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September 5, 2023

The Honorable Maria Hernandez Presiding Judge of the Superior Court 700 Civic Center Drive West Santa Ana, CA 92701



Subject: MWDOC Responses to the Orange County Grand Jury 2022-2023 Report's Findings and Recommendations

Dear Judge Hernandez,

Please accept this letter as the Municipal Water District of Orange County's (MWDOC) timely response to the 2022-23 Orange County Grand Jury report, "HISTORIC DROUGHT, YET DROUGHT REMAINS." The responses to the Orange County Grand Jury Report's findings (F1-F12) and recommendations (R1-R4) are attached.

MWDOC appreciates the Grand Jury's time and efforts in preparing this report. Orange County water agencies continuously work to address the correct balance between our need for water (demands) and sufficient reliable water supplies to meet those needs. The integrated planning efforts undertaken by water agencies establish a long-term, comprehensive water resources strategy to provide the region with reliable and affordable water supplies. Water and the provision of water services at both the wholesale and retail level, are highly complex issues with multiple factors effects supplies and demands.

MWDOC conducts water reliability plannings efforts, which lays out plausible future scenarios to help inform water reliability planning for both the short-and long-term. The intent of these integrated reliability planning efforts is to provide information that will be used by a broad audience, including elected and appointed officials, water agency staff and the public, to form fact-based policies and make informed decisions on project and program investments. The goal is not to dictate decisions, as every city, water agency, and regulatory agency has the authority and responsibility to make their own decisions.

As a wholesale water supplier and resource planning agency, MWDOC's efforts focus on sound planning and appropriate investments in water supply development, water use efficiency, public information, legislative advocacy, water education, and emergency preparedness. It is MWDOC's mission "to provide reliable, high-quality supplies from the Metropolitan Water District of Southern California (Metropolitan) and other sources to meet present and future needs, at an equitable and economical cost, and to promote water use efficiency for all of Orange County."

We thank the Grand Jury for its work on the report and interest in Orange County water issues.

Sincerely,

Megan Yoo Schneider, M.S., P.E. Board President

RESPONSES TO THE ORANGE COUNTY GRAND JURY 2022-2023 REPORT "HISTORIC DROUGHT, YET DROUGHT REMAINS" FINDINGS AND RECOMMENDATIONS

FINDINGS

F1 - FUTURE WATER SUPPLIES ARE IMPACTED BY CLIMATE CHANGE AND CURRENT SUPPLIES WILL NOT MEET FUTURE DEMANDS.

RESPONSE: Agree partially with this Finding

MWDOC partially agrees with this finding. MWDOC agrees that future water supplies are impacted by climate change, however MWDOC disagrees with the conclusion that supplies will not meet future demands. While the current supplies may not meet future demands, future supply investments are currently being developed and/or under consideration by water agencies in Orange County to ensure those future demands are satisfied.

Being "reliable" refers to having sufficient water to avoid shortages whether from long-term climate change, short-term drought, earthquakes or other emergencies, as well as having the ability to meet current and future water demands. Therefore, as a wholesale water supplier and resource planning agency, MWDOC's efforts focus on sound data-driven planning and support of appropriate investments in water supply development. Since 2014, MWDOC has been conducting comprehensive Orange County Water Reliability Studies (*OC Reliability Study*) to address what is needed to be "reliable."

Following the completion of the initial *OC Reliability Study* in 2016, it was updated in 2018, and most recently again in 2023. The evolving scientific understanding of climate change has been tracked since the beginning of these planning efforts and the latest information relevant to water supply and demand impacts to Southern California's water supply sources has been incorporated into these studies. The purpose of reliability planning is to provide information to decisionmakers early enough to make necessary investment decisions.

The 2023 *OC Reliability Study* looked at two main climate change characteristics which climate experts indicate are likely to have large impacts on future water supplies - temperature and precipitation. The results of the 2023 *OC Reliability Study* indicate that under a hot/dry climate future, which recent evidence seems to suggest might be the current path, identifies a maximum potential need for water supplies in 2050 under plausible future conditions is 40,000 Acre-Feet per Year (AFY) for Orange County after consideration of the new water supply projects and additional conservation efforts. This maximum potential need is less than 10% of Orange County's estimated demand; and the probability of these maximum potential shortages occurring is only 3.5%. Although these additional shortages are not large or frequent, they indicate support for the need to make the kinds of future investments accounted for in the 2023 *OC Reliability Study* analysis. Additionally, the Metropolitan Water District of Southern California (Metropolitan) is in the process of developing it's Climate Adaptation Master Plan for Water which integrates current climate, water resources, hazard mitigation, and financial planning efforts to prepare the region for the extremes of climate change.

F2 - CLIMATOLOGISTS PREDICT FUTURE EXTENDED PERIODS OF LOW MOISTURE WITH OCCASIONAL WET YEARS.

RESPONSE: Agree with this Finding

MWDOC agrees with this finding. The final installment of the Intergovernmental Panel on Climate Change's (IPCC) 6th Assessment Report was released on March 20, 2023. This was an 8-year long undertaking from the world's most authoritative scientific body on climate change summarizes the findings from 234 scientists on the physical science of climate change; 270 scientists on impacts, adaptation, and vulnerability to climate change; and 278 scientists on

climate change mitigation. To date, this is the most comprehensive and best available scientific assessment of climate change.

Some of the more relevant findings from the IPCC 6th Assessment Report for Orange County are included in the 2023 *OC Reliability Study*, but one set of IPCC findings in particular address Orange County Grand Jury Finding 2: Changes in precipitation and intensity will vary in North America. The IPCC findings indicate that there is a high confidence that total precipitation will increase somewhat for the northern half of North America, and medium confidence that it will decrease somewhat in parts of the western and southwestern United States. Further, the IPCC 6th Assessment report indicates a greater fraction of precipitation is expected to occur as "intense events" such as those caused by atmospheric rivers.

F3 - CLIMATE CHANGE IS INEVITABLE AND IS EXACERBATED BY HUMAN BEHAVIOR.

RESPONSE: Agree with this Finding

MWDOC agrees with this finding. Concurrent findings from the IPCC 6th Assessment Report which address Orange County Grand Jury Finding 3: "Human activities have warmed Earth's climate by more than 1°C since the late 19th century, and the effects on our climate are unprecedented" (IPCC 6th Assessment Report - The Physical Science Basis).

NASA's Global Climate Change Evidence website illustrates how the Earth's climate has changed throughout history. It additionally notes that the current warming is happening at a rate not seen in the past 10,000 years (https://climate.nasa.gov).

The evolving scientific understanding of climate change has been tracked since the beginning of the *OC Reliability Studies*. From the studies' commencement in 2014 through the update in 2023, the latest information relevant to water supply and demand impacts to Southern California's water supply sources are incorporated.

F4 - SOUTH ORANGE COUNTY RELIES PRIMARILY ON THE IMPORTATION OF WATER.

RESPONSE: Partially agree with this Finding

MWDOC partially agrees with this finding. Water agencies in South Orange County have varying degrees of dependence on imported water supplies. The Orange County Groundwater Basin provides 85% of the drinking water supply to 2.5 million people in North and Central Orange County. Conversely, eight retail water agencies deliver drinking water to the remaining 600,000 residents and businesses located in South Orange County. Further, this portion of the county is heavily (approximately 80%) dependent on imported water, which MWDOC purchases through Metropolitan for their drinking water supply.

With advancements in technology and significant financial investments, South Orange County agencies have made great strides in diversifying their water portfolios and are continuing to develop numerous local water supply projects. South Orange County local supplies currently meet approximately 20% of their demands through local water supply production.



Moreover, there are several additional local projects recently completed or under development in South Orange County. These include:

Project Type	Project name(s)				
	El Toro Water Recycling Plant; San Clemente Recycled Water				
Recycled Water	Expansion Project; Lake Mission Viejo Advanced Treated Water Facility;				
	Los Flores Recycled Water Expansion Project				
Ocean Desalination	Doheny Ocean Desalination Project				
Storage Project	Trampas Reservoir; Gobernadora Basin; Upper Chiquita Reservoir				
Groundwater Supply	Ranch Water Filtration Plant; San Juan Creek Watershed Project; South				
Production	Coast Water District Groundwater Recovery Facility				
Stormwater Capture	Aliso Creek Water Reclamation Facility				

Furthermore, Orange County water agencies have some of the most robust water conservation programs in Southern California.

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: Partially Agree with this Finding

MWDOC partially agrees with this finding. Local supplies are not solely enough, it has been recognized that there is a need have a robust water portfolio that include imported supplies, new local supply development, and water use efficiency measures. To regionally ensure the continued reliability of water supplies, Metropolitan is developing a Climate Adaptation Master Plan for Water, a roadmap that will guide future capital investments and a business model to confront the new climate reality in the years and decades ahead. The 2023 *OC Reliability Study* recommends a policy position of an "all-of-the above" strategy that continues to advocate for water use efficiency and water supply projects at the local and regional level to meet future demands. That said, each local water agency determines the types of projects and actions based on what is best for their local needs.

The continued performance and availability of both local, as with imported supplies, are impacted by many factors which can impede supply development and production. Such factors can include funding, contamination, changing regulatory requirements, and climate change. At the same time, the region has made substantial gains in supply and infrastructure reliability projects as well as storage development.

Enhanced stormwater capture and storage, wastewater recycling, brackish and ocean desalination, and infrastructure improvements are important components of a strategy to address future water supply-demand imbalances. MWDOC does agree that new sources of supply are needed, and those new supplies should consist of a diversified portfolio of water supply projects.

Future demands will not only be met by the development of local supplies, continued water use efficiency actions, but also by optimization and enhancements to imported supplies managed by Metropolitan. Metropolitan has positioned its supply portfolio with various supplemental imported supplies that can be called upon under dry conditions. These include mutually beneficial contractual partnerships with the agricultural community, which uses 70% of the state's developed water supply, to secure water during dry conditions through temporary fallowing programs, exchanges, and market-based water transfers. These voluntary arrangements have provided Metropolitan the ability to enhance its current portfolio of State Water Project water and Colorado River water during critical periods.

The region has and will continue to invest in groundwater storage to provide wet year storage and dry year recovery. Current and future climate conditions will result in multiple dry years contrasted with less frequent extraordinarily

wet years, such as the 2022-2023 water year, where substantial supplies are available. Managing through these climate extremes through more storage will help balance wet and dry periods.

F6 - THERE IS SIGNIFICANT WATER INFRASTRUCTURE PLANNING, BUT INADEQUATE IMPLEMENTATION.

RESPONSE: Disagree with this Finding

The 2023 Orange County Grand Jury report lacks specific evidence or examples of the inadequate implementation of water infrastructure projects. The Orange County water community has planned and successfully implemented numerous water supply and infrastructure reliability projects ranging from water recycling, potable system emergency interconnections, groundwater and surface water treatment, water transmission infrastructure, surface water storage, and others. Orange County is well recognized for its forward-thinking approach to water resource management and execution of both innovative and timely water infrastructure projects. This includes state-wide leadership in water recycling and conjunctive use of groundwater storage with local and imported sources of surface water, and potable reuse of wastewater.

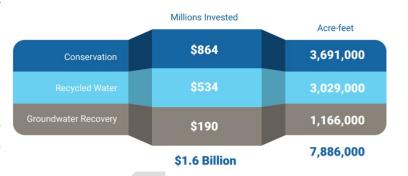
Orange County's water infrastructure network is vast and well-developed, and has advanced the development and utilization of multiple new sources of water. A sampling of water supply projects implemented by Orange County water agencies includes:

Project Name	Multi- Agency	Reuse	Stormwater	Storage	Distribution
OCWD Groundwater Replenishment System (GWRS)	X			X	
Anaheim Lakes and Santiago Pits Recharge facilities			X	X	
Irvine Lake			X	Χ	
Baker Water Treatment Plant	X				
Baker Aqueduct	X				X
Michelson Water Recycling Plant		X			
Los Alisos Water Recycling Plant		X			
JB Latham Water Reclamation Plant		X			
Regional Water Reclamation Plant		X			
Coastal Water Reclamation Plant		Х			
Oso Reservoir		X		Χ	
San Joaquin Reservoir		X		Χ	
IRWD Natural Treatment System			Х		
Santa Ana River Conservation and Conjunctive Use Program (SARCCUP)	X			Χ	
Allen-McCulloch Pipeline	Х				Х
South County Pipeline	Х				Х
East Orange County Feeder No. 2	Х				Х
South County Joint Transmission Facilities					Х

All future water supply projects undergo financial scrutiny and comparison to available options to determine which projects best balance factors including environmental, financial (both affordability of project costs and the capacity to maintain and enhance local economic sustainability), quality of life, and the human right to water. Pursuing collaborative cost-sharing partnerships and the promotion of affordability initiatives are also evaluated as we make the necessary investments to adapt Southern California's water infrastructure to the challenges of the 21st century.

Regionally, Metropolitan has implemented and invested \$1.6 billion for conservation, recycled water, and groundwater recovery projects, resulting in 7.9 million acre-feet of supply. Specifically, Metropolitan's Local

Resources Program provides incentives for member and local agencies to develop new local projects, such as water recycling and groundwater recovery. Metropolitan has provided financial assistance to more than 100 projects across Southern California. By providing direct funding based on how much water projects produce, the program has significantly increased their economic viability.



F7 - THE REVIEW AND APPROVAL PROCESS FOR MAJOR WATER CAPITAL PROJECTS IS CUMBERSOME AND OVERLY RESTRICTIVE.

RESPONSE: Agree with this Finding

MWDOC agrees with this finding. On a state-wide level, projects like the Delta Conveyance Project and Sites Reservoir have struggled with implementation.

On May 19, 2023, Governor Newsom announced the state's most ambitious permitting and project review reforms in a half-century to build California's clean energy future. The measures will facilitate and streamline project approval and completion to maximize California's share of federal infrastructure dollars and expedite the implementation of projects that meet the state's ambitious economic, climate, and social goals.

Through unprecedented investments over the past two state budgets, as well as funding from the federal Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA), California will invest up to \$180 billion over the next decade in clean infrastructure, which will create 400,000 jobs while helping meet the state's climate goals.

By streamlining permitting, cutting red tape, and allowing state agencies to use new types of contracts, these proposals will maximize taxpayer dollars and accelerate timelines of projects throughout the state, while ensuring appropriate environmental review and community engagement.

Governor Newsom also signed an <u>executive order</u> to set up a strike team to accelerate clean infrastructure projects across the state by implementing an all-of-government strategy for planning and development.

The legislative package and executive order will:

- Speed Up Construction: Current construction procurement processes drive delays and increase project costs. The Governor's proposals include methods to offer a streamlined process for project delivery to reduce project timeframes and costs.
- Expedite Court Review: Legal challenges often tie up projects even after they've successfully gone through environmental review. These proposals would authorize expedited judicial review to avoid long delays on the back end and advance projects without reducing the environmental and government transparency benefits of CEQA.
- Streamline Permitting: Makes various changes to California law to accelerate permitting for certain projects, reducing delays and project costs.

- Address cumbersome CEQA processes across the board: Streamlines procedures around document retention and review.
- Maximize Federal Dollars: Establish a Green Bank Financing Program within the Climate Catalyst Fund so
 that the state can leverage federal dollars for climate projects that cut pollution, with an emphasis on
 projects that benefit low-income and disadvantaged communities.

While this is a step in the right direction, more work needs to be done for millions of Californians to benefit from a broad, statewide Water Resilience Portfolio approach to safeguard a vital source of affordable water. Governor Newsom has prioritized Delta conveyance as part of the state's Water Resilience Portfolio, a plan to ensure California has a reliable water supply for future generations in the face of climate change and other challenges.

F8 - FAILING TO FIND SOLUTIONS TO WATER SHORTAGES WILL HAVE A SIGNIFICANT IMPACT ON THE ORANGE COUNTY ECONOMY.

RESPONSE: Agree partially with this Finding

MWDOC partially agrees with this finding. As a wholesale water supplier and resource planning agency, MWDOC's efforts focus on sound planning and appropriate investments in water supply development. The economic impacts of water shortage is a driving factor to continue planning, finding solutions, and minimizing impacts. It is MWDOC's primary mission to provide reliable, high-quality supplies to meet present and future needs, at an equitable and economical cost.

In 2021, MWDOC initiated an economic study to determine the value of water by estimating the economic impacts of water shortages. MWDOC's Economic Impacts of Water Shortages in Orange County report determined that sudden water shortages could result in financial impacts to the Orange County economy, only if there was a future where water agencies fail to ensure water reliability. For this reason, to safeguard against this possibility, agencies continue to make investments in a diversified water supply portfolio (e.g., reuse, water transfers and banking, groundwater/surface water conjunctive use, desalination and water use efficiency).

F9 - CONTINUED DEVELOPMENT IN ORANGE COUNTY CREATES ADDITIONAL WATER SUPPLY NEEDS.

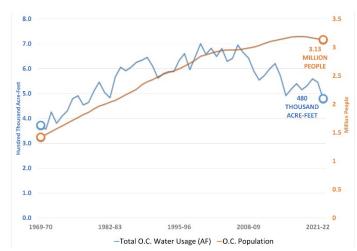
RESPONSE: Agree partially with this Finding

MWDOC agrees partially with this finding. Population growth and water demands (in large part due to tremendous strides in efficiency) are far less than once predicted. Further, the 2023 Orange County Grand Jury report also fails to distinguish between development and re-development, which in some cases uses less water

than the development it is replacing due to changed land use types and contemporary efficiency measures.

MWDOC is required by state law to incorporate future development and its associated demands into its mandated Urban Water Management Plan (UWMP). The information and analysis contained within this plan is coordinated with demographers at the Center for Demographic Research at Cal State Fullerton and the region's development planner the Southern California Association of Governments (SCAG).

As noted in the 2020 UWMP, North Orange County is predominately built-out and development is in the



form of re-development infill. As where, South Orange County has a greater potential for development, with vacant areas gradually transitioning to residential and commercial mixed-use areas. MWDOC and its member agencies work with the local permitting agencies to ensure that local planning information is incorporated into long-range water resources planning, assessing that there are adequate water supplies to meet future demands.

As the local permitting agencies, Orange County cities plan for the additional development within their local jurisdictions. Additionally, because of stringent water use standards being in place for new development state-wide, MWDOC expects future development to have less of an impact on total water demands then has historically been the case.

F10 - CONSERVATION AND EFFICIENT USE OF WATER IS ESSENTIAL.

RESPONSE: Agree with this Finding

MWDOC agrees with this finding. Conservation and efficient use of water has been underpinned as critical and one of many tools for a comprehensive long-term water supply reliability strategy. Metropolitan and MWDOC administer regional conservation programs and co-funds retail agency conservation programs designed to increase water use efficiency and bolster water conservation ethics.

Conservation comes from two areas of change: structural conservation which involves increases in water use efficiency, and behavioral conservation, which involves modifying consumer water-using behavior through messaging, education, pricing, and mandates. Of these two forms of conservation, structural conservation is more

permanent, very similar to the development of a core supply. Water-efficient device retrofits, landscape conversions, plumbing codes, and leak prevention contribute to ongoing structural water savings. Conservation device retrofits help recover storage in future years by lowering demands in all years, not only drought years.

In contrast, behavioral conservation is less permanent and can wax and wane due to various influences outside of a water agency's direct control. The integrated reliability planning recognizes water use behavior, represented by per capita water use, as a major uncertainty for regional demands over time.

MWDOC's administers a robust water use efficiency program. In partnership with Metropolitan, an average of \$6.3 million in rebates and incentives have been provided to Orange County end-users for completing water efficiency projects. Additionally, MWDOC actively pursues state and federal funding. Over the last five years alone, MWDOC has been awarded more than \$8.7 million in grant funding to further support and facilitate water conservation projects in Orange County.



F11 - INCREASED OUTREACH AND PUBLIC EDUCATION ARE NECESSARY.

RESPONSE: Agree with this Finding

MWDOC presently develops, coordinates, and delivers a substantial number of programs and services aimed at elevating stakeholders' awareness about water policy, efficient water use, and the MWDOC's role in advocating for sound policy and water reliability investments that are in the best interest of Orange County. As water is a necessary

resource to all life, these efforts encourage and benefit all Orange County residents and businesses, across all demographics.

Over the past decade, there has been a significant shift in the way people receive information. The media market is overcrowded and constantly evolving. The public is bombarded minute by minute with news from their phones, televisions, computers, and tablets. Traditional media has been on the decline and at the same time, digital media continues to explode. Water providers must prove themselves to be relatable, trustworthy, and essential. This is accomplished by communicating more frequently and more effectively using a wider array of tools and channels to meet the needs and interests of an extremely diverse demographic. It is important to recognize that no single communications tool or channel can fulfill all the MWDOC's identified goals and objectives. Instead, a holistic approach should be taken, utilizing all the tools in the toolbox to create a compounding and inclusive impact.

Strategic communication is an ongoing activity where the purpose, audience, message, tools, and channels may change at any given moment, however, for the most part, the overarching goals remain the same. As a result of this, MWDOC's Strategic Communications Program and Plan must remain a living document to implement effective, relevant communication with timeliness and accuracy. This document serves as a blueprint, establishing a baseline understanding for how MWDOC's programs will provide information and value to its various stakeholders, partners, and employees; enhance the MWDOC's image; and support MWDOC's mission, goals, and objectives to secure long term water reliability for the region. We recognize that more can be done to highlight the projects, policies, and programs that water agencies have developed to help ensure the County's continued resilience and reliability. Acknowledging this opportunity, MWDOC is currently in the process of developing Board's Strategic Priorities, where increased outreach and public education related to water supply reliability is both a focal point and long-term commitment.

F12 - DESALINATION HAS PROVEN TO BE TECHNOLOGICALLY AND ENVIRONMENTALLY FEASIBLE AND IS SLOWLY BEING EMBRACED AS A DROUGHT-RESISTANT SOURCE OF WATER.

RESPONSE: Agree with this Finding

MWDOC agrees with this finding. Both seawater and brackish water desalination are potential new sources that can be made available to mitigate uncertainties in future supplies. Desalination enables local production of high-quality, pure drinking water, as part of a portfolio of diversified supplies to address demands.

The adoption of desalination as a drought-resistant source of water has evolved. Recent technological advances have also made it more sustainable, energy-efficient, and less impactful on the environment to turn seawater into drinking water. In addition, the rising cost of treating and conveying water from other sources has made seawater desalination more economically feasible compared to other new supply alternatives.

Brackish groundwater desalination transforms previously unusable brackish groundwater supplies into high-quality drinking water by removing not only salts, but also other contaminants such as nitrates and Perfluoroalkyl substances (PFAS). Improved technology to remove salt from brackish groundwater has made desalination an increasingly important tool for both augmenting water supplies and improving water quality.

The embrace of desalination in Southern California comes with its challenges and considerations. Misconceptions remain about the environmental impact of desalination and the potential for harm to marine life. Concerns have also been expressed regarding the energy consumption of desalination projects. Although these impacts can be and are being addressed in the planning and design of contemporary desalination projects, educating the public about the benefits of desalination, and addressing these concerns as well as cost and rate impacts is crucial for successful adoption.

RECOMMENDATIONS

R1 - THE COUNTY OF ORANGE BOARD OF SUPERVISORS SHOULD TAKE A LEADERSHIP ROLE BY THE END OF CALENDAR YEAR 2023 TO EXPLORE THE ESTABLISHMENT OF A "CLIMATE RESILIENCY DISTRICT" OR JOINT POWERS AUTHORITY TO FUND AND EXPEDITE IMPLEMENTATION OF A DROUGHT-RESISTANT SOURCE OF WATER.

RESPONSE: Not required to answer

The report recommends the County Board of Supervisors explore the establishment of either a Climate Resilience District or a Joint Powers Authority (JPA). However, the report does not provide sufficient justification, enumerate compelling benefits, or indicate what powers, authorities, and capabilities a Climate Resilience District would provide for the implementation of water supply implementation projects that cannot be accomplished through a Joint Powers Authority (JPA), or is not already being provided by MWDOC, OCWD or other retail water agencies in the County. In addition, the exploration of forming a JPA for water supply projects, as optionally recommended in the report, should be undertaken by MWDOC and other water agencies in Orange County. The County would not be part of a water resources infrastructure or water supply JPA because it neither has the current jurisdiction nor expertise.

In addition, the establishment of a Climate Resilience District - given the fact that this type of organization has only recently been authorized by the State in September 2022 (SB 852) - is a new type of governance structure without a track record or experience. Such a district would likely not only be focused on solving water reliability issues which are challenging on their own; but would likely also need to focus on "projects that address sea level rise, extreme heat, extreme cold, the risk of wildfire, drought, and the risk of flooding". In short, in addition to extensive water agency issues to ensure a reliable and resilient water supply future for Orange County, this type of organization would likely have the added charges of addressing Orange County Fire Authority issues, Orange County Flood Control District issues. The scope of such a governance structure – and if it should appropriately include water supply, needs to be fully considered in order to create an environment for success.

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

RESPONSE: Partial Implementation

With the focus of this recommendation exclusively on ocean desalination, it disregards the full water resources available to the County and other potentially less costly and/or easily implementable local and regional projects or programs to mitigate variations in imported water supplies such as water transfers, groundwater banking, and additional recycling through potable reuse.

MWDOC continues to work with local and regional water agencies on implementation planning for desalination, including the Doheny Ocean Desalination Project. Efforts to assess the options for both seawater and brackish water desalination as potential new sources that can be made available to mitigate uncertainties in future supplies. Water desalination has the potential to provide supply reliability to southern California and Orange County through an interconnected and robust system of supplies, storage, and programs.

In the upcoming quarter, the Metropolitan Board will be considering a regional assessment of water desalination opportunities and technology. The scope of this effort will include: (1) preparing an inventory of potential seawater desalination plant sites in Metropolitan's service area; (2) assessment of permitting and regulatory frameworks that would potentially impact the potential siting of a seawater desalination plant, (3) developing an evaluation methodology for the suitability of this water supply, including consistency with Metropolitan's commitment to

carbon neutrality by 2045; (4) identifying applicable water quality and regulatory requirements; (5) developing conceptual cost estimates and schedules for water produced from desalination facilities; (6) developing project implementation options that would best suit these types of facilities; (7) determining the approximate proportion and area of Metropolitan's service area that would potentially receive water from the plant; and (8) assessing the near-term potential for advances in seawater desalination technologies. Similar work is also being undertaken for potential brackish water resources. On behalf of its Orange County service area, MWDOC will coordinate with Metropolitan on the preparation of this assessment.

While ocean desalination projects such as Doheny Desalination are an important part of the future water supply portfolio for the County and southern California, an "all of the above" strategy of local and imported supplies complemented with water use efficiency is the best strategy for fulfilling future water supply needs. This includes in-County projects such as maximizing non-potable recycling and potable reuse, groundwater banking, and impaired groundwater water treatment, combined with the imported water reliability strategies being undertaken by Metropolitan.

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.

RESPONSE: Not required to answer

A mechanism is already in place, all major development projects are required to have a Water Supply Assessments under state law completed by the local water supplier to ensure the availability and adequacy of supplies. As such, a "development moratorium plan" is premature, reactionary, and does not consider existing statutory mechanisms to limit development should water supplies be unavailable.

In identifying the potential need for a development moratorium, the 2023 Orange County Grand Jury report fails to acknowledge that Orange County recently withstood a state-wide drought emergency without physical curtailment in deliveries nor mandatory water rationing. This is in large part due to water agency's investments in local supply projects. Orange County has one of the most diverse water supply portfolios in southern California and there are numerous new water supply projects (south Orange County potable reuse, Doheny desalination, etc.) and storage programs (such as SARCCUP) in the planning or implementation stages.

The 2023 Orange County Grand Jury report also fails to distinguish between development and re-development, which in some cases use less water than the development it is replacing due to changed land use types and contemporary efficiency measures. Additionally, every water supplier in Orange County has developed a robust response to water shortages through their Water Shortage Contingency Plan (WSCP). Water agencies have predetermined their shortage response actions, which allows for a progressive and appropriate response to shortage conditions of 50% or greater of their supply being interrupted.

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.

RESPONSE: Support Implementation

The vast majority of Orange County water agencies and MWDOC in particular, have extensive integrated water education campaigns regarding the value of water, water use efficiency, and the sources and uses of water in the County. Preparing a public information campaign that has negative connotations regarding detrimental "lifestyle

changes" that would be needed if new sources of water are not secured is speculative and completely disregards the projects that are being planned and implemented both within the County and at the Metropolitan level to ensure sufficient supplies.

MWDOC's WSCP is a strategic planning document designed to prepare for and respond to water shortages and complies with California Water Code (CWC) Section 10632, which requires that every urban water supplier shall prepare and adopt a WSCP as part of its Urban Water Management Plan. This level of detailed planning and preparation is intended to help maintain reliable supplies and reduce the impacts of supply interruptions.

Timely and effective communication is a critical element of each urban water supplier's adopted WSCP implementation. Per CWC 10632 (a)(5), MWDOC has established communication protocols and procedures to inform the public, stakeholders, and local, regional, and state governments regarding any current or predicted water supply shortages as determined by the annual water supply and demand assessment. The type and degree of communication varies with each WSCP shortage level; thus, predefined, and actionable communication protocols improve MWDOC's ability to message necessary events.

Strategic communication is an ongoing activity where the purpose, audience, message, tools, and channels may change at any given moment. In the context of water shortage response, the purpose may be an emergency water shortage like what may result from the impacts of an earthquake or a longer-term, non-emergency shortage condition like drought. In an emergency, MWDOC will activate the communication protocol detailed in the WEROC Emergency Operations Plan. In a non-emergency water shortage situation, MWDOC will implement the procedures identified in the Strategic Communications Program and Plan.

The MWDOC Strategic Communications Program and Plan aligns the MWDOC's identified goals and objectives with the respective audiences, and outlines the appropriate communications tools and channels used to connect them all together. The most current MWDOC Strategic Communications Program and Plan was revised in 2020. This living document will continue to be updated and amended as the MWDOC's goals and objectives evolve, shift, or change. We recognize that more can be done to highlight the projects, policies, and programs that water agencies have developed to help ensure the County's continued resilience and reliability. Acknowledging this opportunity, MWDOC is currently in the process of developing Board's Strategic Priorities, where increased outreach and public education related to water supply reliability is both a focal point and long-term commitment. Following the completion of the MWDOC Board Strategic Priorities (in progress) an update to the Strategic Communications Program and Plan is expected to be completed by in Fiscal Year 2023-2024.

The effectiveness of the MWDOC Strategic Communications Program and Plan depends on a large variety of factors, including technological advancements or changes, the rise and fall of audience engagement, current news or media concentration, political changes in leadership and focus, and even the weather. MWDOC currently utilizes a robust set of Key Performance Indicators, metrics, and measurements to track the effectiveness of MWDOC's programs, activities, and communication efforts. Through this process, the MWDOC's programs and activities are continuously shaped and refined to remain relevant and valuable to the public, stakeholders, partners, employees, and member agencies.