingly.

5. Figure TA4-3: The x-axis label does not match the alternative names used in Chapter 2 of the DEIS. Metropolitan requests that the axis label be corrected to be consistent with the alternative nomenclature used throughout the document.

6. Page B-3: The DEIS states that initial end-of-calendar-year-2026 storage balances for CRSS modeling were generated using CRMMS-ESP. However, each forecast run and trace in CRMMS-ESP yields a different end-of-year result. The DEIS does not state which forecast or trace was used to generate the initial conditions. Metropolitan requests that Reclamation identify the specific forecast or trace used. If the 50th-percentile or most-probable trace was used, that assumption should be stated explicitly in the Final EIS to allow independent review of the modeling initialization.

7. Page B-10: The DEIS states: "If MWD's EC-ICS creation as per Table B-5 (a table for annual creation based on SAC WY type) is less than MWD's required DCP contribution volume, then additional EC-ICS will need to be created and converted to DCP-ICS to fully satisfy MWD's DCP contribution." Metropolitan requests that the Final EIS be revised to confirm that MWD also has the option to convert existing EC-ICS to DCP-ICS to satisfy DCP contribution obligations, not only newly created EC-ICS. The current language implies a limitation that is not consistent with Metropolitan's understanding of the applicable DCP framework.

8. Page B-22: The DEIS states that "[d]elivery/conversion from the Lake Mead mechanism – State Pools are prohibited if Lake Mead starts the year with a physical pool elevation below 1,025 feet." Metropolitan requests that the Final EIS clarify that conversion from a State Pool to system water for the purpose of offsetting required shortage reductions should be permitted below the 1,025-foot elevation threshold, consistent with the treatment of ICS conversions used to make DCP contributions under the 2019 DCP, which were permitted below 1,025 feet. Absent this clarification, the prohibition on State Pool conversion below 1,025 feet would eliminate a critical tool for meeting shortage obligations precisely when system conditions are most stressed.

9. Tables B-16 and B-17 contain assumptions for MWD and IID ICS creation and delivery volumes under the Enhanced Coordination Alternative. Metropolitan requests that Reclamation explain how these volume assumptions were determined. The basis for these assumptions is not described in the DEIS or the technical appendices, and Metropolitan is unable to independently assess whether they are consistent with applicable agreements and operational constraints.