



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

July 13, 2017

Maureen Stapleton
General Manager
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Ms. Stapleton:

This letter is in response to your letter dated July 9, 2017 regarding the report commissioned by the San Diego County Water Authority from Gordon Hess that analyzes Metropolitan's 2015 Urban Water Management Plan (UWMP) and 2015 Integrated Resources Plan (IRP). Our staff memo, copy attached, clearly points out the discrepancies between our Plans and the Hess Report.

Given that our Plans were completed and adopted almost two years ago, I believe the best approach at this date is to have Mr. Hess contact our staff directly so that he can better understand our comprehensive process. Mr. Hess' report on Metropolitan's 2010 reports contained similar errors so perhaps an earlier engagement would prevent this from occurring again if you choose to select his firm to review Metropolitan's upcoming 2020 planning documents.

I would note that during the preparation of the UWMP and the IRP there were more than two dozen discussion meetings among the staff of the member agencies that were attended by staff from the Water Authority. Perhaps during the next cycle of preparing the 2020 UWMP and IRP updates the Water Authority would like to have Mr. Hess or another consultant attend along with its staff.

The appropriate person for Mr. Hess to meet with is Brandon Goshi in our Water Resources Management Group. Mr. Goshi can be reached at bgoshi@mwdh2o.com and 213-217-7384.

Yours,

A handwritten signature in black ink, appearing to read "Jeff Kightlinger", is written over a faint, larger version of the same signature.

Jeffrey Kightlinger
General Manager

Enclosure

Maureen Stapleton
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cc: Metropolitan Board of Directors
SDCWA Board of Directors
SDCWA Member Agency Managers



- Review of Metropolitan's Urban Water Management Plan

Summary

On March 15, 2017, the San Diego County Water Authority (SDCWA) sent to its Board's Imported Water Committee a memorandum entitled, "Comparison of Metropolitan Water District's and its Member Agencies' 2015 Urban Water Management Plans." Attached to that memorandum was a SDCWA-commissioned report prepared by Gordon Hess & Associates, Inc. entitled, "Comparison of: Metropolitan Water District's 2015 Urban Water Management Plan Projected Demand For MWD Water With Its Member Agencies' 2015 UWMP Projected Demand for MWD Water." At SDCWA's March 23, 2017 Imported Water Committee meeting, a presentation on a "Comparison of MWD and Member Agencies' 2015 UWMPs" was given. These documents (referred to as the SDCWA Memo, Hess Report, and UWMP Presentation, respectively) contained numerous erroneous statements regarding Metropolitan's Integrated Water Resources Plan (IRP) and misleading comparisons between Metropolitan's and its member agencies' Urban Water Management Plans (UWMPs). Specifically, the Hess Report and the SDCWA Memo allege that:

- Existing Metropolitan supply and storage programs are sufficient without additional investments to meet demands through 2040
- New Metropolitan investments and planned local supply projects will result in unused surplus water by 2040 and lower-than-predicted water sales
- Failure to coordinate with Metropolitan member agencies could result in the unnecessary expenditure of billions of ratepayer dollars by Metropolitan
- Metropolitan's reporting of local supplies in its UWMP is inconsistent with the California Water Code

In Metropolitan's review of the Hess Report and SDCWA Memo, staff finds that:

- The overall SDCWA finding that no additional Metropolitan investments are necessary to maintain water reliability through 2040 is in serious error.
- The error stems from the mixing of Metropolitan's IRP planning process with the UWMP reporting requirements and using long-term conceptual local supply projections aggregated from individual UWMPs to create inaccurate projections of local developments.
- SDCWA mischaracterizes Metropolitan's local supply targets and the difference between Metropolitan's and its member agencies' projected demands for Metropolitan water.
- Metropolitan is in full compliance with the California Water Code given the California Department of Water Resource's certification of the District's UWMP.

This report addresses the issues listed above and corrects the SDCWA mischaracterizations of Metropolitan's planning process. It specifically refutes the false conclusion that Metropolitan and Southern California are at risk of overdeveloping local supplies.

Purpose

Informational

Attachments

Attachment 1: Department of Water Resources Letter: Review of Metropolitan's 2015 UWMP

Board Report (Review of Metropolitan's Urban Water Management Plan)

Detailed Report

Introduction

The IRP has been Southern California's comprehensive water reliability blueprint since 1996. The IRP arose out of the 1987-91 drought that resulted in Metropolitan allocating water among its member agencies. The key lessons of that drought were that Southern California needed to take a regional approach to water planning and that Metropolitan was the appropriate agency to develop that plan. Metropolitan's initial IRP placed an emphasis on developing regional storage for droughts, notably leading to the construction of Diamond Valley Lake among other programs, and enhancing local supplies and conservation with Metropolitan's support.

Through Metropolitan's IRP process, Southern California has identified and implemented regional approaches that have greatly increased storage capacity, conservation, local resources, and imported supply options. Metropolitan's careful planning process and the region's execution of the IRP has been a resounding success, allowing Southern California to successfully navigate recent historic droughts with minimal impacts. Metropolitan regularly updates the IRP to account for changed conditions and to ensure the region stays on a path toward a reliable future. The latest version of the plan is the 2015 IRP Update.

The UWMP Act of 1984 mandates that certain urban water suppliers report adequacy of supplies to meet projected demands under three hydrologic conditions, as well as during emergency periods and catastrophic events. The information contained in Metropolitan's 2015 UWMP is directly derived from its 2015 IRP Update. Since the IRP considers all historical hydrologic and climatic records, including multiple year droughts extending beyond the three consecutive dry year reporting required by the UWMP Act, the UWMP reporting scenarios are a subset of the various conditions considered in the IRP.

Comparing supply and demand projections between agencies' UWMPs is not an easy task. It requires an understanding of the reporting agencies' assumptions in developing their reliability assessments and the inherent differences across agencies. For example, agencies may base their projected average conditions on different historic periods. Agencies may also use different hydrologic assumptions to project dry sequences. Agencies may even employ fundamentally different methodologies to derive their supply and demand forecasts.

California Water Code (CWC) Sections 10610.2(a)(4) and (b) require an urban water supplier to make every effort to ensure "...the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years..." and "...to ensure adequate water supplies to meet existing and future demands for water." To show adequate supplies in meeting this requirement, agencies typically report the full spectrum of supply capabilities that may be exercised and a comprehensive list of potential future supplies that may be developed within their service area. Some supply options may already be implemented and others may only be concepts of actions that could be taken in the future. For this reason, it is erroneous to simply aggregate forecasted numbers from individual UWMPs without understanding the nature of the reporting and paying attention to the explanations provided in each individual UWMP.

In preparing a comparison of UWMPs, it is best to have extensive and continued coordination with the individual agencies being compared. As explained below, Metropolitan coordinated extensively with its member agencies when it prepared its 2015 UWMP. However, SDCWA, in its commissioned analysis, conducted no coordination with Metropolitan and little, if any, with Metropolitan's other member agencies.

The primary issues raised by the SDCWA Memo and the Hess Report can be grouped into the three areas discussed below.

- 1. The SDCWA Memo inaccurately asserts that Metropolitan is not in compliance with the CWC and failed to coordinate its UWMP with its member agencies**

Despite the UWMP Presentation stating that the Hess Report was "[n]ot an assessment of compliance with UWMP Act" (UWMP Presentation at p. 3), the SDCWA Memo accuses Metropolitan of not following certain UWMP Act provisions by not collaborating with its member agencies during the IRP and UWMP process. In a footnote to the SDCWA Memo, SDCWA quotes various CWC sections and asserts: "The UWMP Act contains certain provisions how wholesale and retail agencies may, and under certain circumstances must, coordinate

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provision of information (e.g., §10620(d)(2) and §10631(k)), but MWD does not appear to follow these provisions, at least in how information is being reported.” (SDCWA Memo at p. 1 n.1.)

CWC Section 10620(d)(2) requires each urban water supplier to coordinate the preparation of its UWMP with other appropriate agencies in the area. Contrary to the SDCWA Memo's claim, Section 5 in Metropolitan's 2015 UWMP, which is entitled “Coordination and Public Outreach,” documents the extensive collaborative regional planning, coordination with member agencies and other organizations, and public notification which Metropolitan conducted to prepare and adopt its 2015 UWMP. The coordination process for the 2015 IRP Update and 2015 UWMP included 21 technical workgroup meetings (which staff of SDCWA and other member agencies attended) and 11 Committee meetings of Metropolitan's Board of Directors (which the delegates of SDCWA and other member agencies attended) covering all aspects of demand, local supply, conservation, and imported supplies.

The SDCWA Memo and the Hess Report also make much of Metropolitan taking the word “Regional” out of the title of its UWMP. (SDCWA Memo at p. 1 n.1; Hess Report at p. 1 n.2.) The reason for this change is quite simple. In its updated “2015 Urban Water Management Plans Guidebook for Urban Water Suppliers,” the State of California's Department of Water Resources (DWR) explained the difference between individual and regional reporting: For regional reporting, an agency becomes part of a regional group working with an Integrated Regional Water Management (IRWM) group, wholesaler, other retailers, or another regional entity to develop either a regional UWMP or a Regional Alliance. (DWR 2015 UWMP Guidebook at pp. 2-6 through 2-7.) In comparison, for individual reporting, an agency prepares an UWMP covering only its own service area, but it still notifies and coordinates with appropriate regional agencies and constituents. (DWR 2015 UWMP Guidebook at p. 2-6.) Based on DWR's definitions in the 2015 UWMP Guidebook, it is more appropriate for Metropolitan's UWMP to be called an UWMP and not a Regional UWMP because Metropolitan and its member agencies each prepare and submit their own individual plans, which are prepared through a regional coordinated process.

The SDCWA Memo cites CWC Sections 10610.2, 10620, 10631, 10633, and 10635 (SDCWA Memo at p. 4 n.8) and draws the faulty conclusion that Metropolitan's standard for reporting water supplies, “... appears to be inconsistent with Water Code requirements.” (SDCWA Memo at p. 4.) In contrast to these claims, Metropolitan's 2015 UWMP was found to comply with the CWC requirements. In a letter dated November 23, 2016, DWR stated:

“DWR's review of the Metropolitan Water District of Southern California's 2015 plan has found that the UWMP addresses the requirements of the CWC” (Attachment 1).

This letter was posted on DWR's website and was thus readily available to SDCWA and the authors of the Hess Report.

2. The Hess Report and SDCWA Memo confuse Metropolitan's IRP planning process with the UWMP reporting requirements and falsely accuse Metropolitan of overdeveloping and overinvesting in supplies

Page 1 of the Hess Report, the Overview and Purpose section, states that Metropolitan, “... used its 2015 Integrated Resources Plan (IRP) as a source document and as a result, the MWD-UWMP is consistent with Metropolitan's IRP. One notable difference however, is that the IRP focuses only on ‘average’ water year demands to the year 2040, whereas the MWD-UWMP, as required by law, considers ‘average,’ ‘single dry-year,’ and ‘multiple dry-year’ conditions in five-year increments through 2040.” (Hess Report at p. 1.)

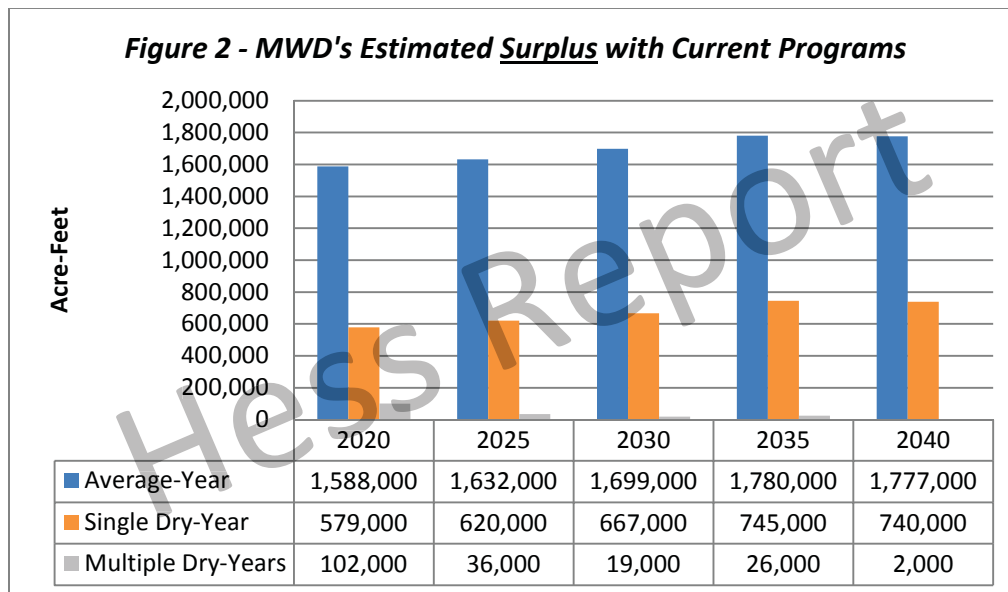
The claim that the IRP focuses on average year demands is not accurate and demonstrates a fundamental lack of understanding of Metropolitan's planning approach. The reliability analysis in the 2015 IRP Update is based on a sequential simulation of 91 years of historic hydrologic conditions, which is adjusted to reflect changing conditions in the future. Appendix 11 of the 2015 IRP Update describes this methodology in detail. This approach, which incorporates drought sequences of more than five years in length, clearly does more than “focuses on only average water year demands.” This basic misunderstanding leads to a number of false conclusions in the Hess Report.

Metropolitan's IRP actually plans for conditions that are more severe than those required for UWMP reporting.

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The UWMP reporting requires a multiple dry year scenario of three years in length. As mentioned above, the IRP sets regional targets designed to provide reliability through drought periods more consistent with recent history, including droughts lasting five years and longer. The Hess Report deliberately confuses Metropolitan’s IRP, which plans for extended drought periods, with UWMP reporting, which looks at drought sequences of only three years. The Hess Report uses this confusion to support its theme that Metropolitan is at risk of overdeveloping supplies.

The Hess Report also misinterprets how “supply capability” is reported within the UWMP in order to bolster its argument that Metropolitan is overdeveloping supplies. This is done using a series of figures in the Hess Report. As an example, Figure 2 from the Hess Report (page 9) is based on regional supplies that existed in 2015, when Metropolitan’s 2015 UWMP was developed. The Hess Report’s Figure 2 shows a purported surplus supply in the UWMP average year, single dry year, and multiple dry year (three year duration) scenarios.



Source: Hess Report page 9

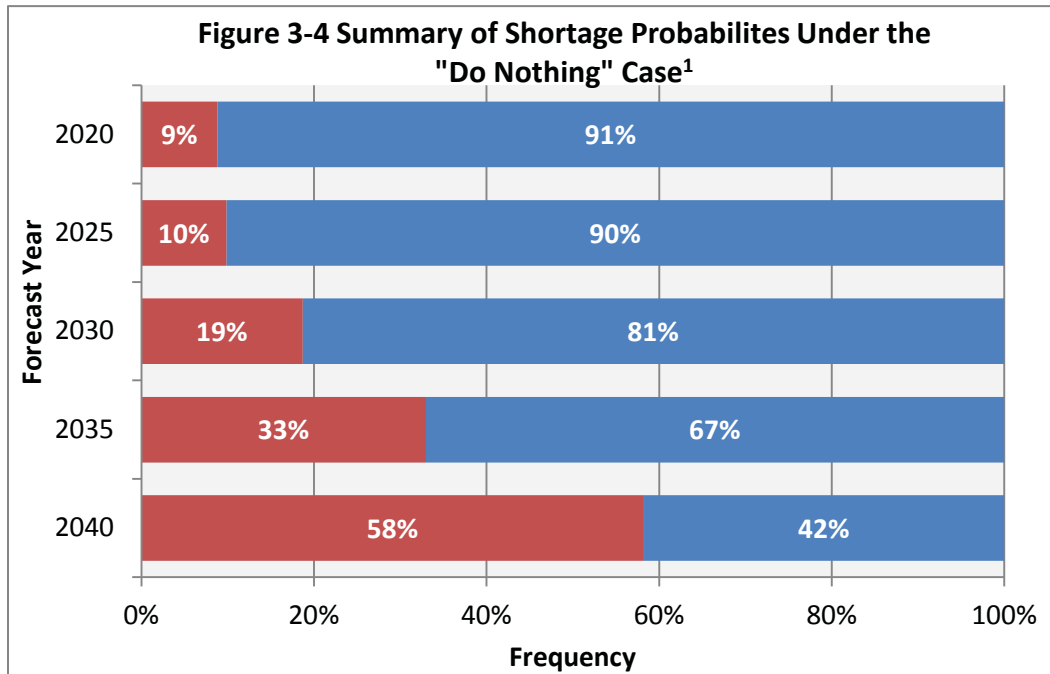
Figure 2 demonstrates the Hess Report’s complete failure to follow basic water resource planning principles. Page 19 of the Hess Report states, “... indeed, it (Metropolitan) would have surplus supplies in all hydrological conditions evaluated.” This is not an accurate interpretation of Figure 2 (which is based on Tables 2-4 through 2-6 in Metropolitan’s 2015 UWMP). Consistent with CWC requirements (such as CWC Section 10631(c)), Tables 2-4 through 2-6 are simply reporting the full range of supply options that could potentially be exercised to meet projected demands in order to demonstrate the reliability of Metropolitan’s water supply.

In illustrating 1.6 million acre-feet of purported surplus supplies under average conditions, the Hess Report assumes that Metropolitan would pursue and exercise the full range of non-emergency water resource capabilities identified in Metropolitan’s 2015 UWMP Table A.3-7, regardless of need, including: draining all stored water from Diamond Valley Lake, Lake Mathews, and Lake Skinner simultaneously; using all flexible storage in Castaic Lake and Lake Perris; using all groundwater conjunctive use and cyclic storage; executing all long-term water transfers and exchange programs along the California Aqueduct and Colorado River Aqueduct; and taking all carry over supplies from the State Water Project. While this list constitutes the many supply options available to Metropolitan, these supply options would only be exercised as needed. And they would never all be executed simultaneously. The Hess Report intentionally assumes that all of these actions would be taken in an average year in order to reach the false and misleading conclusion that Metropolitan is overdeveloping supplies.

Figure 2 actually shows that, absent further investment in future resources, supplies would be barely sufficient to manage through a period of three consecutive dry years and would leave regional storage reserves at a very low level without the capability to meet further drought conditions. While the Hess Report uses Figure 2 to claim the

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region is overinvesting, a correct interpretation of Figure 2 shows that additional investments must be made, if the region hopes to survive droughts of longer than three years in the future. To this point, Figure 3-4 in the 2015 IRP Update shows potential shortages of almost 60 percent of the time by 2040 under the “Do Nothing Case.”



Source: 2015 IRP Update Page 3.30

1. IRPSIM results represent 91 modeled outcomes based on weather/climate and hydrology from 1922-2012. This is intended to be an indicator of reliability.

For this reason, the IRP sets water resource targets that will allow the region to maintain its reliability through foreseeable hydrologic conditions, including droughts that exceed the UWMP reporting requirement within the CWC. In light of the recent drought, Governor Brown’s 2017 report “Making Water Conservation a California Way of Life” suggests increasing the UWMP reporting requirement to include drought sequences of at least five years in length. The IRP planning process is well prepared to meet this new standard.

The SDCWA Memo also states: “The cumulative effect of MWD overdeveloping supplies and demand management programs could result in stranding hundreds of thousands of acre-feet of new supplies and the billions of dollars spent to support these supply developments.” (SDCWA Memo at p. 2.) It should be noted that in 2010, SDCWA released a similar report by Gordon Hess & Associates, Inc. That previous report contained the same claim that Metropolitan is overdeveloping supplies and potentially wasting ratepayers’ money. In the intervening years between these reports, Southern California has experienced:

- The worst drought on record;
- The lowest State Water Project allocation in history;
- Use of almost 70 percent of Metropolitan’s regional storage reserves;
- Metropolitan water supply allocation actions; and
- An Executive Order for the residents of the State to reduce their water consumption by 25 percent.

Despite these recent water supply challenges and Metropolitan’s proven success in managing these conditions to support the region, the Hess Report stubbornly continues to insist that any additional action by Metropolitan would result in overdeveloping supplies and overinvesting. The high level of risk in the “Do Nothing Case”

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would be unacceptable to most water agencies, but SDCWA's Hess Report suggests that the region does not need to implement the water supply targets adopted in Metropolitan's 2015 IRP Update because many local agencies "also have plans to develop local water supply to reduce demand for imported water that may not be captured in either MWD member agencies' or MWD's plans." (SDCWA Memo p. 2; see Hess Report pp. 1-2.) Metropolitan disagrees with the notion that the region would be fine without future actions to ensure reliability.

Metropolitan will continue to monitor the progress of the region in developing local supplies and conservation and continue to identify local projects and conservation programs that fit within the targets identified in the IRP. On a yearly basis, through the IRP Implementation Report, Metropolitan's Board of Directors will be provided with an update of the region's water supply situation, and will be able to make informed decisions on actions needed to meet the regional goals identified in the IRP. As projects come online, they are accounted for in the regular updates of the IRP and the UWMP. The assertion that hundreds of thousands of acre-feet of supply will be mistakenly overdeveloped through this process has no basis in reality.

3. The Hess Report and SDCWA Memo mischaracterize Metropolitan's local supply targets and the difference between Metropolitan's and member agencies' projected demands for Metropolitan water

SDCWA maintains that Metropolitan ignores the potential future local supply development described in member agencies' UWMPs. (SDCWA Memo at pp. 2-4.) The Hess Report criticizes the planning criteria that Metropolitan uses for the "Do Nothing Case" in the IRP, which is used to provide an outlook of current supply assets with no further investments. (Hess Report at pp. 1-2, 7.) Local projects reported to Metropolitan by its member agencies that are either existing or under construction are included in the "Do Nothing Case" because of the high likelihood of those supplies being developed without further investment. The SDCWA Memo claims that this approach is unnecessarily strict, and the Hess Report argues that it results in an underestimation of future local supply. (SDCWA Memo at p. 4; Hess Report pp. 1-2.)

The IRP sets regional targets for local supply production in the future, without making determinations regarding which specific local projects will be completed. The 2015 IRP Update sets a target for local supply production of just over 2.4 million acre-feet in 2040 under normal conditions. This is almost 600,000 acre-feet higher than the approximately 1.8 million acre-feet of local supplies produced in Metropolitan's region in calendar year 2016. Contrary to the Hess Report, Metropolitan anticipates that member agencies will continue to develop local supplies in the future. In fact, a comprehensive list of local projects resulting from discussions with Metropolitan's member agencies is included in Appendix 5 of Metropolitan's 2015 UWMP. Over time, it is expected that many of these projects will come to fruition and help to meet the regional IRP targets for local supply production. Going forward, Metropolitan will continue to coordinate with all of the member agencies, including SDCWA, to discuss their potential future local projects and will continue to present an annual IRP Implementation Plan update to the Board to track progress towards the IRP targets, including new local supplies that have been developed.

The IRP approach allows Metropolitan to recognize the many potential member agency local projects that are in various stages of planning without assuming which specific projects will go forward to meet the IRP targets. This is important because agencies are inclusive in the reporting of potential projects that are used within their UWMPs' forecasts of potential local supply development. To demonstrate, the following tables compare the reported local supply production for calendar year 2015 with the projections that were included in previous member agency UWMPs. The information is based on data from 18 member agency UWMPs. These 18 member agencies were selected because of the availability of their UWMPs and consistency of the local supplies reported in their UWMPs dating back to the 2000 UWMPs. Table 2 shows similar information, but excludes data for surface water supplies and Los Angeles Aqueduct supplies. Yield from these two categories tends to vary significantly based on the hydrology in a given year. Tables 3 and 4 show similar data, but only using information from SDCWA's UWMPs.

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Table 1: 18 Member Agencies¹ - All Local Supplies²

	Projected Supplies ³ for 2015	Reported Yield in 2015 UWMP	<i>[Reported] - [Projected] Difference</i>	<i>% Lower Than Projection</i>
2000 UWMP	1,863,391	1,084,902	(778,489)	-42%
2005 UWMP	1,681,644		(596,742)	-35%
2010 UWMP	1,406,326		(321,424)	-23%

1. Member Agencies whose UWMPs were available and contained comparable local supply information to their respective 2015 UWMPs.
2. Includes Groundwater, Groundwater Recovery, Surface Water, Recycled Water, Los Angeles Aqueduct, and Seawater Desalination Supplies.
3. Average Year Projection

Table 2: 18 Member Agencies¹ – Excluding Surface and Los Angeles Aqueduct Supplies²

	Projected Supplies ³ for 2015	Reported Yield in 2015 UWMP	<i>[Reported] - [Projected] Difference</i>	<i>% Lower Than Projection</i>
2000 UWMP	1,421,791	1,019,075	(402,716)	-28%
2005 UWMP	1,335,246		(316,171)	-24%
2010 UWMP	1,100,020		(80,945)	-7%

1. Member Agencies whose UWMPs were available and contained comparable local supply information to their respective 2015 UWMPs.
2. Includes Groundwater, Groundwater Recovery, Recycled Water, and Seawater Desalination Supplies.
3. Average Year Projection

Table 3: San Diego County Water Authority - All Local Supplies¹

	Projected Supplies ² for 2015	Reported Yield in 2015 UWMP	<i>[Reported] - [Projected] Difference</i>	<i>% Lower Than Projection</i>
2000 UWMP	194,950	56,968	(137,982)	-71%
2005 UWMP	165,345		(108,377)	-66%
2010 UWMP	108,896		(51,928)	-48%

1. Includes Groundwater, Groundwater Recovery, Surface Water (FY 2015), Recycled Water, and Seawater Desalination Supplies.
2. Average Year Projection

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Table 4: San Diego County Water Authority – Excluding Surface Water Supplies¹

	Projected Supplies ² for 2015	Reported Yield in 2015 UWMP	[Reported] - [Projected] Difference	% Lower Than Projection
2000 UWMP	109,350	52,868	(56,482)	-52%
2005 UWMP	105,696		(52,828)	-50%
2010 UWMP	60,690		(7,822)	-13%

1. Includes Groundwater, Groundwater Recovery, Recycled Water, and Seawater Desalination Supplies.
2. Average Year Projection

While the reported yields of local supplies in 2015 are affected by factors that include dry hydrologic conditions and abnormally low demands, these tables show the long-term UWMP forecasts of the 18 member agencies, and of SDCWA, significantly overstate potential local supply development. This analysis shows that simply assuming these local supply forecasts will happen in the future is not appropriate for planning purposes.

The assertion that Metropolitan is under-reporting local supplies carries over to the Hess Report’s claim that Metropolitan is overestimating future demands for imported water. The report states:

“...Metropolitan’s forecasted demand [for imported water] is substantially higher – more than 300,000 acre-feet higher... than the demand forecasted by it [sic] member agencies in average years... These differences are primarily due to Metropolitan’s failure to account for water conservation and local water supplies now being implemented by Metropolitan’s member agencies...” (Hess Report at p. 17.)

The majority of the 300,000 acre-feet difference is explained by the Hess Report’s lack of effort to thoroughly analyze and understand each member agency’s UWMP and from the Hess Report’s assumption that conceptual future local supplies will all be completed. As the above tables show, that assumption is not historically accurate. Like the rest of the region, SDCWA has a similar track record in building less local supplies than projected in previous UWMPs. This is likely the reason why SDCWA does not include conceptual or additional planned projects in its own UWMP reliability assessment, contrary to the approach that the Hess Report used in aggregating all of Metropolitan member agencies’ potential local projects regardless of planning status. Additional differences come from improper calculations and selective data utilization within the Hess Report.

The Hess Report also notes that Metropolitan’s demand projections have significantly decreased over time. (Hess Report at p. 17.) The Hess Report misses the point entirely that the downward trend in the demand for Metropolitan water is, in fact, proof of the success in implementing the IRP and Metropolitan’s regional demand management programs. The programs help to increase regional water supply reliability, reduce demands for imported supplies, decrease the burden on Metropolitan’s infrastructure and reduce system costs, and free up conveyance capacity. The success of Metropolitan’s IRP and its demand management programs to encourage conservation and local supply development over the past 30 years is a major reason why the region has been able to manage through more recent droughts and avoid an unsustainable increase in imported water demands. This is confirmed by the Public Policy Institute of California (PPIC) in its recent report entitled “Building Drought Resilience in California’s Cities and Suburbs” dated June 2017 where they said that “... the result is that the region’s water supply is more diverse and more drought resilient” (pp. 13-14). The Hess Report also fails to note a similar drop in SDCWA demands over the same period. Demands for Metropolitan’s imported deliveries will continue to change based on new trends in demographics, climate, conservation, local supply development, and other factors. As this occurs, Metropolitan will periodically update the IRP, thus capturing changes to conditions and adapting the long term regional targets and goals accordingly.

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Conclusion

Water resources planning can be nuanced and requires a broad understanding of sometimes arcane and intensely technical concepts. However, the misrepresentations in the SDCWA Memo and the Hess Report display both a lack of knowledge of fundamental water resource planning concepts and a purposeful distortion of information. SDCWA, through the SDCWA Memo and the Hess Report, is attempting to sow confusion and distrust among Metropolitan, its member agencies, and other interested parties. This analysis shows the claims of the SDCWA Memo and the Hess Report are verifiably false and not founded on sound water resources planning principles. Metropolitan developed its IRP and UWMP in extensive coordination with DWR and Metropolitan's 26 member agencies, including SDCWA. DWR confirmed that Metropolitan's 2015 UWMP addressed all the requirements of the CWC, and only SDCWA has taken issue with Metropolitan's plans. Regardless of SDCWA's contentions, Metropolitan will continue to strive for a reliable water resource supply for its service area, will continue to use its IRP process as the region's blueprint for developing a reliable water supply, and will continue to comply with the CWC in its UWMP development and reporting. Metropolitan will also continue to work closely with all of its member agencies to ensure we use the best data available so that the IRP continues to be the planning document and blueprint for Southern California's water reliability.

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY **EDMUND G. BROWN JR., Governor**

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



November 23, 2016

Edgar Fandialan
Senior Engineer
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, California 90012

RE: Urban Water Management Plan Requirements Addressed

Dear Mr. Fandialan:

The Department of Water Resources (DWR) has reviewed the Metropolitan Water District of Southern California's 2015 Urban Water Management Plan (UWMP) received on May 24, 2016. The California Water Code (CWC) directs DWR to report to the legislature once every five years on the status of submitted UWMPs. In meeting this legislative reporting requirement, DWR reviews all submitted UWMPs.

DWR's review of the Metropolitan Water District of Southern California's 2015 plan has found that the UWMP addresses the requirements of the CWC. DWR's review of plans is limited to assessing whether suppliers have addressed the required legislative elements. In its review, DWR does not evaluate or analyze the supplier's UWMP data, projections, or water management strategies. This letter acknowledges that the Metropolitan Water District of Southern California's 2015 UWMP addresses the CWC requirements. The results of the review will be provided to DWR's Financial Assistance Branch.

If you have any questions regarding the review of the UWMP or urban water management planning please call Gwen Huff at 916-651-9672.

Sincerely,

A handwritten signature in blue ink, appearing to read "Vicki Lake".

Vicki Lake
Unit Chief
Urban Water Use Efficiency
(916) 651-0740