



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

*Office of the General Manager*

**Via Electronic Mail and FedEx**

August 31, 2023

The Honorable Maria Hernandez  
Presiding Judge of the Superior Court of California  
700 Civic Center Drive West  
Santa Ana, CA 92701  
grandjurysupport@occourts.org

Dear Presiding Judge Hernandez:

**The Metropolitan Water District of Southern California  
Response to Grand Jury Report *Historic Rain, Yet Drought Remains***

On June 9, 2023, the Orange County Grand Jury released a report titled, *Historic Rain, Yet Drought Remains* (Grand Jury report), that summarized their effort to examine the complex issues surrounding water supply conditions in Orange County. The Grand Jury report presented information on the current crisis in water planning, existing projects to augment non-potable supply water for irrigation, storage issues, and their recommendations for a reliable source of potable water through desalination of ocean water.

The Grand Jury requested that The Metropolitan Water District of Southern California (Metropolitan) respond to findings and recommendations in the report. In accordance with California Penal Code Sections 933 and 933.05, the 2022-2023 Grand Jury requires (or, as noted, requests) each agency affected by the findings and recommendations presented in the report to submit their responses to the Presiding Judge of the Superior Court. Per the Grand Jury's request, below are Metropolitan's responses to Findings F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, and F12, and Recommendations R2, R3, and R4.

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### **Background of Metropolitan**

Metropolitan is a voluntary cooperative created in 1928 under authority of the Metropolitan Water District Act. Metropolitan's primary purpose is to provide wholesale water for domestic and municipal uses to its member public agencies. Metropolitan has no retail customers. Metropolitan's mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan is a public agency and the largest regional wholesale provider of drinking water in the United States. It comprises 26 member public agencies that serve approximately 19 million people in Metropolitan's 5,200-square-mile service area that includes portions of six counties in Southern California, including Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Metropolitan's member agencies, include 14 cities, 11 municipal water districts, and one county water authority, which collectively serve the residents and businesses of more than 300 cities and numerous unincorporated communities.

For most member agencies, Metropolitan's water serves as a supplemental source of water and for others, it is the primary source of water. Member agencies are not required to purchase or use any amount of the water available from Metropolitan. Some agencies depend on Metropolitan's supply nearly for all their water needs, regardless of the weather. Other agencies with local surface reservoirs or aqueducts that capture rain or snowfall rely on Metropolitan's supply more in dry years than in years with heavy rainfall. Yet other agencies with ample groundwater supplies purchase Metropolitan water only to supplement local supplies and to recharge groundwater basins.

All member agencies are connected to Metropolitan's system at all times and Metropolitan stands by to provide the water upon request. Member agencies provide estimates of demands to Metropolitan for each year and request water from Metropolitan at various delivery points within Metropolitan's system and pay for such water at uniform rates established by the Board for each class of water service. Consumer demand and locally supplied water vary from year to year, resulting in variability in the volume of Metropolitan's water transactions with its member agencies.

### **Comments**

In the Grand Jury report, there were numerous assertions regarding Metropolitan's role, mission, and ability to meet the future demands of its member agencies that require further clarification and, in some cases, correction. Metropolitan first addresses those assertions. Next, Metropolitan would like to provide input on the Grand Jury report assessment of the State of California

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managed supplies and Federal “intervention” on the availability of Colorado River supplies. Lastly, Metropolitan includes responses to the findings and recommendations the Grand Jury requested from Metropolitan.

The bulleted items below were taken from the Grand Jury report. As an overall comment, Metropolitan notes that water resource management extends beyond construction of facilities. The Grand Jury Report appears to review only physical structures, without considering effective resource management has grown to include creative water exchanges, transfers, storage deals, and development of local water supply programs, all towards the goal of managing the water that is available in the most efficient ways.

Grand Jury Report assessment of Metropolitan:

- Page 9: *“The long-term threat of climate change and historic droughts have challenged MET and they have failed to identify new supplies of water beyond their historic charter.”*

**Clarification:**

**Metropolitan was created to acquire, develop, store, and transport water to sell and deliver to its member agencies. It has undertaken all of these actions since its creation in 1928. Metropolitan has successfully developed a diverse resource mix that enables the region to meet its water supply needs.**

In its role as a wholesale supplier to its 26 member agencies in the Southern California water community, Metropolitan has ongoing planning efforts to overcome challenges in meeting its member agencies’ needs for water supply reliability and quality in the region. Over the years, Metropolitan developed adaptable resource management strategies to meet a range of possible future demands. Metropolitan’s continued progress in developing a diverse resource mix enables the region to meet its water supply needs. The investments that Metropolitan has made and its ongoing efforts in many different areas coalesce toward its goal of long-term regional water supply reliability. Metropolitan’s actions have been focused on the following:

- Continuing water conservation
- Developing water supply management programs outside of the region
- Developing storage for its State Water Project (SWP) and Colorado River supplies
- Developing storage and groundwater management programs within the Southern California Region
- Increasing water recycling, groundwater recovery, stormwater capture, and funding for seawater desalination

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- Pursuing long-term solutions for the ecosystem, regulatory and climate change and seismic risks to Metropolitan's SWP supplies in the Sacramento-San Joaquin Bay-Delta

Since 1982, Metropolitan has assisted the region in the development of local supplies under the Local Resources Program (LRP). The LRP is a performance-based program that provides financial incentives for local agencies to expand water recycling and support recovery of degraded groundwater, among other types of projects. The LRP has evolved over time in an effort to help support the development of local supply projects including the methodology for providing the incentives to the member agencies. In October 2014, Metropolitan's Board approved additional LRP refinements to support further development of local resources. These refinements covered increasing the maximum incentive amount, offering three incentive payment structures, including on-site recycled water retrofit costs and other water resources such as seawater desalination as eligible costs, and providing reimbursable services for Metropolitan's technical assistance.

In addition, Metropolitan is developing its own regional recycled water supply through the Pure Water Southern California project that, if approved by the Board, will provide advanced treated water for both potable and non-potable reuse. Metropolitan's cumulative investment of \$1.6 billion in water conservation, recycled water, and groundwater recovery have yielded a cumulative total of 7.9 million acre-feet of local water supply for our member agencies, and in combination with imported water supplies from the SWP and Colorado River, helped the region meet its water needs. As reported in Metropolitan's SB 60 Report: Achievements in Conservation, Recycling, and Groundwater Recharge for Fiscal Year 2021-22<sup>1</sup>, achievements are as follows:

- Conservation: 3.7 million acre-feet water saved under \$864 million Metropolitan investment
- Recycled Water: Over 3 million acre-feet production under \$534 million Metropolitan investment
- Groundwater Recovery: 1.17 million acre-feet production under \$190 million Metropolitan investment
- Conjunctive Use Program: 351 thousand acre-feet water stored and 343 thousand acre-feet water extracted under \$27 million Metropolitan and \$45 million State Prop 13 investment

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<sup>1</sup> See Metropolitan's Achievements in Conservation, Recycling, and Groundwater Recharge (February 2023) at

<https://www.mwdh2o.com/media/3vah4zvt/2023-annual-achievement-report-final-metropolitan-water-district.pdf>

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- Groundwater Replenishment: 4.2 million acre-feet cumulative replenishment delivery (1984-2022)
- Page 10: *“Metropolitan Water District is in the **water movement business and is not historically tasked with securing new sources of water.** As the leading water agency in Southern California, **MET has not taken on this responsibility.** Their supply of water is dependent on precipitation.”*

**Clarification:**

**Metropolitan was created to acquire, develop, store, and transport water to sell and deliver to its member agencies. It has undertaken all of these actions since its creation in 1928. Over the years, Metropolitan has successfully completed numerous planning initiatives in collaboration with its member agencies and various stakeholders to achieve its water supply reliability goals.**

The 2020 Urban Water Management Plan (UWMP)<sup>2</sup> Section 2 summarizes Metropolitan’s past and current planning efforts. These include the 1996 Integrated Water Resources Plan (IRP) and its three updates in 2004, 2010, and 2015; the 2020 IRP; the Water Shortage Contingency Plan; the Water Surplus and Drought Management Plan; the Water Supply Allocation Plan; Metropolitan’s Emergency Storage Objective; and Seismic Resiliency Studies. Collectively, these planning efforts provide policy framework guidelines and resource targets for Metropolitan to achieve its regional water supply reliability goals.

The 2020 IRP<sup>3</sup> provides a broader look and concept than the previous IRP updates. The latest IRP strengthens the adaptive management approaches employed in prior updates through the incorporation of an explicit scenario planning step to broaden the understanding of plausible, but uncertain, future conditions affecting both supplies and demands. Scenario planning incorporates factors like climate change impacts and regulatory uncertainty in evaluating investments and actions needed to achieve desired reliability under a diverse range of future conditions.

In addition, Appendix 3 of the 2020 UWMP presents a detailed discussion of Metropolitan’s sources of supplies and programs developed along the Colorado River, California Aqueduct, and In-Region surface storage and supplies.

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<sup>2</sup> See Metropolitan’s 2020 Urban Water Management Plan (June 2021) at <https://www.mwdh2o.com/media/21641/2020-urban-water-management-plan-june-2021.pdf>

<sup>3</sup> See Metropolitan’s 2020 Integrated Water Resources Plan - Regional Needs Assessment at [https://www.mwdh2o.com/media/sgvlkith/2020\\_irp\\_needs\\_assessment.pdf](https://www.mwdh2o.com/media/sgvlkith/2020_irp_needs_assessment.pdf)

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- Page 10: *“When the water allocation was reduced from the State Water Project, MET had to switch many of its customers to the Colorado River. However, numerous articles have documented that the lakes on the Colorado River (Mead and Powell) are at the lowest levels since they were built, and their future viability is at question due to a decade’s long drought in the west.”*

**Clarification:**

**During recent shortage conditions in the SWP, Metropolitan's integrated system operated as intended by using its flexibility to draw on the Colorado River. The same flexibility has been used to take more from the SWP when the Colorado River is low. For that reason, Metropolitan works to preserve both sources as core supplies. Indeed, Metropolitan is at the center of negotiating a plan for the Colorado River.**

The five-year period from 2000-2004 was characterized by very low runoff conditions on the Colorado River. This began a critical period of adaptive management that included changes to reservoir operations, reduced demands, and additional collaborative conservation projects. All of these actions, in conjunction with less severe drought conditions, significantly halted the decline in total system storage. The average total system storage from 2005 to 2019 was approximately 32 million acre-feet.

The period between 2020 and 2022 was once again characterized by very low flows on the Colorado River. Lake Powell and Lake Mead declined to the lowest elevations since initial filling last year, but due to the very wet winter in 2022-2023, during the spring runoff period Lake Powell recovered 60 feet of elevation, and Lake Mead is forecast to rise 25 feet by the end of 2023. It is unclear what “future viability” means here, but reservoir elevations are affected by hydrology, water use demands, and conservation. Currently, the U.S. Bureau of Reclamation (Reclamation) manages operations of Lake Powell and Lake Mead under the *2007 Record of Decision Entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations For Lake Powell and Lake Mead (2007 Interim Guidelines)*. These guidelines expire in 2026. Reclamation has initiated the process to develop a new set of operating guidelines that will likely use operational experiences since 2007 to inform new criteria for water releases, storage, protection of critical reservoir elevations, Lower Basin shortages, and/or other reductions, based on updated hydrology and climate science.

The Interior Department, Reclamation, Colorado River Basin States and the water contractors in the Lower Basin that hold the rights to use Colorado River water have a shared interest in the successful management and operation of Lake Powell and Lake Mead. The actual hydrology since the *2007 Interim Guidelines* were adopted has been drier than the hydrology used for modeling the *2007 Interim Guidelines* and this contributed to reservoir

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elevations declining below the forecasts. However, since adoption of the *2007 Interim Guidelines*, the Interior Department, Reclamation, Colorado River Basin States and water contractors have worked together to take action to protect the reservoirs through voluntary storage and conservation starting in 2013, adoption of the 2019 Colorado River Drought Contingency Plan, funding and implementing the 500+ Plan in 2021, and through Reclamation's development of the *Supplemental Environmental Impact Statement for December 2007 Record of Decision Entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations For Lake Powell and Lake Mead (SEIS)*, and the Lower Basin States development of an SEIS alternative (Lower Basin Plan) that is designed to keep Lake Powell and Lake Mead above critical elevations through expiration of the *2007 Interim Guidelines* in 2026.

In addition to this history of recent collaboration to keep Lake Powell and Lake Mead above critical elevations, the Colorado River Basin States and Lower Basin water contractors are currently working with the Interior Department and Reclamation to develop new guidelines that will sustainably manage Lake Powell and Lake Mead into a drier future.

- Page 10: *“The project originated in 1960 and although it is **well maintained**, it has not been upgraded in years... When forming its water strategies, Orange County needs to recognize that the State Water Project’s reliability is in doubt due to its 53-year history of **not being adequately maintained**.”*

**Clarification:**

**The California Department of Water Resources (DWR) has extensive capital investment and asset management programs to ensure adequate rehabilitation and upgrades to the SWP delivery system/facilities, with its water supply and delivery functions being funded by its participants. Metropolitan, which includes member agencies from Orange County, is a participant in the SWP with years of past investment in the project and continued future obligations. The annual delivery capability of the SWP is variable due to hydrologic conditions and environmental regulations, not poor maintenance.**

In addition to the capital investment program, DWR has a number of programs aimed to bring facilities built more than 50 years ago to the 21<sup>st</sup> century. These programs include the development of an asset management program to provide recommendations for infrastructure upgrades while being financially responsible, a dam safety program that is evaluating the safety of all dams and related infrastructure under DWR ownership, and finally a program to oversee efforts and provide recommendations to counter the subsidence impacts to the California aqueduct. State resource agencies and various water user entities are also currently engaged in the development of the Delta Conveyance Project (DCP), which would

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include new diversion and conveyance facilities in the Delta necessary to restore and protect the reliability of SWP water deliveries and, potentially, Central Valley Project (CVP) water deliveries south of the Delta.

The delivery reliability is variable due to hydrologic variability and environmental regulations, not poor maintenance. In addition to regular and frequent preventive maintenance, DWR has a running list of more than 300 capital investment program projects that is discussed with the SWP contractors every January. These projects can be programmatic, such as fire and life safety modernization of all SWP facilities, as well as focused on a particular facility, such as Lake Perris emergency release facilities. The goal of these projects is not just to fix broken infrastructure but to upgrade the SWP facilities and infrastructure to accommodate urban growth, changes in safety codes, among others.

The reliability of the SWP under existing and future conditions is detailed every two years by DWR in SWP Delivery Capability Report publications. The annual delivery capability of the SWP is highly variable and largely dependent on hydrologic conditions and regulations that govern Delta export capacity. The most recent 2021 Delivery Capability Report indicates long-term average deliveries of 56 percent of contract amounts, deliveries 6 percent of contract amounts in a single dry year like 1977, and deliveries 95 percent of contract amounts in a single wet year like 1985. In 2023, under a 100 percent allocation, the SWP has been able to meet requested contractor deliveries with existing facilities.

- Page 10: *“The Colorado River has been in the news due to the drought reducing its flow over the past twenty years... **Orange County should simply not rely upon the Colorado River as a dependable supply, now or in the future.**”*

**Clarification:**

**Metropolitan believes that no member agency should rely on a single water source. The main tenet of Metropolitan’s regional planning effort through the IRP is the development of diversified portfolio of water supply for its service area. Orange County relies on a combination of water supplies from the SWP, Colorado River, groundwater, and other local projects. Metropolitan and Orange County have undertaken and continue to undertake extensive efforts to develop new supplies to meet future demands.**

Currently, Reclamation manages operations of Lake Powell and Lake Mead under the 2007 *Interim Guidelines* and the 2019 Colorado River Drought Contingency Plan, which are set to expire in 2026. Under the current rules, California has taken no mandatory reductions to date. California does not take shortages under the 2007 *Interim Guidelines*. And based on Reclamation’s recent 24-Month Studies, Metropolitan and California are not forecast to take



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any reductions associated with the 2019 Colorado River Drought Contingency Plan through 2026.

The guidelines for the management and operation of Lake Powell and Lake Mead after 2026 are in development, as described above. As such, it is unclear whether Metropolitan's Colorado River deliveries will be reduced in the future, but Metropolitan is participating in processes to develop the new guidelines and will represent Metropolitan's rights and interests throughout those processes.

Metropolitan has also significantly increased surface storage outside of its service area along the Colorado River. The 2007 Interim Guidelines outlined Metropolitan's ability to store conserved water in Lake Mead, referred to as Intentionally Created Surplus or ICS. Metropolitan used this storage account over the years to store surplus supplies when the SWP allocation is high and to augment Colorado River Aqueduct (CRA) deliveries when the SWP allocation is low and to make 2019 Drought Contingency Plan contributions if necessary. At the end of 2022 Metropolitan had 1.162 million acre-feet available in Lake Mead. Metropolitan plans to add approximately 300,000 acre-feet to its storage in Lake Mead in 2023. And while creation of new ICS ends after 2026 under the *2007 Interim Guidelines*, those guidelines provide for ICS remaining in 2026 to continue to be delivered for an additional decade, through 2036. While the terms were not outlined at the time, Metropolitan's right to store water in Lake Mead originated under the 1931 Seven Party Agreement. Renegotiating the *2007 Interim Guidelines* is covered in detail on pages 5 and 6, including the terms under which water can continue to be stored in Lake Mead. While the terms were not outlined at the time, Metropolitan's right to store water in Lake Mead originated under the 1931 Seven Party Agreement.

- Page 11: “...*the Grand Jury reached several conclusions regarding MET programs to replace dwindling water supplies. Most notable is that the Carson wastewater reclamation project is years away from being completed and 20 years behind similar projects in Orange County. Overall, MET cannot be expected to significantly replace the reductions in water allocations from the Colorado River and the State Water Project within the next decade.*”

**Clarification:**

**Metropolitan was created to acquire, develop, store, and transport water to sell and deliver to its member agencies. It has undertaken all of these actions since its creation in 1928. The investments that Metropolitan has made and its ongoing efforts in many different areas, including preserving favorable future supply outlook from the State Water Project and Colorado River, coalesce toward its goal of long-term regional water supply reliability.**

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Pure Water Southern California is a partnership with the Los Angeles County Sanitation Districts (LACSD) that would purify treated wastewater from LACSD's Joint Water Pollution Control Plant at a new advanced water purification facility in the City of Carson. The program could produce up to 155,000 acre-feet of purified water for groundwater replenishment, industrial use, and raw water augmentation. At full scale, the program would produce enough water to meet the needs of approximately 500,000 homes and could be one of the largest water reuse efforts of its kind in the world. The agencies have been working together for over 10 years on the program. They are currently operating a demonstration facility, completing the program's environmental review, and starting preliminary design of the program's conveyance pipeline. On July 19, 2023, State officials presented Metropolitan with \$80 million to help advance Pure Water Southern California. Metropolitan and the LACSD are partnering on work to accelerate the project's design and construction, with the potential to begin construction as early as 2025 and water deliveries as early as 2032, upon approval by the Metropolitan Board of Directors.

To date, Metropolitan and California have yet to take "shortages" on the Colorado River as defined under the operational guidelines. The Interior Department and Reclamation are currently undertaking two environmental compliance processes that may affect Colorado River shortages in the Lower Basin or other forms of water use within the Colorado River Basin reduction in the *Near Term Colorado River Operations Supplemental Environmental Impact Statement* and the *Environmental Impact Statement on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead*, but those processes are underway and it is unknown whether California and/or Metropolitan would face any reductions in the amount of water available from the Colorado River over the next decade.

Under the existing requirements established in the *2007 Interim Guidelines* and 2019 Drought Contingency Plan, Metropolitan has taken no reductions in Colorado River supply. However, if Metropolitan needed to replace Colorado River supplies, Metropolitan has successfully enhanced or replaced Colorado River supplies through a range of partnerships with Colorado River contractors in California that have enabled Metropolitan to have a continuously reliable supply of Colorado River water. Starting with an agreement with the Imperial Irrigation District in 1988 and continuing through to Metropolitan's most recent agreement for seasonal fallowing with the Quechan Tribe, Metropolitan has secured reliable sources of Colorado River supply throughout the period of increasing demands for Colorado River water in the 1990s and during the drought that started in the Colorado River basin in 2000. In the late 1990s and early 2000s, California faced the prospect of losing access to 800,000 acre-feet of surplus Colorado River water as Arizona and Nevada's development meant that their formerly unused state apportionments would not be available. The 2003 Quantification Settlement Agreement helped California manage its 4.4 million acre-feet of

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supplies, and Metropolitan was able to replace its lost surplus supplies through partnerships with other Colorado River contractors such as the Palo Verde Irrigation District.

Grand Jury Report assessment of MWDOC:

- Page 11: Regarding MWDOC’s study of OC water reliability needs, “...*the study is devoid of information about financing and implementation, and its conclusions rely too much on MET efforts that are decades behind where they should be.*”

**Clarification:**

**The Municipal Water District of Orange County or MWDOC’s study does not state that it is intended to address financing or implementation. Instead, it represents that it is intended only to identify future water supply reliability projects, including, but not focused solely, on those funded by or undertaken by Metropolitan. The study found that Orange County has multiple pathways to reliability gained through combinations of local projects, Metropolitan projects, and demand management. Projects identified in the study, such as Metropolitan’s Pure Water Project, and South Coast Water District’s Doheny Ocean Desalination Project, are both moving forward with the potential to be online by the end of the decade.**

MWDOC’s 2018 Orange County Water Reliability Study (Reliability Study), which started in 2016 and was completed in 2019, had the primary goal “*to provide independent, consistent, and accurate information on current and future water supply conditions in Orange County and provide objective comparisons of local projects that can effectively meet projected water demands.*”

The Reliability Study includes evaluations of both Metropolitan regional and Orange County local supplies and reliability. The study concluded that Orange County had several pathways to supply reliability that included alternative Metropolitan and Orange County supply portfolios. The Findings and Recommendations (Section 7) of this report noted that:

- “...*the need for additional water supplies for the OC Basin is fairly small, meaning the OC Basin performs well under the scenarios evaluated. Without any new investments, the OC Basin may utilize demand curtailment at the level of 10 percent about once every 20 years to meet supply gaps. Alternatively, the study noted that there are a number of projects available to OCWD that can help meet supply gaps...*”
- “...*South OC is short of emergency supplies today by 20 to 27.5 MGD (which can be met through a combination of local projects and emergency projects such as the IRWD SOC Emergency Interconnection and the pump-in to the EOCF#2). The emergency needs is the major driver of the need for new local projects in SOC... The study analysis indicates that the San Juan Watershed Project and the Doheny Project*

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*both provide cost-effective annual supplies and emergency supplies... additional study is recommended to determine the appropriate timing and sizing of phases...*

In addition, the Orange County Water Reliability Study: Executive Report (December 2016) in Section 4.1 revealed a number of important findings that have implications for OC water reliability. With regards to Metropolitan investments, the study presented findings 3 and 4 below:

- 3) At the MET regional level, there are multiple paths to achieving supply reliability, including strategies other than the WaterFix. The study identified two portfolios that were fully reliable that did not include the WaterFix and one portfolio that was fully reliable that included the WaterFix.
- 4) Assuming MET Supply Portfolio B (one of six regional portfolios evaluated in the study), which did not include the WaterFix but did include other MET investments, supply reliability for Orange County is greatly improved. MET Supply Portfolio B included the Carson Indirect Potable Reuse project, new water transfers, and new MET member agency local projects that were assumed to receive incentive funding from MET's Local Resources Program (LRP).

Grand Jury Report assessment of State of California Managed Supplies:

- Page 14: *“The State of California is responsible for operating the State Water Project, planning and implementation of statewide projects for water supply, State bond financing for projects, and management of federal and State funding programs. These have been insufficient to address the threats to Orange County water supply.”*

**Clarification:**

**Improving the water supply reliability of the SWP is a primary focus of Metropolitan's long-term planning efforts, as it is a participant with past investment and future financial obligation in the project. Metropolitan's strategy is to reduce its dependence on SWP supplies during dry years and to maximize its deliveries of available SWP water during wetter years to store in surface reservoirs and groundwater basins for later use during droughts and emergencies.**

As stated above, State resource agencies and various water user entities are currently engaged in the development of DCP, which would include new diversion and conveyance facilities in the Delta necessary to restore and protect the reliability of SWP water deliveries and, potentially, CVP water deliveries south of the Delta. The DCP objectives are to address sea level rise, climate change and extreme weather events; minimize the potential for public health and safety impacts from reduced quantity and quality of SWP water deliveries, and potentially CVP water deliveries, south of the Delta resulting from a major earthquake that

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causes breaching of Delta levees; protect the ability of the SWP, and potentially the CVP, to deliver water when hydrologic conditions result in the availability of sufficient amounts, consistent with the requirements of state and federal law and contractual commitments; and to provide operational flexibility to improve aquatic conditions in the Delta and better manage risks of further regulatory constraints on project operations.

In dry, below-normal conditions, Metropolitan has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and water transfer programs. The goal of these storage/transfer programs is to develop additional dry-year supplies that can be conveyed through the available pumping capacity to maximize deliveries through the California Aqueduct during dry hydrologic conditions.

- Page 14: *“State’s lack of long-term solutions to California’s water needs is not new. **No new reservoirs have been built since the 1970’s** when the population was 20 million people. 50 years later, California’s population has almost doubled to 39 million... the State has studied proposals to secure additional supplies of water by moving water from the Sacramento delta to Southern California through the California Water Project, **with no discernable results.**”*

**Clarification:**

**Storage, in both surface water reservoirs and groundwater basins, is a critical component of Metropolitan’s planning process. In 1980, Metropolitan’s storage capacity was less than 500,000 acre-feet. Now, Metropolitan has the potential to store approximately 5.5 million acre-feet.**

Specifically for surface storage, since the beginning of Metropolitan’s planning process, two significant changes have occurred to regional surface storage: (1) the construction of the Diamond Valley Lake (DVL), and (2) Metropolitan receiving access to 218,940 acre-feet of storage capacity in Castaic Lake and Lake Perris.

- (1) Construction of Southern California’s newest and largest reservoir nearly doubled the region’s surface water storage capacity. Transport of imported water to the lake began in November 1999, and the lake reached capacity in early 2003. DVL holds up to 810,000 acre-feet, some of which is for dry-year or seasonal storage, and the remainder for emergency storage. With a wet 2023 season, DVL is currently at around 75% full and anticipated to be at 750-800 thousand acre-feet by the end of the year.
- (2) Under the 1994 Monterey Agreement and SWP Contract Amendment, Metropolitan is permitted to withdraw up to 218,940 acre-feet in the reservoirs at the southern terminals of the California Aqueduct. Access to this storage capacity in Castaic Lake (153,940 acre-feet) and Lake Perris (65,000 acre-feet) gives Metropolitan greater flexibility in

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handling supply shortages. Any amount of water withdrawn in a year must be replaced with supplies available to Metropolitan within five years.

Sites Reservoir is another critical component of Metropolitan's planning process for surface water storage. Sites Reservoir is a proposed reservoir project of approximately 1.3 to 1.5 million acre-feet, being analyzed by the Sites Project Authority. Sites Reservoir emerged as part of a second stage of SWP facilities seeking voter approval in the 1980s, which included a peripheral canal and other northern California water-related projects. In 1996, the project was further analyzed by DWR and Reclamation as part of the CALFED Bay-Delta process. In 2010, the Sites Project Authority was formed as a joint powers authority to continue moving forward with the development of the Sites Reservoir Project. To be located north of Sacramento, the water stored in the reservoir would be diverted from the Sacramento River during high flow events and returned to the Sacramento River during dry and critical years, thereby providing additional dry year water for environmental flows and project partners including CVP and SWP agencies north and south of the Delta. Metropolitan is a member of the Sites Reservoir Committee, a group of 30 agencies that are participating in certain planning activities in connection with the proposed development of the project, including the development of environmental planning documents, a federal feasibility report, and project permitting. The current operations model estimates the annual water yield of Sites Reservoir at approximately 240,000 acre-feet per year. An initial feasibility study and Administrative Draft Environmental Impact Report (EIR) were completed in 2013 by DWR. A Public Draft EIR/Environmental Impact Statement (EIS) for the Project was released by the Sites Project Authority (state lead agency) and Reclamation (federal lead agency) in August 2017. The Revised Draft EIR and Supplemental EIS were released for public comment in November 2021, with the Final EIR/EIS anticipated in the fall of 2023.

Metropolitan has also significantly increased surface storage outside of its service area along the Colorado River. The *2007 Interim Guidelines* outlined Metropolitan's ability to store conserved water in Lake Mead. Metropolitan used this storage account over the years to store surplus supplies when the SWP allocation is high and to augment CRA deliveries when the SWP allocation is low and to make 2019 Drought Contingency Plan contributions if necessary. At the end of 2022, Metropolitan had 1.162 million acre-feet available in Lake Mead. Metropolitan plans to add approximately 300 thousand acre-feet to its storage in Lake Mead in 2023.

- Page 16: "*The Delta Conveyance Project faces **strong opposition** from environmentalists. The prospect of the project being completed in a timely manner, if at all, is doubtful.*"

**Clarification:**

**The Delta Conveyance Project has strong overall statewide support.**

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A recent statewide poll conducted by Californians for Water Security showed that 76% of voters say they support the Delta Conveyance Project when provided a description, including 40% of voters that strongly favor the project. Only 13% of voters oppose the project. And voters across party and region also strongly support the project, with 81% of Democrats, 65% of Republicans, and 76% of No Party Preference voters expressing support.

DWR is currently pursuing numerous environmental compliance and permitting processes that must be completed prior to the construction and operation of the proposed project. DWR anticipates that the Delta Conveyance Project Final EIR will be completed at the end of 2023, and the Final EIS will be completed in early 2024. Additionally, DWR is currently beginning the State and Federal Endangered Species Act consultation process, developing a Community Benefits Program, and completing a revised cost estimate and a cost-benefit analysis for the Project.

- Page 16: ***“The State cannot be relied upon for consistent water delivery in wet or dry years”*** and ***“Water management in California can best be summed up as always studied but never resolved. The impacts of this paralysis mean that Orange County cannot currently rely on the State to identify or secure a new source or supplies of water.”***

**Clarification:**

**No agency should rely solely on the State, and Metropolitan and Orange County have undertaken and continue to undertake extensive efforts to develop new supplies to meet future demands. In addition, the State provides assistance for capital projects, and Orange County has been a direct recipient of state funds to help develop and secure water supplies.**

In 2023, construction on the Groundwater Replenishment System, the world’s largest advanced wastewater purification system for indirect potable reuse, was completed. The new system which is large enough to meet the needs of one million residents in north and central Orange County had 54% of its capital costs funded by the State Water Board’s Division of Financial Assistance. This funding assistance totaled \$491 million and included \$10 million in grants from Propositions 1 and 13 and \$481 million in 11 low-interest loans.

As noted previously, the reliability of the SWP is highly dependent upon hydrology and the 2021 Delivery Capability Report indicates long-term average deliveries of 56 percent of contract amounts equivalent to over a million acre-feet a year to Metropolitan. In historically wet 2023, the full 100% allocation was made available to SWP Contractors, equivalent to over 1.9 million acre-feet for Metropolitan. During the 2020-2022 drought, Metropolitan received nearly 1.7 million acre-feet of supplies from the SWP system. Metropolitan is a participant in the SWP with decades of past and ongoing investment in the SWP. As a

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member agency of Metropolitan, MWDOC is also invested in the SWP and therefore, works through Metropolitan to work with the State's DWR to coordinate and improve the SWP's delivery of water.

The State of California has always engaged in robust statewide water planning activities. The California Water Plan, updated every five years, is the State's strategic plan for sustainably and equitably managing and developing water resources for current and future generations. In addition to the Water Plan, the current Administration also released a comprehensive Water Resilience Portfolio that serves as a blueprint for equipping California to cope with more extreme droughts and floods and rising temperatures, while addressing long-standing challenges that include declining fish populations, over-reliance on groundwater and lack of safe drinking water in many communities.

In January 2022, the Administration released a progress report documenting its efforts to implement the portfolio over the previous 18 months. Some key achievements noted in the report include:

- In the five months since August 2021, DWR and the State Water Resources Control Board invested \$92 million in state funds to assist 48 separate small communities across the state with drought-related drinking water supply problems.
- The local water agencies pursuing six new water storage projects eligible for \$2.7 billion in state water bond funding advanced their projects in 2021; all projects were deemed feasible by the California Water Commission after completing draft environmental documents and arranging non-state financing, among other requirements. If completed, those six projects together would expand storage capacity in the state by nearly 2.8 million acre-feet of water.
- The state has aligned planning, technical, and financial assistance to support local agencies implementing groundwater sustainability plans. In April 2021, the state awarded \$26 million for the construction of local projects. An additional \$300 million will be disbursed for planning and projects in coming months. A new \$50 million grant program will support local reuse of farmland where more acres are currently irrigated than groundwater aquifers can support.

Since the progress report was released, a California Water Strategy document was released by the Administration in August 2022 that called for investing in new sources of water supply, accelerating projects, and modernizing how the state manages water through new technology. The strategy prioritizes actions to capture, recycle, desalt, and conserve more water. These actions include:

- Creating storage space for up to 4 million acre-feet of water, which will allow us to capitalize on big storms when they do occur and store water for dry periods



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- Recycling and reusing at least 800,000 acre-feet of water per year by 2030, enabling better and safer use of wastewater currently discharged to the ocean.
- Freeing up 500,000 acre-feet of water through more efficient water use and conservation, helping make up for water lost due to climate change.
- Making new water available for use by capturing stormwater and desalinating ocean water and salty water in groundwater basins, diversifying supplies, and making the most of high flows during storm events.

Noted in the strategy was that over the last three years state leaders have earmarked more than \$8 billion to modernize water infrastructure and management. The historic three-year, \$5.2 billion investment in California water systems enacted in 2021-22 enabled emergency drought response, improved water conservation to stretch water supplies, and enabled scores of local drought resilience projects. The 2022-23 budget includes an additional \$2.8 billion for drought relief to hard-hit communities, water conservation, environmental protection for fish and wildlife, and long-term drought resilience projects.

Grand Jury Report assessment of Federal Intervention:

- Page 16: *“The rationing of water from the Colorado River basin appears inevitable... disrupting the long-tenured stability of Southern California’s imported water supply. It reinforces the idea that the time to act for securing a new source of water for Orange County is now.”*

**Clarification:**

**Reclamation does not “ration” Colorado River water.**

As described above, the guidelines for operation of Lake Powell and Lake Mead establish the conditions under which shortages or other mandatory reductions will be made. Reclamation’s authority to require shortages and mandatory reductions is limited by and must be consistent with the “Law of the River,” a body of law that includes the Colorado River Compact, 1944 Treaty with Mexico, Supreme Court decrees in *Arizona v. California*, and numerous other federal statutes and regulations. Reclamation may only reduce deliveries of Colorado River water pursuant to and consistently with the Law of the River. As also described above, the work to develop new guidelines for operating Lake Powell and Lake Mead sustainably into a drier future is currently underway. Further, if Reclamation imposes mandatory reductions that it lacks the legal authority to impose, Metropolitan would act to defend its rights and interests.

Metropolitan Responses on Findings:

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**Finding F1:** *“Future water supplies are impacted by climate change and current supplies will not meet future demands.”*

**Response: Agree**

Metropolitan agrees that future water supplies will be impacted by climate change and “current supplies will not meet future needs.” As discussed above, Metropolitan and Orange County have undertaken and continue to undertake extensive efforts to develop new supplies and to increase conservation to meet future demands. Metropolitan’s ongoing planning process such as the IRP and Climate Adaptation Master Plan for Water (CAMP4W) are aimed towards addressing the potential for new supplies and meeting future demands. Metropolitan’s Board is taking the lead in developing climate adaptation master plan that can provide safe and reliable water for all with no one left behind. CAMP4W will integrate resource planning, Board policy, and sound technical analysis to address the impacts of climate change on its water supplies, supply chains, worker safety, and the disparity of accessing safe and reliable water. Commenced in February 2023, the CAMP4W builds upon the 2020 IRP needs assessment, to guide future planning and investments. Metropolitan is working collaboratively with its 26 member agencies to achieve the CAMP4W goals.

**Finding F2:** *“Climatologists predict future extended periods of low moisture with occasional wet years.”*

**Response: Disagree**

Metropolitan agrees that some climatologists are predicting future low moisture or drought periods, but also notes that these experts are also predicting uncertainty in the weather patterns that may include extreme wet years, like 2022-23. However, there is no consensus on these findings. Also, climatologists normally provide projections and not predictions for future conditions.

**Finding F3:** *“Climate change is inevitable and is exacerbated by human behavior.”*

**Response: Agree**

The Sixth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) states “**Human activities**, principally through emissions of greenhouse gases, have **unequivocally caused global warming**, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020. Global greenhouse gas emissions have continued to increase, with unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles, and patterns of consumption and production across regions, between and within countries, and among individuals (high confidence).”

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To respond to climate change, Metropolitan developed a Climate Action Plan (CAP). Adopted in 2022, the CAP furthers Metropolitan’s commitment to sustainability by adopting a near-term greenhouse gas (GHG) reduction target of 40% below 1990 levels by 2030 and sets a long-term target of carbon neutrality by 2045. The CAP serves as a planning document to guide policy and planning decisions on operations, water resources, capital investments, and conservation and resource programs to ensure that Metropolitan will meet its GHG reduction commitment.

Metropolitan is also in the midst of a comprehensive planning process to develop a CAMP4W. As described in our response to Finding F1, this plan will integrate resource planning, Board policy, and sound technical analysis to address the impacts of climate change on its water supplies, supply chains, worker safety, and the disparity of accessing safe and reliable water.

**Finding F4:** *“South Orange County relies primarily on the importation of water.”*

**Response: Agree**

Agencies in south Orange County are working to develop and diversify local supplies like the proposed Doheny Desalination Plant. These efforts build upon existing local supply development such as the 28 million gallons per day Baker Water Treatment Plant in Lake Forest. In addition, Metropolitan continues to work to meet its regional water supply reliability goal and meet member agencies’ future demands. Metropolitan’s actions include seismic strengthening of the 520 million gallons per day Diemer Water Treatment Plant in Yorba Linda, seismic improvements to the Allen McCulloh Pipeline serving south Orange County, and protecting critical facilities against wildfire risk.

**Finding F5:** *“Local water suppliers recognize that enhanced stormwater capture and storage, wastewater recycling, and infrastructure improvements will not be sufficient to address the long-term forecast of drought and its effects on supply.”*

**Response: Disagree**

Metropolitan, as a regional wholesaler of water, does not have sufficient information to make this determination. Metropolitan would gladly review any information the Grand Jury reviewed to come to this conclusion. For Southern California and the Sierra Nevada watersheds, the scientists generally conclude that annual average precipitation will remain close to the long-term average. Yes, periods of drought will still occur—as they have for millennia. But capturing more of the surplus flows in wet years may, in fact, be all that is needed to improve reliability. In addition, Metropolitan is centered on effective water resource management that has grown to include creative water transfers and exchanges, innovative storage deals, large-scale regional recycling, productive local supply programs,

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and practicable conservation and demand management measures, all towards the goal of managing both supply and demand in the most efficient manner.

**Finding F6:** *“There is significant water infrastructure planning, but inadequate implementation.”*

**Response: Disagree**

Metropolitan undertakes extensive implementation of water infrastructure and water supply development. Metropolitan’s current Capital Investment Plan (CIP) for fiscal years 2022/23 and 2023/24<sup>4</sup> is approximately \$600 million. Metropolitan continues to place an emphasis on execution of capital projects, support to internal and external stakeholders, infrastructure reliability and protection, and planning for the future with workforce development initiatives.

Additionally, DWR has a robust CIP to ensure the continued reliability of the SWP through the recently extended term of 2085. Metropolitan contributes an average of approximately 50% of the annual SWP water-related expenditures. Since 1963, Metropolitan has paid \$15.4 billion for the SWP. Metropolitan is planning on maintaining this commitment to regional water supply reliability through the SWP for another 62 years.

**Finding F7:** *“The review and approval process for major water capital projects is cumbersome and overly restrictive.”*

**Response: Agree**

The review and approval process for large and complex projects is cumbersome and restrictive. Metropolitan supports efforts to streamline this process, like the Governor’s new water infrastructure package of budget trailer bills, although more can be done.

**Finding F8:** *“Failing to find solutions to water shortages will have a significant impact on the Orange County economy.”*

**Response: Partially Agree**

Reliable water supplies and confidence in public infrastructure are necessary linchpins for the health of the economy. The Grand Jury’s finding here implies that solutions are either not known or too difficult to implement. Metropolitan, MWDOC, and Orange County’s progressive water utilities are working collaboratively to ensure reliability of the county’s water service.

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<sup>4</sup> See Metropolitan’s CIP for 2022/23 and 2023/24 at [https://www.mwdh2o.com/media/wxdazp1i/fy-2022\\_23-and-2023\\_24-cip-appendix-web.pdf](https://www.mwdh2o.com/media/wxdazp1i/fy-2022_23-and-2023_24-cip-appendix-web.pdf).

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**Finding F9:** *“Continued development in Orange County creates additional water supply needs.”*

**Response: Disagree**

Municipal water demands in Anaheim, Fullerton, Santa Ana, and MWDOC increased only 7 percent since the early 1980s, despite a burgeoning population growth of 57 percent. In areas with a growing ethic of water use efficiency—like Orange County—it is no longer valid to presume that economic or population growth creates additional water supply needs. Conservation and demand management programs supported by Metropolitan and Orange County water suppliers assist in reducing additional water supply needs.

**Finding F10:** *“Conservation and efficient use of water is essential.”*

**Response: Agree**

Conservation and demand management programs supported by Metropolitan and Orange County water suppliers assist in reducing additional water supply needs. Water use in MWDOC’s service area has dropped from about 215 gallons per capita per day (gpcd) in the early 1980s to 156 gpcd today—a 27 percent decline. In Santa Ana, the efficiency improvements are even greater with a 49 percent decline in per capita water use since the early 1980s.

**Finding F11:** *“Increased outreach and public education are necessary.”*

**Response: Agree**

It is well established that behavior water use is influenced by outreach, public education, and earned media from news outlets. Metropolitan is committed to its continued support of outreach and public education programs in Orange County and throughout its service area.

**Finding F12:** *“Desalination has proven to be technologically and environmentally feasible and is slowly being embraced as a drought-resistant source of water.”*

**Response: Disagree**

While desalination may be technically feasible and economically viable in some communities, the development of large-scale desalination facilities along Orange County’s coast has been excruciatingly slow and increasingly expensive. Small desalination projects with state-of-the-art intake and discharge facilities may prove viable for communities with a demonstrated supply or resiliency need. Nevertheless, Metropolitan supports its member agencies’ efforts to develop local desalination projects. As desalination technology improves resulting in reduced environmental impacts, public and regulatory support may increase.

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**Metropolitan Responses on Recommendations:**

**Recommendation R2:** *“Orange County water agencies should expedite the planning, development, and construction of desalination plants over the next five years to insure a sustainable and reliable drought-resistant source of water. F1, F2, F3, F4, F5, F6, F7, F8, F9, F11, F12.”*

**Response: The recommendation will not be implemented because it is practically infeasible.**

As the regional wholesale provider, Metropolitan cannot make these decisions for Orange County.

Metropolitan does support its member agencies’ efforts to develop water recycling, groundwater recovery, or desalination projects. Metropolitan encourages water agencies to find local solutions for their respective service areas; however, assessment of needs and potential solutions should be based on correct information and coordination with local stakeholders. Collaboration is a key element in Metropolitan’s regional planning efforts. Metropolitan supports local decision-making in determining the most appropriate solutions and local supply programs.

**Recommendation R3:** *“The County of Orange and all Orange County cities should formulate an emergency development moratorium plan in anticipation of the Colorado River water supply being constrained. The emergency moratorium plan should be developed by the end of calendar year 2023. F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12.”*

**Response: The recommendation will not be implemented because it is unreasonable.**

As the regional wholesale provider, Metropolitan may not make these types of decisions for its member agencies or local agencies, but will continue to provide support for the Orange County water agencies’ decision-making. We also see no evidence that the water supply conditions in Orange County warrant such a draconian decision as banning new water service connections.

**Recommendation R4:** *“Orange County water agencies should update their public communication strategies, by calendar year end 2023, to inform the public of lifestyle changes if additional water sources are not developed. F10, F11, F12.”*

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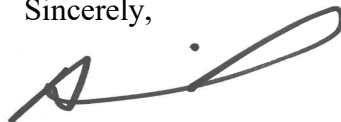
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**Response: The recommendation will not be implemented because it is unreasonable and not supported by the evidence.**

As the regional wholesale provider, Metropolitan would not make these decisions for Orange County water agencies. Further, this fear-invoking approach to public communications would only discourage economic growth and investment in Orange County. Finally, advances in planning, water use efficiency, water recycling, groundwater recharge, and stormwater capture all present viable options to ensure Orange County's water reliability for generations to come.

Thank you for providing Metropolitan with the opportunity to respond. Please feel free to contact us if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Adel Hagekhalil', with a large, stylized flourish extending to the right.

Adel Hagekhalil  
General Manager