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Submitted via email to: [input@waterresilience.ca.gov](mailto:input@waterresilience.ca.gov)

(Nancy Vogel, Director, Water Portfolio Program)

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**Subject:** The Municipal Water District of Orange County Letter of Input for Consideration in the Development of the California Water Resilience Portfolio

Dear Secretaries Blumenfeld, Crowfoot, and Ross:

On behalf of the Municipal Water District of Orange County<sup>1</sup> (MWD OC), we thank you for the opportunity to provide input in the development of the Water Resilience Portfolio as directed by Governor Newsom’s Executive Order N-10-19.

As the third largest member agency of the Metropolitan Water District of Southern California (Metropolitan), MWD OC relies on the State Water Project as well as the Colorado River supplies to meet the needs of our service area. The MWD OC service area is composed of retail agencies with a diversity in water supply and demand. For example, half are heavily dependent on imported water, with some nearly 100% dependent. Thus our comments reflect our ongoing concerns with the reliability of these supplies over time, and the important role of the state in the complementary actions to ensure safe and resilient water supplies, flood protection, and healthy waterways for California’s communities, economy, and environment.

As Californians we are all facing a number of water challenges. Among them are infrastructure improvements, extreme variation in precipitation and temperature,

extended droughts, water quality impacts, and depleted groundwater levels - and all of these are intensified with climate change. The health of our community is dependent on addressing these challenges while meeting the needs of future water demands, and the obligation to ready ourselves for a forthcoming natural disaster. Therefore, we agree that preparing a Water Resilience Portfolio with identification of key priorities for the state is a necessity for our future.

It can be said that resiliency can look different depending on where you stand; whether you are a farmer in Central Valley or business owner in Southern California. However, the meaning of resilience is the same - the ability of preparing for recovery from changes in and/or losses of supply. Based on our experiences and lessons learned in Orange County, we find resilience can be achieved by long-term **adaptable planning** coupled with **operational flexibility** to manage risk and uncertainty through **redundancy** that is balanced with **affordability**. There are a number of actions that we have taken locally and regionally through the years that can be applicable to the development of the state's resilience strategy.

### Adaptable Planning

Among the first is long-term adaptable planning. Since the early 1990s, Southern California has been preparing for supply and demand variations through different forms of reliability planning. The more comprehensive of these is the quinquennial development of Metropolitan' Integrated Water Resources Plan (IRP). The Metropolitan IRP provides a roadmap for the region to manage meeting demands by integration of all supplies in Southern California under both dry and wet conditions over the next 25 years. Moreover, it gives the region the tools to respond to a variety of risks and uncertainties to meet future water demands.

To complement Metropolitan's regional IRP, and provide a more localized version, in turn MWDOC has developed and continues to update its county wide water reliability plan<sup>2</sup>. Whereby we assess all of the water supplies and demands in Orange County to examine the range of future reliability gaps under different scenarios; such as climate change impacts, local and regional supplies, and Delta conveyance. We meet these gaps through local resource project development, water use efficiency programs, and water loss optimization.

The State should endorse similar comprehensive regional and local planning to better examine water supply and demand gaps throughout the state. Not only to meet demands under normal and dry-year conditions, but to be prepared for times of limited or interrupted supplies.

### Operational Flexibility

In addition to planning for the future, we in Southern California have made a number of investments to provide for operational flexibility in the form of infrastructure improvements, system enhancements, and increased storage capacity. These investments in maintaining a flexible delivery system have allowed for dramatic shifts in State Water Project and Colorado River supplies throughout the service area. Of particular note, is the construction of Diamond Valley Lake, in Helmet, CA, which provides the ability to store excess supplies. This surface storage reservoir provides more than six months of supply reliability for Southern California to mitigate droughts and manage through a natural disaster; in addition to benefits such as flood control, recreational opportunities, power generation, and even

replenishment of groundwater basins. Further, the expansion of Metropolitan's dry-year storage capacity (totaling 6 million acre-feet) is now five times their 1990 capacity.

In Orange County, we have made a number of local investments in the construction of treatment plants and surface reservoirs to enhance our operational flexibility to manage through imported water outages and emergency situations. MWDOC supports, encourages and partners in the development of recycled water, groundwater, and stormwater projects within our service area. For examples, Orange County is the home of the Groundwater Replenishment System, the world's largest water purification system for indirect potable reuse, highly treating wastewater that would have previously been discharged into the Pacific Ocean. As imported water supplies have become more challenged, along with our local agencies, we have continued working to identify opportunities for the use of recycled water for irrigation purposes, groundwater recharge, and even non-irrigation applications.

There also needs to be investments in storage above and below the Sacramento-San Joaquin Delta to ensure a resilient State Water Project. However, this is only achieved through the integration of and cooperation between State and Federal stakeholders. The water management of the Delta is dependent on these key regulatory entities working in concert for the long-term success of the system. Of the water supplies for the 19 million people within Southern California, more than 30 percent comes through the Delta. And for the state as a whole, the Delta plays a major role in California's prosperity by supplying drinking water to almost 27 million people and fueling a \$32 billion agricultural industry. It also serves as important habitat to more than 750 animal and plant species, including more than 40 aquatic species. Therefore, it is vital that the State invest in a Delta conveyance system, such as the proposed Delta Conveyance Project to ensure a greater and more reliable way of moving water.

The extreme variations we expect to see as a result of climate change requires having a modernized conveyance system that can balance ecosystem and water exports. How will we plan for the sea level rise and changes to habitat in 2050? It is essential for the state to modernized key state infrastructure, such as the State Water Project and Delta Conveyance, to provide the operational flexibility that is needed to capture and deliver water under various climate pressures.

### Redundancy

The state's resiliency strategy must also include the development of redundancy under the balance of affordability. We cannot just plan or invest for that we need or expect, we know there unplanned or emergency situations that we must prepare for. For example, in Orange County there are a number of agencies that will be shifting from pumping groundwater to utilizing imported water as a result of water quality regulations (i.e. per- and polyfluoroalkyl substances, PFAS). Fortunately, if PFAS is detected above the Department of Drinking Water Response Level, because of redundancy in supplies the retail agency has ability to purchase imported water until they construct the necessary treatment system to return to groundwater production. This is strengthened by regional planning efforts that result in having the supply and the system capacity to anticipate such unexpected situations.

To further prepare for the uncertain future, Metropolitan and its member agencies are in the exploration stages of constructing the largest recycled water system in the United State, to replace 165 million gallons per day of potable water for groundwater replenishment and direct industrial usage. Such a

supplemental supply, if cost-beneficial, will further provide the redundancy in supplies to manage through unplanned circumstances.

The acceleration of surface storage, recycled water projects, and new regulations of raw water augmentation are critical to redundant supplies. The state can bolster the development of additional emergency supplies through grant funds and regulations. Similar to the State of Kentucky, California can tie the funding to regional plans to ensure coordination.

## Conclusions

We agree that it will take a suite of complementary actions to build water resilience, ensure healthy waterways, and meet our needs through 2050 and beyond. It is important that we focus the planning efforts on the challenges of the future, which will be different than those of the past and of today. Resiliency planning needs to be adaptable to manage future changes with operations that will be flexible enough to handle sudden uncertainty. These projects need a realistic timeframe to be completed. By not having a schedule in place, there will be real environmental and economic downsides.

We look forward to the defined specifics of Water Resilience Portfolio in the coming months; with elements that include making the most of every drop through recycling and conservation, and utilizing surface water and groundwater to their full potential, modernizing water infrastructure – including in the Delta – to withstand climate pressures, and advancing multi-benefit projects. We hope that we can be a resource and a partner in the development of the Water Resilience Portfolio strategy.

Sincerely,



Robert J. Hunter  
General Manager

*<sup>1</sup>Municipal Water District of Orange County is a member of the Metropolitan Water District of Southern California, providing imported water to over 3.2 million Orange County residents through 28 retail water agencies. MWDOC is a wholesale water supplier and resource planning agency whose efforts focus on sound planning and appropriate investments in water supply development, water use efficiency, public information, legislative advocacy, water education and emergency preparedness.*

*<sup>2</sup>More information on the OC Reliability Studies can be found at <https://tinyurl.com/oc-reliability-study>*