



● **Board of Directors**
Water Planning and Stewardship Committee

8/16/2022 Board Meeting

7-13

Subject

Adopt resolution affirming Metropolitan's call to action and commitment to regional reliability for all member agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Metropolitan Water District of Southern California endeavors to provide an adequate and reliable supply of high-quality water to meet the region's present and future needs in an environmentally and economically responsible way. As an example from 1930, Metropolitan's first Board Chair, W.P. Whitsett, provided a guiding principle for developing regional water supply reliability: "Whatever is done should be done for the benefit of the whole, and whatever is done for the benefit of the whole should be shared by all the parts."

Nearly a century after those aspirational words, a record-breaking drought has descended on the Southwest, and Southern California's water reliability is in crisis. This year, supply from the State Water Project (SWP) was cut to 5 percent of Metropolitan's total allocation for the second consecutive year—resulting in a 3-year water supply substantially below the California Department of Water Resources' worst-case projection. These conditions starkly highlight an infrastructure and water supply vulnerability that must now be addressed. Simply put, there is not enough pipeline connectivity or operational flexibility for imported supply and existing regional storage to meet the needs of six member agencies with a combined population greater than six million.

Because of this supply shortage and limits to its infrastructure, Metropolitan cannot provide equivalent supply reliability from one corner of the service area to another. In response, Metropolitan's Board declared a water shortage emergency and imposed a water conservation program in April of this year for the six SWP-dependent agencies. The impacted agencies include Calleguas Municipal Water District, Inland Empire Utilities Agency (IEUA), Las Virgenes Municipal Water District, the City of Los Angeles, Three Valleys Municipal Water District, and Upper San Gabriel Valley Municipal Water District.

These six SWP-dependent agencies have limited connection to Metropolitan's existing infrastructure, storage, and supplies. This constraint forced them to take mandatory and painful water supply cuts from their expected SWP use by an average of 35 percent—with some facing reductions up to 73 percent. If these agencies cannot limit their use of Metropolitan's supply from the SWP, then they face stiff volumetric penalties of \$2,000 per acre-foot (AF) or the first-ever total ban on outdoor irrigation. Meanwhile, under statewide regulation, the 20 member agencies outside of this area must implement demand-reduction actions under Level 2 of their Water Shortage Contingency Plans. These actions are locally determined to achieve only a 10 to 20 percent water reduction (without volumetric penalties).

This disparity is unacceptable to Metropolitan and its member agencies. By adopting the proposed Resolution in Attachment 1, the Board would prioritize a policy to provide 100 percent and equitable reliability to all member agencies. Metropolitan would thus commit to taking all necessary actions to give the SWP-dependent member agencies a level of infrastructure and water supply reliability equivalent to that of Metropolitan's other member agencies. Equitable access will be achieved through the expedited and prioritized implementation of a balanced set of projects and programs that improve existing infrastructure, imported and local supplies, and demand management.

Details

Problem Statement

Given the overlapping effects of infrastructure and water supply constraints, Metropolitan staff, in coordination with the SWP-dependent agencies, collectively worked to describe the current water reliability crisis. The joint problem statement follows:

Due to limited infrastructure, Metropolitan cannot provide the SWP-dependent agencies equitable access to water supply and storage assets during severe droughts.

Simply put, there is not enough pipeline connectivity and operational flexibility between imported supplies and storage assets and not enough water resource diversity for Metropolitan to equitably satisfy the needs of all member agencies. The following sections describe the limits of Metropolitan's existing infrastructure, the current water supply conditions, the impacts to the member agencies, and the existing policy background which drives the need for further action.

Infrastructure Condition

In normal years, Metropolitan serves the SWP-dependent areas from two different branches of the California Aqueduct. The East Branch from Silverwood Lake feeds IEUA, Three Valleys, and Upper San Gabriel Valley. In contrast, Calleguas, Las Virgenes, and Los Angeles are served predominantly by the West Branch from Castaic Lake. These six agencies are referred to as "SWP-dependent" because they rely on either an annual allocation from DWR or on previously stored SWP supplies.

Importantly, infrastructure constraints prevent these agencies from accessing sufficient supply from the Colorado River Aqueduct, or from storage in Diamond Valley Lake or Lake Mead.¹ On the western side, Calleguas, Las Virgenes, and Los Angeles can access relatively small amounts of Colorado River or stored supplies through the Greg Avenue facility, a 50 cubic feet per second (cfs) pumping plant that lifts water into the East Valley Feeder and moves it northwest. By comparison, the total demands of these westside agencies can be 14 times more (requiring approximately 700 cfs on a short-term basis) from the SWP system (if available).

A similar condition exists on the eastern portion of the SWP-dependent area. For IEUA, Three Valleys, and Upper San Gabriel Valley, the Rialto Pipeline can carry about 600 cfs from the Devil Canyon facility downstream of Silverwood Lake. No Colorado River or stored supplies can be delivered to these agencies via the Rialto Pipeline, although they have limited access to other feeders carrying Colorado River supplies.

The infrastructure constraints seen by these six agencies prompted the Board to authorize various projects to improve access. In December 2021, the Board amended the existing Capital Investment Plan (CIP) to start water supply reliability improvements in the Rialto Pipeline service area.² Specifically, the action authorized work to expand delivery of alternative supplies from Diamond Valley Lake and possibly the Colorado River Aqueduct to the eastern SWP-dependent area, thus preserving the saved SWP supply for the west side.

In February 2022, the Board amended the CIP to include planning and implementation of possible infrastructure improvements for west side reliability. This action authorized preliminary investigations including a feasibility study, hydraulic modeling, and developing a conceptual suite of options to improve supply reliability. These projects include expanded Greg Avenue Pumping and new pumping facilities along the Sepulveda Feeder to push Colorado River water north from the central pool into the western area. In total, up to 150 cfs of additional capacity were targeted in this first set of west-side CIP projects. Further studies will evaluate other potential conveyance projects to move additional supply into the west side.

Metropolitan and its member agencies are currently engaged in a collaborative effort to identify additional infrastructure and supply projects that can improve reliability for the SWP-dependent areas. Some ideas are short term, while others will come to fruition only after a decade or more. Conceptual designs are fast-tracked

¹ At the beginning of 2022, Metropolitan had 2.0 million AF of storage in Lake Mead Intentionally Created Surplus and in Diamond Valley Lake, Lake Mathews, and Lake Skinner.

² These projects, and preliminary feasibility work for a new project for westside pump stations, were approved as part of the current biennium budget.

whenever a project appears to provide a near-term solution with few downsides. Initial portfolios of these projects will be presented to the Board in September 2022. Staff will seek Board approval for one of the portfolios and for associated implementation actions in February 2023. The portfolio evaluation will include technical studies supporting their recommendation.

Water Supply Condition

Climate change—this century’s growing crisis—plunged the Southwest into a “perfect drought”^{3,4} not seen since the medieval age.⁵ What is more, human-caused warming turned what otherwise would have been a bad drought into a catastrophic one. Since the early 1990s and through extensive resource planning and investment, Metropolitan mitigated the shock of “20th Century” droughts (i.e., droughts predicted by using 1922 – 2017 hydrology). Constructing the Diamond Valley Lake system, driving down per-capita water use by 40 percent, and investing heavily in local supplies all improved the regional capacity to withstand expected droughts.

Always fickle but occasionally abundant, the watersheds supplying the SWP system have long been uncertain. Water deliveries from the SWP have been impacted by both prolonged droughts and federally mandated pumping restrictions. In 2007, Federal Judge Oliver Wanger issued a decision that overturned a federal scientific study intended to protect Delta smelt in the Sacramento-San Joaquin Delta. This marked the beginning of a series of back-and-forth decisions by Judge Wanger and the Federal 9th Circuit Court of Appeals seeking to balance the needs of Delta smelt against the “significant effects on the human environment” from pumping restrictions. These actions reduced the amount of water exported from the Delta by the SWP and by the Central Valley Project (CVP). In drier years, as a combined result of State Water Resources Control Board (SWRCB) Decision 1641 and federal biological opinions, the Public Policy Institute of California estimated that Delta exports averaged about 1.5 million AF per year lower, for similar inflows, since 2008 as compared to 1995-2007.⁶

Today, the SWP watersheds have received well-below-average precipitation and runoff for three years in a row. This resulted in the lowest three-year combined deliveries of allocated water in the history of the SWP. In fact, SWP deliveries are currently 40 percent lower than the worst three-year period projected by DWR modeling as recently as 2020. Even with this reduced delivery, DWR and the U.S. Bureau of Reclamation still sought a series of Temporary Urgency Change Petitions (TUCPs) to change water flow or facility operations to move water through the Delta.⁷

The most recent Integrated Water Resource Plan (IRP) Assessment⁸ expanded on prior planning efforts and developed scenarios to pre-experience four plausible futures we might see through mid-century. These scenarios included significant erosion of supply from both the SWP and the Colorado River. This board-adopted assessment called for enhanced access to core supplies and storage, and to make new storage accessible to the SWP-dependent areas. Unfortunately, the challenging future envisioned by the IRP scenarios arrived all too early. This adds urgency to the need for a concerted response now.

Impact on Member Agencies

During the last major drought in 2012-2016, the Board implemented an updated Water Supply Allocation Plan⁹ (WSAP) to manage shortages. The WSAP established a baseline use for all member agencies, determined regional shortage levels, and imposed a surcharge for water use above a predetermined allotment by agency. However, the WSAP was not designed or intended for the circumstances experienced during the current drought emergency.

³ MacDonald, G., K. Kremenetski and H. Hidalgo (2008). [Southern California and the perfect drought: Simultaneous prolonged drought in southern California and the Sacramento and Colorado River systems.](#)

⁴ Woodhouse, C., D. Meko and E. Bigio (2020). [A long view of Southern California water supply: Perfect droughts revisited.](#)

⁵ Williams, A., B. Cook and J. Smerdon (2022). [Rapid intensification of the emerging southwestern North American megadrought in 2020–2021.](#)

⁶ Gartrell, G., J. Mount and E. Hanak (2022). [Tracking where water goes in a changing Sacramento–San Joaquin Delta.](#)

⁷ SWRCB (2022). [Order approving temporary urgency changes to water right license and permit terms relating to Delta water quality objectives.](#)

⁸ MWDSC (2022). [Adopt the 2020 Integrated Water Resources Plan Needs Assessment.](#)

⁹ MWDSC (2014). [Approve adjustments to Metropolitan’s Water Supply Allocation Plan.](#)

Rather than reconstructing the WSAP for rapidly developing emergency conditions, in April 2022, the Board (1) declared that a Water Shortage Emergency Condition existed in the SWP-dependent area; (2) adopted an Emergency Water Conservation Program to preserve available supply for the greatest public benefit by reducing non-essential water use; and (3) expressed support for the Governor's Executive Order N-7-22.¹⁰

As a result of the Board's April 2022 action, six member agencies serving about one-third of Southern California's population were required to mandate emergency drought restrictions or reduce use to specific volumetric limits by June 1, 2022, to stretch the severely limited SWP supply. The depth and urgency of the drought restrictions imposed by the Board through emergency action are painful, and they garnered substantial local and national media attention, public engagement, and the attention of elected officials.

This constraint forced the six agencies to take mandatory water supply cuts from their expected SWP use by an average of 35 percent—with some facing reductions up to 73 percent. If these agencies cannot limit their use of Metropolitan's supply from the SWP, then they face stiff volumetric penalties of \$2,000 per AF or the first-ever total ban on outdoor irrigation which could dramatically change the outdoor landscape of local communities. The reductions in water use and the possibility of fines also exert financial pressure on the member agencies, as well as forced member agencies and their customers to draw down local supply reserves, at least in the shorter term.

For the other 20 member agencies in the service area, the SWRCB adopted an emergency regulation based on Governor Newsom's executive order. This regulation requires all urban water agencies to implement demand-reduction actions under Level 2 of their Water Shortage Contingency Plans. These actions are locally determined to achieve only a 10 to 20 percent water reduction (without volumetric penalties). Based on preliminary submittals of data from urban water agencies across the state, the California Urban Water Agencies (CUWA) estimates that demand reductions of 8-10 percent were met under this framework in June and July.

Because Metropolitan's supply and infrastructure capabilities were insufficient to meet even the human health and safety needs¹¹ of the SWP-dependent areas—much less than the normally-expected demands—Metropolitan sought additional supply from DWR. DWR granted Metropolitan's request for Human Health and Safety (HH&S) supply with conditions: Metropolitan must impose mandatory conservation and must also pay back any water borrowed for this purpose within five years. For 2022, this debt is expected to be 133,000 AF.

Finally, Metropolitan also sought supplemental HH&S supply from DWR to reduce the risk of wildfires in state-designated Very High Fire Hazard Safety Zones. Unfortunately, DWR denied Metropolitan's request and stated that "if landscaping within a defensible space cannot be reliably watered – due to conditions such as extreme drought – then dead and dying vegetation should be removed to reduce fire risk." Thus, the inability to connect these areas of high fire hazard to an adequate water supply may permanently change the character of the outdoor landscape (even if the landscape otherwise used water efficiently).

Policy and Reliability Foundation

Metropolitan has long endeavored to provide for the current and future needs of its member agencies and the communities they serve. Some of Metropolitan's historical policies supporting this objective include:

1. Metropolitan's [enabling legislation](#) provided broad powers for "developing, storing, and distributing water for domestic and municipal purposes."
2. In 1931, Metropolitan policy established, "Neither surface nor subsurface storage shall be created to the advantage of any area within the limits of the District, or elsewhere, unless such storage is a necessary and economical part of the general engineering plans which may be accepted."¹² The development of Metropolitan's conveyance and distribution infrastructure thus focused on this approach.
3. In 1967, and in response to the expanding needs of the member agencies, Metropolitan's General Counsel offered that, "neither the Metropolitan Water District Act nor any other law provides or permits the existence of 'second-class' unit municipalities of the District, either by direct action or by indirect action

¹⁰ Newsom, G. (2022). [Executive Order N-7-22](#).

¹¹ The human health and safety needs are defined by SWRCB regulations and are set at 55 gallons per capita per day (gpcd).

¹² MWDC (1931). [Statement of Policy of The Metropolitan Water District of Southern California](#).

of the Board of Directors.”¹³ Metropolitan’s intent was—through sufficient supply, storage, and distribution infrastructure—to meet the expected water demands of its member agencies.

4. In 1991, Metropolitan established its current mission to “provide the service area with adequate supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.”¹⁴
5. In 1996, Metropolitan adopted its first Integrated Water Resource Plan.¹⁵ The IRP included an analysis of Metropolitan’s projected Capital Improvement Program and water resource actions. The capital improvements were intended to provide the necessary infrastructure to achieve the water supply resource targets through regional storage, water quality, and system reliability improvements. The 1996 IRP also established targets for local resource development and demand management actions to improve reliability. A basic assumption of the 1996 IRP was that without substantial investment in the SWP, the lowest dry-year supplies available to Metropolitan by 2020 would be 154,000 AF—50 percent higher than available in 2021 and 2022. The adaptive IRP was subsequently updated in 2004, 2010, and 2015.
6. In 2008, Metropolitan’s Board adopted a Water Supply Allocation Plan (WSAP) for use when regional shortages exist.⁹ The WSAP was activated three times (2009, 2010, and 2015) to manage shortage conditions felt across the entire service area.
7. In 1988¹⁶, 1996¹⁷, and 2007¹⁸, Metropolitan published system overview and integrated area studies. These studies were undertaken in large part to achieve this principle: “District facilities will be selected, sized, and located so that water from the Colorado River and the State Water Project may be delivered in the most effective and economical manner and in the best interests of the area taken as a whole.”¹⁶ In 2007, the Integrated Area Study acknowledged that “Metropolitan strives to treat all areas as equitably as possible although precise equality of service is not possible (e.g., there will always be geographic inequities).”¹⁸ Equity was to be maximized by developing “sufficient system capacity to ensure the delivery of water identified in the IRP...”¹⁹
8. In 2022, Metropolitan adopted the 2020 Integrated Water Resources Plan Needs Assessment.⁸ Although earlier studies also foreshadowed a reliability challenge,^{20,21} this latest IRP assessment directly incorporated scenario planning to address wide-ranging uncertainties and to pre-experience alternative and plausible futures through 2045. The IRP assessment included numerous findings that called for enhanced accessibility to core supplies and storage, and also new storage accessible to the SWP-dependent areas. Unfortunately, the challenging future projected by the IRP scenarios and the other studies arrived early.
9. Also in 2022, the Board approved the General Manager’s strategic priorities for the current biennial budget period. One of the five priorities (Adapt) led with the goal of providing each member agency with an equivalent level of water supply reliability through adaptive implementation of the IRP findings.²²

Based on this brief review of the historical policy background, Metropolitan’s clear intent was to provide equitable reliability across its service area through a balanced combination of infrastructure, storage, demand

¹³ MWDCS (1967). Report to Water Problems Committee on District Policy Re: Design and Use of Feeder Lines and Authorization of Service Connections.

¹⁴ MWDCS (1991). [Proposed Mission Statement](#).

¹⁵ MWDCS (1995). [Approval of the Integrated Resources Plan](#).

¹⁶ MWDCS (1988). Distribution System Overview Study.

¹⁷ MWDCS (1996). [Southern California's Integrated Water Resources Plan](#).

¹⁸ MWDCS (2007). [Integrated Area Study](#).

¹⁹ MWDCS (2007). [Results of the Integrated Area Study planning process](#).

²⁰ Groves, D., E. Bloom, R. Lempert, J. Fischbach, J. Nevills and B. Goshi (2014). [Developing Key Indicators for Adaptive Water Planning](#).

²¹ Groves, D. and R. Lempert (2017). Evaluating the Robustness of Metropolitan’s Integrated Resources Plan to Future Climate and Other Uncertainties. Santa Monica, Calif., RAND Corporation.

²² MWDCS (2022). [Approve the General Manager’s Strategic Priorities](#).

management, and water supply programs. In the context of climate change, historical hydrology has proven an inadequate guide to supplies available from the State Water Project and the Colorado River.

Unfortunately, imported supply losses outstripped the ability of Metropolitan's portfolio to compensate. Further, Metropolitan could not provide equitable service as intended in the 2007 Integrated Area Study described in policy item no. 7 above. As such, the proposed resolution condenses the intent of this suite of historical policies, focuses on their urgency, and advances resiliency. New proposed policy statements include:

- *All member agencies must receive equivalent water supply reliability through an interconnected and robust system of supplies, storage, and programs.*
- *Metropolitan will reconfigure and expand its existing portfolio and infrastructure to provide sufficient access to the integrated system of water sources, conveyance and distribution, storage, and programs to achieve equivalent levels of reliability to all member agencies.*
- *Metropolitan will eliminate disparate water supply reliability through a One Water integrated planning and implementation approach to manage finite water resources for long-term resilience and reliability, meeting both community and ecosystem needs.²³*

Call to Action

Metropolitan commits to ensuring equitable access to supply and storage assets by building infrastructure, increasing local supply availability, expanding partnerships, and advancing water use efficiency.

Metropolitan's Board of Directors, therefore, affirms a Call to Action and directs the General Manager, in collaboration with the member agencies, to:

- Drive a decision towards a portfolio of specific projects and programs to address the problem statement noted above. The selected portfolio must include infrastructure improvements to deliver available water supplies to the SWP-dependent areas. The portfolio must also be balanced through new storage and supply programs and local supply development and management.
- Bring the recommended portfolio and associated implementation plans forward for Board approval in February 2023. Board approval should include modifying the CIP to include the new projects.
- Reprioritize CIP projects, spending plans, and Board approvals as needed to expedite work on critical and time-sensitive elements to address the supply and infrastructure inequity.
- Utilize alternative project delivery methods such as design-build, progressive design-build, or the construction manager/general contractor to counteract the negative impacts of severe and ongoing drought and the continuing impacts of climate change.²⁴
- Provide quarterly reports to the Board on the status of the drought emergency projects.

Further, the Board directs the General Manager to take on these actions through a One Water approach, with robust Board oversight through the implementation phase of the IRP. Four elements of action include:

1. Upgrade water infrastructure to ensure equitable access to supply and storage assets.
2. Increase long-term water savings through water use efficiency and the transforming of non-functional turfgrass into a more appropriate Southern California landscape.
3. Advance development of local supplies for recycled water, groundwater recovery, stormwater capture, and desalination.

²³ Paulson, C., W. Broley and L. Shephens (2017). [Blueprint for One Water](#).

²⁴ This call to action is contingent on the passage of California Assembly Bill No. 1845 (Calderon; D-Whittier).

4. Align imported supply planning and actions for the full potential impacts of climate change, using the best available science. These actions include stabilizing those supplies through conveyance improvements, storage infrastructure and programs, water-loss prevention, and voluntary transfers.

Metropolitan recognizes that although the current drought emergency may seemingly ease in the future with one or two wet years, the possibility of recurrent and severe droughts cannot be ignored. The resolution establishes that the Board intends staff to pursue these improvements until the clear-and-present infrastructure problem is resolved.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52481, dated August 17, 2021, the Board adopted a resolution which declared a “Condition 2 – Water Supply Alert.”

By Minute Item 52581, dated November 9, 2021, the Board adopted a resolution which declared specified emergency conditions within the Metropolitan service area.

By Minute Item 52626, dated December 14, 2021, the Board amended the CIP to include water supply reliability improvements in the Rialto Pipeline service area.

By Minute Item 52703 dated February 8, 2022, the Board amended the CIP to include water supply reliability for the western service area.

By Minute Item 52802, dated April 12, 2022, the Board declared a Water Shortage Emergency Condition, adopted an Emergency Water Conservation Program, and expressed support for the Governor’s Executive Order N-7-22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because it involves continuing administrative activities, such as general policy and procedure making, which will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment (Section 15378(b)(5) of the State CEQA Guidelines).

Metropolitan, as the Lead Agency, will be responsible for complying with the requirements of CEQA and the State CEQA Guidelines for any future project related to this resolution prior to approval of such project. As specific projects are proposed, Metropolitan staff will conduct CEQA review as applicable and prepare the appropriate environmental documentation for each project.

CEQA determination for Option #2:

None required

CEQA determination for Option #3:

None required

Board Options

Option #1

Adopt the Resolution shown in **Attachment 1** committing to regional reliability for all member agencies.

Fiscal Impact: Unknown but significant expense to add new infrastructure and water supply programs to ensure equitable reliability across the service area.

Business Analysis: Adopting the resolution would set a course to ensure each member agency can access the regional water supply benefits intended for all.

Option #2

Modify the Resolution in **Attachment 1** to expand or limit the direction to the General Manager to address the inequitable access to water supply and storage assets.

Fiscal Impact: Unknown fiscal impact

Business Analysis: Adjusting the proposed resolution may accelerate or slow Metropolitan’s activities to address current conditions.

Option #3

Do not adopt the Resolution in **Attachment 1**


Fiscal Impact: Unknown fiscal impact of water shortage

Business Analysis: If the resolution were not adopted, Metropolitan staff would continue to seek reliability improvements under existing policy and direction.

Staff Recommendation

Option #1

	8/8/2022
_____ Brad Coffey Manager, Water Resource Management	Date

	8/9/2022
_____ Adel Hagekhalil General Manager	Date

Attachment 1 – Resolution of the Board of Directors of the Metropolitan Water District of Southern California Affirming a Call to Action and a Commitment to Regional Reliability for All Member Agencies

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

**AFFIRMING A CALL TO ACTION AND A
COMMITMENT TO REGIONAL RELIABILITY
FOR ALL MEMBER AGENCIES**

- 1) WHEREAS, Metropolitan seeks to provide water supply reliability to its Member Agencies.**
 - a) Metropolitan’s enabling legislation provides broad powers for “developing, storing, and distributing water for domestic and municipal purposes.”
 - b) The Board in 1931 established, “Neither surface nor subsurface storage shall be created to the advantage of any area within the limits of the District, or elsewhere, unless such storage is a necessary and economical part of the general engineering plans which may be accepted.”
 - c) The Board in 1991 established its current mission to “provide the service area with adequate supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.”
 - d) The Board in 1996 adopted its first in a series of Integrated Water Resource Plans (IRPs) to identify infrastructure and supply programs to achieve 100 percent reliability.
 - e) The Board in 2008 adopted a water supply allocation plan (WSAP) for use when regional shortages exist to manage shortage conditions felt across the entire service area.

- 2) WHEREAS, Metropolitan’s infrastructure today cannot provide equivalent water supply reliability to all Member Agencies.**
 - a) Metropolitan’s distribution system was designed decades ago to operate by gravity and to serve large portions of the service area from a single supply system.
 - b) Past reliability efforts focused largely on increasing supply availability rather than connecting member agency demand to multiple imported sources
 - c) Infrastructure constraints prevent the State Water Project (SWP)-dependent agencies from accessing sufficient amounts of supply from the Colorado River Aqueduct, or from storage in Diamond Valley Lake or Lake Mead
 - d) Metropolitan’s actions to operate existing infrastructure to distribute water across the service area, such as the rehabilitation of the Greg Avenue pumping plant, can only meet a small portion of SWP dependent-area needs.

- 3) WHEREAS, infrastructure constraints created substantial and disparate impacts between Member Agencies.**
 - a) Under the Emergency Water Conservation Program, six out of 26 member agencies, serving about one-third of Southern California’s population, were required to severely constrain outdoor water use or comply with strict volumetric limits beginning on June 1, 2022.
 - b) These affected member agencies must cut their use of Metropolitan’s SWP supply by up to 73 percent, or face volumetric penalties of \$2,000 per acre-foot or a first-ever total ban on outdoor irrigation.

- c) Meanwhile, other member agencies face lesser requirements under statewide regulation to implement demand reductions under Level 2 of their Water Shortage Contingency Plans, locally determined to achieve up to 20 percent water use reduction, and without volumetric penalties.

4) WHEREAS, Severe drought curtailed Metropolitan's State Water Project Supplies.

- a) Beginning in water year 2020 (October 1, 2019, to September 30, 2020), the watersheds supplying the California State Water Project (SWP) received below-average precipitation. The California Department of Water Resources (DWR) classified water years 2020 - 2022 as dry or critically dry.
- b) The three-year sequence of water years 2020 - 2022 (October 1, 2019, through September 30, 2022) is projected to be the driest on record in California for statewide precipitation. Precipitation in Northern California during the three months from January through March 2022 was the driest on record for that region.
- c) On March 18, 2022, DWR reduced the SWP Table A allocation for 2022 from 15 to only five percent of contract amounts. Table A allocations for 2020 and 2021 were 20 and five percent, respectively. The last three years marks the lowest three-year combined deliveries of allocated water in the history of the SWP.

5) WHEREAS, Metropolitan and its Member Agencies have taken specific actions to preserve SWP supplies.

- a) Metropolitan's member agencies have, where feasible, operated their systems to reduce dependency on Metropolitan's supply delivered through service connections fed from the SWP system.
- b) On August 17, 2021, by Minute Item 52481, Metropolitan's Board adopted a resolution declaring a "Condition 2 – Water Supply Alert" to preserve Metropolitan's supply for the region.
- c) On November 9, 2021, by Minute Item 52581, Metropolitan's Board adopted a resolution recognizing the statewide drought emergency, declaring specified emergency conditions to exist within portions of its service area, and calling on member agencies to take various actions to preserve Metropolitan's supply from the SWP.
- d) On April 26, 2022, by Minute Item 52802, Metropolitan's Board adopted a resolution declaring a Water Shortage Emergency Condition and established an Emergency Water Conservation Program for member agencies within the SWP-Dependent Area.

6) WHEREAS, Metropolitan has sought additional water for the Human Health and Safety needs of the residents in the SWP-dependent areas.

- a) Supply and infrastructure capabilities within the SWP Dependent Area became insufficient in 2022 to meet basic human health and safety needs, as defined by State Water Resources Control Board regulations and based on 55 gallons per capita per day.
- b) Although DWR granted Metropolitan's request for additional supply for unmet Human Health and Safety water needs, this water comes under certain conditions: Metropolitan must impose mandatory conservation and must also repay any water borrowed for this purpose within five years.

7) AND WHEREAS, Metropolitan and the affected Member Agencies jointly agree on this problem statement:

- a) Due to limited infrastructure, Metropolitan cannot provide the SWP-dependent member agencies equitable access to water supply and storage assets during severe droughts.

- 1) **NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of The Metropolitan Water District of Southern California hereby affirms the following:
 - a) Southern California's water reliability is in crisis because of record-breaking drought and insufficient pipeline connectivity for imported supplies and existing regional storage to serve all member agencies.
 - b) The disparity in water supply reliability between member agencies is unacceptable.
 - c) Serving any member agency from only one supply source creates a long-term and unacceptable risk.

- 2) **BE IT FURTHER RESOLVED** that the Board intends to provide equitable reliability across the service area through a balanced combination of infrastructure, storage, demand management, and water supply programs. These three policy statements affirm this intent:
 - a) All member agencies must receive equivalent water supply reliability through an interconnected and robust system of supplies, storage, and programs.
 - b) Metropolitan will reconfigure and expand (1) its existing portfolio to provide sufficient access to the integrated system of water sources, conveyance and distribution, storage, and (2) programs to achieve equivalent levels of reliability to all member agencies.
 - c) Metropolitan will eliminate disparate water supply reliability through a One Water integrated planning and implementation approach to manage finite water resources for long-term resilience and reliability, meeting both community and ecosystem needs.

- 3) **BE IT FURTHER RESOLVED** that the urgency of this inequity requires a Call to Action where the General Manager is directed to:
 - a) Identify a portfolio of projects and programs, in coordination with the member agencies, to address the problem statement in this resolution. The selected portfolio must include infrastructure improvements to deliver available water supplies to the SWP-dependent areas. The portfolio must also be balanced through new storage and supply programs and local supply development and management.
 - b) Bring a recommended portfolio and implementation plan for Board approval in February 2023.
 - c) Reprioritize CIP projects and spending plans as needed to expedite work on critical and time-sensitive elements to address the supply and infrastructure inequity. If available, use alternative project delivery methods to deliver the projects.
 - d) Provide quarterly reports on the status of the drought emergency projects.

- 4) **BE IT FURTHER RESOLVED** that the Board directs the General Manager to address these actions through a One Water approach with robust Board oversight through the implementation phase of the IRP. The cornerstone elements of the actions must include the following:
 - a) Upgrade water infrastructure to ensure equitable access to supply and storage assets.
 - b) Increase long-term water savings through water use efficiency and transformation of non-functional turfgrass into a more appropriate Southern California landscape.
 - c) Advance development of local supplies for recycled water, groundwater recovery, stormwater capture, and desalination.

- d) Align imported supply planning and actions for the full potential impacts of climate change, using the best available science. These actions include stabilizing those supplies through conveyance improvements, storage infrastructure and programs, water-loss prevention, and voluntary transfers.
- 5) **BE IT FURTHER RESOLVED** that the Board recognizes that the urgency of these improvements may appear to diminish when this present drought eases. The Board affirms that the General Manager must continue to pursue these infrastructure investments even if temporary relief is provided and the water supply conditions improve.
- 6) **BE IT FURTHER RESOLVED** that the General Manager is hereby directed to continue the actions and activities specified in Board Resolution 9313 (August 17, 2021), 9289 (November 9, 2021), and 9305 (April 26, 2002), except as expanded or limited herein.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held on Aug. 15, 2022.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California