



April 11, 2016

The Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153
Attn: Edgar Fandialan

Re: Request for MWD Staff to Revise the March 2016 Draft Regional Urban Water Management Plan taking into account all prolonged drought scenarios, local water supply projects, and replacement plans should the California Water Fix fail to materialize.

Dear MWD staff and Board of Directors:

Environment Now, Los Angeles Waterkeeper, Heal the Bay, San Diego Coastkeeper, and Surfrider object to the approval of the March 2016 Draft Regional Urban Water Management Plan (RUWMP). The Urban Water Management Plan Act (UWMPA, Water Code §§ 10610 et seq.) requires urban water suppliers to describe and evaluate sources of water, efficient uses of water, demand management measures, implementation strategy and schedule, and other relevant information and programs. The purpose of this information is to plan for growth accordingly, in coordination with municipalities as they consider new development projects. The role of Metropolitan Water District (MWD) is of unique importance because all 26 member agencies, both wholesalers and retailers, depend on the information provided by MWD to plan for the next 20 to 40 years of growth throughout the region. MWD's estimates of water supply, demand, and efficiencies figures in the RUWMP will be relied upon in retailers' water supply plans and municipal development decisions resulting in the possibility of water shortages—and all of its associated ills—if the figures are skewed or inaccurate.

We submit these comments to assist MWD in identifying and rectifying skewed estimates found in the RUWMP. In summary, we urge MWD to:

- use a more relevant and accurate recent history of the state's precipitation and runoff that considers climate change when modeling future water supplies;
- define and account for "planned" projects in a consistent manner when considering MWD's and member agencies' projects;
- revise conservation projections taking into consideration the increase in water efficiency campaigns at all levels of government;
- coordinate with member agencies to incorporate updates in respective UWMPs.



A. The RUWMP Fails to Provide a Reliable Analysis of Water Availability and Vulnerability

Given the cyclical nature of droughts in California, authors of the the UWMPA required agencies to account for vulnerabilities associated with seasonal and climatic shortages. (Water Code § 10631 (c) (1)). To that end, agencies were required to project water supply reliability in average, single-dry, and multiple-dry years. (Water Code § 10631 (g).) In response the RUWMP uses hydrology scenarios based on the average water supply between 1922-2012, the single driest year 1977, and the *previous record* (now outdated) for the driest three-consecutive years 1990-92. (emphasis added). But those hydrology scenarios have changed with the onset of climate change as new records were set in recent years. 2013 was the driest year; 2014 was the warmest year; and 2015 experienced record-low snowpack. Since snowpack is where California has stored up to a third of its water historically, major shifts in hydrology records are exactly what the UWMPA authors intended for agencies to capture when accounting for seasonal and climatic shortages. In fact, climate scientists have recently recommended that water agencies build in longer than three-year drought periods when modeling future water supply reliability. (Pacific Institute, *Where We Agree*, <http://pacinst.org/publication/where-we-agree-building-consensus-on-solutions-to-californias-urban-water-challenges/> p.11) Instead, they recommend planning for prolonged droughts, lasting 10 years or longer, as is the case in the Colorado River Basin.

Despite acknowledging that California has been experiencing an historic drought, the RUWMP fails to use relevant climate data to plan for water supply reliability. Instead the RUWMP maintains an outdated multiple-dry year scenario contrary to UWMPA 10632(a)(2) when projecting local supply capabilities (p. 1-22), Colorado River Aqueduct capabilities (p.3-9), California Aqueduct capabilities (p.3-18), Bay-Delta Storage & Transfer Projects (p.3-26), and surface storage supplies (p. A3-42). If MWD were to update the three driest-years scenario from 1990-92 to 2013-15, models of future water supply reliability could change by a factor of nearly 20 percent in dry years. Under the updated hydrology scenario, the MWD region could experience shortages as soon as next year if the drought continues and demands remain constant. To best prepare for this possibility, MWD ought to use the most accurate, updated information available.

Admittedly, MWD received some supply projections from the Department of Water Resources (DWR) which should be accounting for seasonable and climatic shortages as well. Similarly, however, DWR failed to update its water delivery models to incorporate recent droughts into its 2015 State Water Project Delivery Capability Report. The 2015 State Water Project Delivery Capability Report bases projections for future deliveries on historical precipitation and runoff patterns from 1922-2003, prior to both the 2007-09 and the 2013-15 droughts. (DWR, 2015 State Water Project Capability Report, <http://baydeltaoffice.water.ca.gov/swpreliability/>, p. 25). The result is that DWR guaranteed that water contractors would receive considerably more water than what could be legally exported through the State Water Project (SWP). (See *Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 914.) Upon



releasing drafts of its 2015 Capability Report, DWR received comments from stakeholders addressing this omission and recommending an updated report. DWR did not respond to these comments.

Could MWD have known that the 2013-15 dry-year sequence would surpass the 1990-92 sequence in severity in time to incorporate this model into the RRUWMP? Ample evidence showing that climate models unanimously project increased drought in California have been available to water planners for over five years. (Sheffield & Wood, *Climate Dynamics*, 31.1 (2008): 79-105; US Global Change Research Program, Cambridge Uni. Press (2009)). MWD was well aware that the 2013-14 sequence was on a path toward setting a record for the driest multiple years in history. And Board meeting reports show that MWD knew how much water supply it would for the entire year by the Spring of 2015, well before the draft RUWMP was released in March 2016. As of April 14, 2015, MWD knew that their SWP allocation would be 20 percent, without much chance that the final allocation would be more than 25 percent. (Water Surplus and Drought Management (WSDM) Report 4/14/15, p. 1) This was confirmed on April 23, 2015, when DWR announced that the SWP allocation would be between 20 and 24 percent, with stored reserves making up the difference rather than any possible runoff. (WSDM Report 6/8/15, p.1)

B. MWD's Assumptions Regarding Limitations of Existing and Anticipated Imported Water Projects are Misleading

The UWMPA requires suppliers to identify and quantify the existing and planned sources of water available. (Water Code § 10631(b)). The 2105 RUWMP provides conflicting definitions of "existing and planned" sources of water. As explained below, when referring to MWD's existing and planned sources, the RUWMP accounts for all water yields, including those "under development" no matter how infeasible, as well as those that are interruptible. On the other hand, when referring to member agencies' "existing and planned" local source water projects, the RUWMP account for only water yields from existing or "under construction" projects.

The result of these conflicting assumptions for MWD's supplies compared to local sources is a plan that continues to rely on MWD's imports as the principal source of water, discounting and arguably dis-incentivizing member agencies from investing in local water supply projects that would create more self-sufficiency. In years when MWD's supplies are suddenly unavailable, member agencies will be forced to adopt the fastest or largest water project replacements that are not necessarily cost-effective.

As an example of MWD's favor toward the projects under development that the wholesaler will manage, turn to Chapter 3 of the RUWMP, which identifies existing water supplies and planned water supplies and Appendix 3, which quantifies these supplies. (A.3 1-59) Among the planned supplies Appendix 3 quantifies, the following projects that are "under development":

1. SNWA Interstate Banking Agreement is a multi-party federal and interstate contract to divert and store unused water belonging Southern



Nevada Water Authority to MWD, and returning all or a portion of that water to SNWA when called upon, through 2026. The historical record shows that water has been and has not been made available during past drought years suggesting no assurances that SNWA will have unused water left for MWD to divert. (pp. A.3-11-12) This exemplifies the interruptible supplies on which MWD depends.

2. Additional Fallowing Programs seems to refer to those detailed on p. A. 3-16 including expansion of the Palo Verde Irrigation District Land Management Program, AZ Storage & Interstate Release Agreement, and Bard Water District Seasonal Fallowing Pilot Program. The first two programs are briefly described providing no expected supply or assurances of contracts, funding, or permit approvals. The third is described hypothetically as providing 4.6 TAF in 2016 & 2017, if MWD enters into an agreement with farmers, but no confirmation is provided.
3. The Antelope Valley East Kern Water Agency and Exchange Program describes details of a contractual agreement, which has not yet been executed, but could make up to 30 TAF available over 10 years beginning in 2016. (pp. A. 3 25-26)
4. The Delta Improvements Program describes details of the plans with numerous agreements or MOUs entered into from 1999-2008, allocation but no authorization of funding, and outdated (no longer relevant) permit approvals. The description provides a goal of managing regulations and participating in the long-term California WaterFix and EcoRestore efforts aimed at securing 980TAF in the near-term and 1.2 MAF on average years as of 2030 when the “solution is assumed to be in place.” (pp. A. 3 26-30)
5. IRP Development refers to In-Region Storage and Programs, specifically conservation and local supplies. From 2020-2040, MWD anticipates conservation efforts will offset between 40TAF- 180 TAF/on average years and local resources will add between 8 TAF- 20 TAF/on average years. The conservation is supposed to be achieved through the Model Water Efficiency Landscaping Ordinance, whereas the local resources are supposed to be achieved through additional recycling, groundwater recovery, and seawater desalination. No further detail is provided in this section. (pp. A. 3-45)

The RUWMP accounts for these water supplies, regardless of their feasibility, in Program Capabilities Table A. 3-7 (A. 3 47-59). To be sure, the RUWMP distinguishes the existing from planned supplies that are under development, but by including the supplies that under development within the “Maximum Metropolitan Supply Capabilities,” the plan implicitly mischaracterizes these sources as reliable water supplies.



Among the highly questionable projects under development is the “Delta Improvements Program,” otherwise referred to as Delta Solutions, Bay Delta Conservation Plan, California WaterFix, or California Aqueduct. Beginning in Chapter 2, the RUWMP provides that MWD “targets an average of 980 TAF of SWP supplies in the near-term and 1.2 MAF of supplies on average starting in 2030 when the long-term Delta solution is *assumed to be in place*.” (RUWMP p. 2-12, emphasis added.) It accounts for the Delta Improvements Program under the name “California Aqueduct” in the “Supply Capability and Projected Demands” Tables 2-4,5 & 6. The table assumes that this project will yield 225 TAF in average years once it is built. (p. 2-16.) Next the plan accounts for the Delta Improvements Program in the California Aqueduct Program Capabilities Table 3-2. The table assumes that this project will yield 205 TAF in average years. (p.3-18). In another variation of the Delta Improvements Program, the 2015 IRP Update provides that “the projected increase in SWP supplies from 2020 to 2040 is actually 229 TAF.” (2015 IRP, p. 6-4.)

Without referring to any of the setbacks that call the Delta Improvements Program into question, the RUWMP describes its history. It describes the program’s origin in the Bay Delta Conservation Plan (BDCP) as a plan “formulated to contribute to the state’s co-equal goals of water supply reliability and ecosystem restoration” established in the 2009 Delta Reform Act. It explains that the BDCP was assessed through an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that was released for public comment in December 2013. With no explanation for the transition, the RUWMP then explains that “[a] new permitting approach and new alternatives to the BDCP were announced in April 2015.” (p. A-27.) The new water conveyance facility would be the California WaterFix, whereas the new ecosystem restoration efforts would be the EcoRestore Program. The RUWMP explains that the new regulatory approach is undergoing an assessment by way of a Recirculated EIR/EIS, which was open for public comments through October 2015.

What the RUWMP omits is that the BDCP, which began in 2006, faced a series of setbacks that appear to carry-over into the project’s new incarnations, the California WaterFix and EcoRestore. The agencies and stakeholders took seven years to come up with BDCP plans. The original EIR/EIS was rejected by the federal EPA, which stated the review did not logically lead to the findings and that the plan was likely to contribute to violations of water quality standards and endangered species protections. Federal and state regulators commented that they would be unable to provide legal permits for the BDCP to operate based on the EIR/EIS. Moreover, the federal agencies rejected claims that they would provide for matching financial grants. In Southern California, researchers warned that such an investment would preclude more immediate, local water supply project due to financial constraints. (USC, [Sustainable Communities](https://sustainablecitiespreview.usc.edu/files/2015/01/H-Blanco-WSSC-Exec-Summary-12-2012.pdf), p. 26, <https://sustainablecitiespreview.usc.edu/files/2015/01/H-Blanco-WSSC-Exec-Summary-12-2012.pdf>)

Like the previous plans, the Recirculated EIR/EIS would violate the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the Delta Reform Act because it fails to consider a single tunnel conveyance project alternative; it fails to provide plans for reducing reliance on the Delta; and, it fails to put forward a finance



plan. Lead agencies have not begun to consider the impacts and alternatives to the EcoRestore aspect of the project, but the Director of DWR recently stated that “[t]he idea that it’s all going to be resolved is a fiction,” when referring to the environmental restoration efforts. (Boxall, *LATimes*, Apr. 8, 2016.) To date, stakeholders have expended the \$250 million of ratepayer dollars dedicated to the planning process and they have no assurances that these planning dollars will be replenished.

While there could be dozens of investors, four major partners from San Joaquin Valley irrigation districts and Southland water agencies have shown the greatest interest in this planning process. MWD is among the four and under the anticipated quarter split cost-share would cover between 25-30% of the capital costs to be secured through water sales revenue. Even if the CA WaterFix and EcoRestore project do materialize, the planning documents show that on average over time, the project is not expected to provide a significant increase in water deliveries from the Delta. (<https://www.californiawaterfix.com>) The recently released biological assessment provides that on average Delta contractors would receive approximately 225 TAF of water combined from the California WaterFix. (https://s3.amazonaws.com/californiawater/pdfs/lveo5_BA_ModelingData.pdf). Depending on how the costs are ultimately split, MWD could receive an average water yield of up to 57 TAF for its investment. That is several orders of magnitude smaller than what the RUWMP states, projecting between 205-229 TAF annually.

With so little water to show for such a large investment, other major investors are showing signs of disengagement. In October, the Kern County Water Agency commented that the California Water Fix does not seem economically feasible (Board Meeting Minutes, 10/30/15). That same month, the San Luis & Delta Mendota Water Authority stated that “additional work needs to be done before the California WaterFix will provide a dependable and affordable solution for public water agencies that receive water from the Central Valley Project” and that “the current path would result in tens of millions of dollars of investment with nothing to show for it.” (D. Nelson cover letter to Sen. Feinstein, 10/15) In February, Westlands Water District, who has since been fined by the Securities & Exchange Commission and had its credit ratings placed on a negative watch list, said “[t]he tunnels are not an economically viable project and they would not be needed if we used common sense.” (Fox News, 2/ 22/16) In March, the Alameda County Flood Control and Conservation District postponed any decision to support or reject the California Water Fix for at least six months until more analysis has been completed. (Board Meeting Minutes, 3/16/16.)

Despite ample evidence to show that the Delta Improvements Program is questionable, the RUWMP heavily relies on it to show water supply capability and fails to identify replacement water should it fail to materialize. The RUWMP, thus, violates requirements pursuant to the UWMPA, which say that “for any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.” (Water Code § 10631(c)(2)).



C. MWD's Assumptions Regarding Limitations of Existing and Anticipated Local Water Projects are Misleading, Thus Skewing Analysis Against Local Supplies

In contrast to the RUWMP's inclusion of questionable and interruptible planned projects for imported water, the plan fails to account for hundreds of thousands of acre-feet of projected local supply that are in more advanced stages of development. The UWMPA requires agencies to "[d]escribe water management tools and options to maximize resources and minimize the need to import water from other regions." (Water Code § 10620 (f).) In violation of this requirement, the RUWMP minimizes the need for local resources by accounting only for existing projects and projects that are under construction and suggesting that imported water supplies would fill that demand. RUWMP's Appendix 5 lists all of the local supply projects put forward by member agencies. They total more than 1.45 MAF worth of water supplies by 2040. Of that amount, existing and under construction projects total 770 TAF, whereas the remaining supplies would be met by projects that are fully designed with appropriated funds, permitted under CEQA/NEPA, feasible insofar as engineering reports provide, or conceptual. To guide agencies as to when those projects may yield water supplies the following table provides a timeline:

	2020	2025	2030	2035	2040
Existing	693,440	-	-	-	-
Under Construction	76,702	-	-	-	-
Full Design & Appropriated Funds	34,291	34,030	-	-	-
Advanced Planning (EIR/EIS Certified)	131,238	6,000	-	-	-
Feasibility Projects	80,162	118,701	-	-	-
Conceptual	38,309	117,144	6,600	115,413	-
Total	1,054,142	275,875	6,600	115,413	

As member agencies look more toward self-sufficiency, they must also include consideration of energy intensities of various water supply sources. In this respect, we note that ocean desalination, with its high energy intensity, would exacerbate climate change and increase the associated risks of prolonged drought more than virtually any other water supply source. (See, for example, Proceed with Caution report by NRDC (<https://www.nrdc.org/sites/default/files/california-drought-desalination-2-ib.pdf>, page 3)) Because of the high energy intensity and other negative impacts, desalination should only be considered as a local supply of last resort.

D. MWD's Assumptions of Limitations of Existing and Anticipated Water Efficiency Are Misleading, Thus Skewing Analysis Against Such Measures

The RUWMP also fails to account for the continual gains projected from water efficiency campaigns. Rather, the RUWMP assumes that regional water use will increase "at a relatively fast pace between 2015 and 2020 and then grow more slowly between 2020 and 2040 as short-



term behavioral effects from the extraordinary drought response gradually fade over the long term.” (p. A.1-7) Specifically, MWD assumes that GPCD (Gallons Per Capita Daily) water usage will increase nearly 15% over the next five years, rebounding almost completely from the conservation achieved under Governor’s Brown’s emergency drought mandate calling for a 25 percent reduction. It also assumes that the region will require an 20 more years to achieve today’s efficiency level again. (IRP 4-7, Figure 4-1.) These assumptions are based on the belief that the 2013-15 drought was a singular event that is not expected to recur in the next 25 years. They are also based on the belief that agencies at all levels of government will cease aggressive campaigns to reduce water use. Evidence shows that the RUWMP’s water use assumptions are misleading. Climate scientists have linked prolonged droughts to climate change and warned that California’s “untrammled growth... has run against the limits of nature” urging that an ethic of efficiency will need to continue if Californians want to maintain current lifestyles with less water supply. (*New York Times*, 4/2/15)

To address the future’s water shortages, both the private and public sectors have increased efforts to strengthen efficiency campaigns. For instance, the Governor of California extended the emergency drought regulations last November 2015 assuming drought conditions would persist into 2016. To implement this regulation, the State Water Resources Control Board will continue to track water conservation efforts for each of the state’s urban water suppliers on a monthly basis. (*SWRCB Media Release*, 2/2/16.) Municipalities have begun to adopt the updated Model Water Efficiency Landscaping Ordinance, which is expected to remove turf at unprecedented levels statewide over the next 20 years. On its website, the Association of California Water Agencies links to over 75 retail water agencies that “continue to expand conservation programs, enforce water use restrictions, and make critical infrastructure investments.” (<http://droughtresponse.acwa.com>.) Among them are nearly half of MWD member agencies like Los Angeles Department Water & Power and Long Beach Water Department that have invested in increasingly aggressive conservation campaigns. Adding to the momentum, the Obama Administration hosted a White House Water Summit to raise awareness of the national importance of water and to highlight new commitments and announcements that the Administration is making to build a sustainable water future on World Water Day March 22, 2016. At the summit, among other innovators the White House recognized “Renovate America, the leading provider of residential Property Assessed Clean Energy (PACE) financing in the U.S. ... for its goal to help homeowners save 34.1 billion gallons of water over the next 10 years through new and existing water-efficiency projects.” (*PRNewswire*, 10/22/16.)

E. The RUWMP Threatens to Seriously Mislead Water Agencies and Governments that Rely on it Resulting in Potentially Severe Consequences for Californians and Liability for MWD

The RUWMP provides that “[a]lthough Metropolitan and other wholesalers do not have verification responsibilities under this legislation [SB 210/661], information provided by Metropolitan may be useful to retailers in complying with these responsibilities.” (A.3-1) Retailers are required to demonstrate that “their water supplies are sufficient for certain proposed



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subdivisions and large development projects subject to the California Environmental Quality Act (CEQA).” (*Id.*) These retailers draw on MWD’s RUWMP when projecting water supplies available for future growth in their respective planning documents and permits. They contract with MWD for a certain amount of water based on the RUWMP projections and cost. If that supply is not available or it is not affordable, the retailers may not be able to deliver water to customers to meet basic needs, thus resulting in preventable disruptions. (*California Oak Found. v. City of Santa Clarita* (2005) 133 Cal. App. 4th 1219, 1241-1242 [reliance on “paper water” resulted in setting aside project approval for 584 acre subdivision]; see also *Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 914.)

A loss of water for basic needs could result in monetary damages and adverse health impacts. The contractual relationship that the wholesale and member agencies create when agreeing to purchase MWD water establishes a duty of care and a warranty of good faith and fair dealing. If member agencies detrimentally rely on MWD’s RUWMP to the extent they depend on MWD supplies and/or forgo the production of local supplies, MWD can be held liable for damages resulting from that breach of contract. If a contracting party believes the other may breach, they can request “further assurances” demonstrating the reliability of the remaining contract execution. If those assurances are not provided, the breach of contract can be established early and the harmed party can be compensated for its loss and cost of replacement. To avoid such claims, it behooves MWD to take the reasonable care necessary to provide the most updated and accurate information in its RUWMP.

Permitting agencies are also required to provide independent judgment and correct information pursuant to CEQA’s standard of making a “good faith effort at full disclosure” (Pub. Resources Code § 15151. *Berkeley Keep Jets Over Bay Comm. v. Bd. Of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1367). Mischaracterizing supplies to customers that will knowingly rely on those promises when making permitting decisions would violate CEQA and contribute to an untold number of invalidated development decisions. A worse outcome would be the construction and inhabitation of hundreds of thousands of homes by millions of residents that will not receive reliable water, leading to considerable economic and health problems.

Conclusion

The recommendations set forth in this comment letter for rectifying skewed estimates of water supply and water supply reliability would help to bring MWD into compliance with the UWMPA. They would also help reduce MWD’s liability to member agencies or stakeholders who might otherwise rely upon outdated and questionable data currently represented in the RUWMP.

Should you have any questions, please contact: Caryn Mandelbaum, Environment Now, cmandelbaum@environmentnow.org; Rita Kampalath, Heal the Bay, rkampalath@healthebay.org; Matt O’Malley, San Diego Coastkeeper, matt@sdcoastkeeper.org;



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Sincerely,

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