



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

5/10/2016 Board Meeting

8-5

Subject

Declare a “Condition 2 – Water Supply Alert” effective immediately; do not implement a Water Supply Allocation Plan for 2016/17 and thereby rescind the current “Condition 3 – Water Supply Allocation”

Executive Summary

This letter recommends that the Board declare a “Condition 2 – Water Supply Alert”, not implement a Water Supply Allocation Plan (WSAP) for 2016/17 and rescind the “Condition 3 – Water Supply Allocation” to reflect the current conditions and water needs within Metropolitan’s service area.

Metropolitan’s current and long-standing conservation programs and public outreach have increased water use efficiency practices and awareness and have successfully sustained demands at lower levels over the last two years. Due to these efforts, coupled with improved water supply conditions, Metropolitan will be adding storage in 2016 following three consecutive years of withdrawals. In addition, the improved hydrologic conditions in Northern California that have increased storage levels in State Water Project (SWP) reservoirs in 2016 make it more likely that the SWP Table A Allocation in 2017 will allow Metropolitan to maintain storage levels next year.

Details

Background

In February 2008, the Board approved Metropolitan’s WSAP. The WSAP sets forth the specific formulas for calculating member agency supply allocations and the key implementation elements needed for administering an allocation. Pursuant to the WSAP, the Board considers implementation in April for the upcoming fiscal year. At that time, the Board determines the WSAP Regional Shortage Level, if any, that will be implemented for the following July through June.

In April 2015, the Board approved implementation of WSAP Regional Shortage Level 3 effective July 1, 2015 through June 30, 2016. This water management action helped balance supplies and demands and reduced withdrawals from Metropolitan’s dry-year storage in 2015 and 2016.

In April 2016, consideration to implement the WSAP was deferred to May 2016 in order to confirm the anticipated increase in the SWP Allocation. The SWP Allocation increased to 60 percent in late April. Since the implementation of the current WSAP, staff has provided the Board with regular Water Surplus and Drought Management (WSDM) updates on the developing water supply, demand, and storage conditions for 2016. The regular WSDM update report for this month is included as [Attachment 1](#) to this letter, rather than as a separate information item.

Key Considerations for Declaring a Condition 2 – Water Supply Alert

Key considerations in the decision to Declare a “Condition 2 – Water Supply Alert” and rescind the “Condition 3 – Water Supply Allocation” is the status of the region’s water supply situation and need for continued conservation practices. Staff recommends that Metropolitan adopt a Water Supply Alert as a regional call for continued awareness and heightened conservation within Metropolitan’s service area.

Although Metropolitan anticipates being able to add to storage and meet all water demands this year and next, actions taken to lower water demands in 2016 could avoid or reduce the magnitude of regional shortages in later years if drought conditions return. A Water Supply Alert would call for cities, counties, member agencies and retail agencies to continue their heightened conservation activities.

Key Considerations for 2016/17 WSAP Decision

Key considerations in the WSAP implementation decision for 2016/17 are the State Water Project (SWP) Table A Allocation, projected end-of-year storage, and projected 2017 SWP Table A Allocation to maintain adequate dry-year storage should dry conditions return next year. With the improved hydrologic conditions in Northern California, Metropolitan's storage will rebound and begin to increase in 2016 under all storage scenarios analyzed including the low supply/high demand case. See [Attachment 1](#) for the full range of storage outcomes.

As the Board considers implementation of the WSAP for 2016/17, the water supply and storage conditions are considerably more favorable than in the previous year. In fact, at the current 60 percent SWP Allocation, Metropolitan will receive the equivalent Table A supplies in 2016 as it has in the last three years combined from the SWP. Further, improvement in SWP reservoirs this year will translate to SWP Table A Allocations going into 2017 that are sufficient enough to maintain or even add to storage thus avoiding the need to implement a WSAP in 2017/18.

Pursuant to the WSAP Exit Strategy approved in September 2011, if the Board decides not to implement a WSAP Allocation for 2016/17, the WSAP Allocation currently in effect is automatically terminated.

Policy

By Minute Item 47393, dated February 12, 2008, the Board adopted the Water Supply Allocation Plan.

By Minute Item 48376, dated August 17, 2010, the Board adopted proposed adjustments to the Water Supply Allocation Plan, and the allocation of seawater barrier supplies for the 2010/11 Allocation Year.

By Minute Item 48803, dated September 13, 2011, the Board adopted adjustments to the Water Supply Allocation Plan.

By Minute Item 49979, dated December 9, 2014, the Board adopted adjustments to the Water Supply Allocation Plan.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action of moving the Water Supply Condition to a "Condition 2 – Water Supply Alert" is not defined as a project under CEQA because the proposed action involves continuing administrative activities such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action of moving the Water Supply Condition is not defined as a project under CEQA.

CEQA determination for Option #2:

Adoption of the WSAP previously was determined to be categorically and statutorily exempt under the provisions of CEQA and State CEQA Guidelines. Specifically, the WSAP was found to be exempt under 15301 (Class 1), 15307 (Class 7), 15308 (Class 8) and 15378(b)(4) of the State CEQA Guidelines. In addition, the WSAP was found to be exempt pursuant to Water Code Section 10652, to the extent this plan serves as the basis for the urban water shortage contingency analysis required under Water Code Section 10632 and is incorporated into Metropolitan's RUWMP.

Similarly, the proposed action of implementing a WSAP for 2016/17 is exempt from or otherwise not covered by CEQA. Specifically, implementation of the WSAP is statutorily exempt from CEQA under Water Code

Section 10652, which expressly exempts actions listed in and taken pursuant to a RUWMP's urban water shortage contingency analysis. Likewise, implementation of a WSAP allocation merely involves the potential application of a surcharge to those member agencies whose deliveries of water from Metropolitan exceed their allocations, but it does not otherwise prohibit or restrict such deliveries. As such, the proposed action is not defined as a project under Section 15378(b) (4) of the State CEQA Guidelines, because it involves government fiscal activities that do not involve a commitment to any specific project that may result in a potentially significant impact. Finally, where it can be seen with certainty that there is no possibility that the proposed actions may have a significant impact on the environment, those actions are not subject to CEQA pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

The CEQA determination is: Determine that the proposed actions are statutorily and categorically exempt, are not defined as a project and are not subject to CEQA, pursuant to Water Code Section 10652 and Sections 15378(b)(4) and 15061(b)(3) of the State CEQA Guidelines.

Board Options

Option #1

Adopt the CEQA determination that the proposed action of moving the Water Supply Condition is not defined as a project under CEQA, and

- a. Declare a "Condition 2 – Water Supply Alert" and rescind the "Condition 3 – Water Supply Allocation"; and
- b. Do not implement the WSAP for 2016/17

Fiscal Impact: None directly related to a declaration of a water supply condition or not implementing a WSAP

Business Analysis: Not implementing the WSAP for 2016/17 and thereby terminating the current WSAP Allocation, and rescinding the "Condition 3 - Water Supply Allocation is consistent with Metropolitan's storage management framework. Setting a "Condition 2 – Water Supply Alert" emphasizes the importance of continuing conservation efforts.

Option #2

Adopt the CEQA determination that the proposed action of implementing a WSAP for 2016/17 is statutorily and categorically exempt, are not defined as a project and are not subject to CEQA, pursuant to Water Code Section 10652 and Sections 15378(b)(4) and 15061(b)(3) of the State CEQA Guidelines, and

Implement a WSAP for 2016/17 at a regional shortage level based on board discussion.

Fiscal Impact: Depending on what regional shortage level is implemented, water sales may be below budgeted FY 2016/17 amounts.

Business Analysis: Implementing the WSAP for 2016/17 would not terminate the current Level 3 WSAP and it would remain in effect through June 30, 2016. As such, the Local Supply Certification process would be completed in July 2016 and the Allocation Surcharge assessment and billing would occur August 2016 through September 2016. This option would be more protective of regional storage levels and could further increase dry-year storage levels by the end of calendar year 2016.

Staff Recommendation

Option #1



Kevin A. Dorhoff
Interim Manager, Water Resource Management Group

5/2/2016
Date



Jeffrey Nightlinger
General Manager

5/3/2016
Date

Attachment 1 – Water Surplus and Demand Management Report

Ref# wrm12642288



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Report

Water Resources Management

• **Water Surplus and Drought Management Plan**

Summary

Hydrologic conditions in California have improved considerably in CY 2016 as compared to the last four years. These improved conditions have led to a 60 percent State Water Project (SWP) Table A Allocation. Many of the uncertainties discussed in previous WSDM reports are now better known and a more accurate range of supply demand balances can be ascertained. Given the projected storage levels and an assessment of the supplies needed and anticipated next year to maintain appropriate storage levels in CY 2017 to safeguard against future dry years, staff is recommending not to implement a WSAP for allocation year 2016/17, thereby lifting the current WSAP allocation and return to a water supply condition “Condition 2 – Water Supply Alert”.

Purpose

Informational

Attachments

[Attachment A: 2016 WSDM Storage Detail](#)

Detailed Report

This WSDM report updates the developing water supply and demand conditions for CY 2016. This report provides the Board with a detailed accounting of WSDM conditions that may impact water supply reliability for CY 2016 and provides the bases for staff’s WSAP recommendation for allocation year 2016/17. The water supply, demand, and storage information contained in this letter is current as of April 26, 2016.

Estimated State Water Project Supplies

On April 21, 2016, the California Department of Water Resources (DWR) increased the SWP Table A Allocation to 60 percent. This increase is the fourth increase since the initial allocation of 10 percent was announced in December 2015 and reflects the improved hydrological conditions in northern California this water year. The 60 percent SWP Allocation amounts to the same Table A supplies available to Metropolitan from the SWP in 2013, 2014 and 2015 combined. And for the first time since 2012, the current water year runoff forecast is projected to be above normal, further indicating that drought conditions are beginning to ease in northern California.

Despite the improved hydrologic conditions, Delta export pumping continues to be limited. Concerns over the declining Delta smelt population and conditions in the Delta have prompted more restrictive fishery requirements prescribed under the Biological Opinions during wet periods. As a result, both the SWP and Central Valley Project (CVP) have had to forego opportunities to capture high Delta flows that accompanied precipitation events and flood control releases this year. To date, the SWP and CVP combined water losses are estimated to be approximately 1.0 MAF. The severity of the fishery restrictions will also make it difficult for DWR to allocate additional supplies, therefore, the 2016 final SWP allocation is likely to be 60 percent. However, any unallocated water captured in Lake Oroville in 2016 will further bolster the 2017 initial SWP Allocation.

The table below shows the associated SWP Table A supplies for the current SWP allocation.

2016 State Water Project Supply Estimate (Acre-Feet)	
SWP Allocation	60%
Table A Supply	1,147,000

Board Report (Water Surplus and Drought Management Plan)

Estimated Colorado River Aqueduct Supplies

Following four consecutive months of below normal precipitation, the water year runoff forecast remains below normal suggesting that the Colorado River watershed could be in its 16th year of drought. This ongoing drought has impacted storage levels in Lake Powell and Lake Mead, which in turn affect the likelihood of surplus or shortage conditions in the future.

Staff's estimate of Colorado River supplies for CY 2016 is approximately 961 TAF with potential variability based on higher or lower priority agricultural use. The agricultural use will be better known as the year progresses at which time the appropriate adjustments will be made to the Colorado River supply projection. Therefore, the estimated water supply includes Metropolitan's contracted amount of 550 TAF without an agricultural use adjustment and the established Colorado River multi-year supply programs developed to date of approximately 411 TAF. A detailed listing of projected Colorado River supplies is included below.

2016 Colorado River Aqueduct Supply Estimate (Acre-Feet)	
<u>Contract</u>	
Basic Apportionment	550,000
<u>Multi-Year Programs</u>	
IID/MWD Conservation Program	90,000
PVID Land Fallowing	118,000
Transfer to SDCWA (IID Transfer and Canal Lining)	180,000
Canal Lining Water to MWD	16,000
Lower Colorado Water Supply Project	6,000
Bard WD Seasonal Fallowing Pilot Program	1,000
Total CRA Supply	961,000

2016 Current Trend Demands and Losses Estimate

Member agency demands on Metropolitan include water deliveries to the member agencies, as well as water exchanged with the San Diego County Water Authority. Member agency demands on Metropolitan have shown a downward trend since the WSAP Level 3 Regional Shortage was implemented in July 2015. In fact, since July 2015, Member Agency regional demand levels have been consistently lower than the WSAP Level 3 Regional Shortage target set by the Board. Driving the reduced demand was the Governor's emergency water conservation regulations calling for a 25 percent statewide reduction in consumptive use implemented in May 2015.

The current twelve month rolling demand on Metropolitan is roughly 1.7 MAF including losses. Losses for 2016 are an estimate of Metropolitan distribution system losses, and evaporative and contractual losses from storage. Metropolitan will also meet obligations and deliver 42 TAF to various partners in 2016. Factors that will likely influence projected demands include climate, improving local supply levels and future decisions surrounding implementation of Metropolitan's WSAP and the statewide emergency water conservation

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regulations. These impacts are discussed in the “Uncertainties” section of this report. The table below summarizes the current twelve month rolling demands, obligations and losses.

2016 Current Trend Demands, Obligations, and Losses Estimate (Acre-Feet)	
Member Agency Demands	1,680,000
Obligations ¹	42,000
System and Storage Losses	50,000
Total Demands, Obligations, and Losses	1,772,000

¹Includes deliveries to Coachella Valley Water District and Conjunctive Use programs

WSDM Supplies and Management Actions

WSDM Dry Year Storage

In addition to base CRA and SWP supplies shown above, Metropolitan had a total of approximately 911 TAF of storage in its WSDM dry-year storage portfolio as of the beginning of CY 2016 (this figure excludes water stored for emergency purposes). Accounting for conveyance constraints, approximately 628 TAF is available for use in CY 2016 at a 60 percent SWP Allocation. This estimate reflects the contractual minimum amounts of the programs and/or any agreed upon increase in minimum contractual amounts with banking partners. This storage could be used to meet demands in CY 2016 if necessary. However, staff anticipates that supplies will be higher than demands in CY 2016. In this circumstance, Metropolitan’s storage programs have the ability to capture roughly 1.7 MAF in CY 2016. [Attachment A](#) shows the starting balance, estimated put and take capacities for CY 2016 and total storage capacity for each of Metropolitan’s storage programs.

Transfer/Exchanges

In accordance with the WSDM plan guidelines, Metropolitan is pursuing transfer and exchanges to supplement 2016 supplies. For this report, staff is conservatively estimating 40 TAF of supplies. This low estimate is due in part to the low Lake Mead levels that could limit development of interstate transfer and exchange programs to augment Colorado River Aqueduct supplies and no longer having capacity to export transfers and exchanges originating north of delta under the 60 percent SWP allocation. As such, staff is focusing efforts on developing SWP supplies from south of Delta partners.

2016 Water Supply Balance

The following table shows the estimated “Current Trend” net balance between demands and water supplies at a SWP Table A Allocation of 60 percent for CY 2016.

2016 Current Trend Water Supply and Demand Balance Estimate (Acre-Feet)	
CRA Supplies	961,000
SWP Supplies	1,147,000
WSDM Transfers/Exchanges	40,000
Total Supplies	2,148,000
Total Demands and Losses	1,772,000
Net Water Supply and Demand Balance	376,000

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As shown, at a 60 percent SWP allocation staff is estimating that there will be opportunities to increase dry-year storage balances by approximately 375 TAF. As such, storage balances at the end of CY 2016 could increase to approximately 1.3 MAF under this “Current Trend” scenario.

Uncertainties

This WSDM report makes assumptions about the supplies that will be available to Metropolitan in CY 2016 and about deliveries to member agencies. More is now known with respect to the final CY 2016 SWP Table A supply level and transfer and exchange opportunities; however, conditions continue to evolve that could decrease or increase supplies and demands. The following discussion quantifies the remaining uncertainties and their impacts on dry-year storage balances and provides a range of storage scenarios used to aid staff’s formulation of a WSAP recommendation.

The following table includes the “Current Trend” storage scenario discussed earlier in this report and also includes two additional scenarios described as “Low Storage” and “High Storage” to capture the impacts of the remaining uncertainties on storage. In addition, the required minimum CY 2017 SWP Table A Allocation to maintain end-of-year 2017 storage balances at or above 1.0 MAF is also provided. While not a board policy, Metropolitan reviews storage levels when considering implementation of a WSAP. Particular attention is paid to levels falling below 1.0 MAF in a given year.

Estimated 2016 Water Supply/Demand Balances and Storage Scenarios (Acre-Feet)			
Projected 2017 SWP Allocation Requirement (%)			
	Low Storage	Current Trend	High Storage
CRA Supplies	861,000	961,000	1,061,000
SWP Supplies	1,147,000	1,147,000	1,147,000
WSDM Transfers/Exchanges	40,000	40,000	40,000
Total Supplies	2,048,000	2,148,000	2,248,000
Total Demands and Losses	1,872,000	1,772,000	1,672,000
Net Water Supply and Demand Balance	176,000	376,000	576,000
2016 End-of-Year Storage Balance	1,087,000	1,287,000	1,487,000
2017 SWP Allocation Target	35%	25%	15%

Supply Assumptions

In all of the scenarios illustrated above, the SWP Table A Allocation and WSDM Transfer/Exchanges remain constant at 60 percent and 40 TAF respectively. The “Low Storage” scenario, reflects a reduction of 100 TAF in the Base supplies available to Metropolitan on the CRA due to higher priority users having high Colorado River water use this year. The “High Storage” scenario increases these Base supplies by a like amount making the assumption that the higher priority users have lower Colorado River water use this year. This range of +/- 100 TAF is within the CRA higher priority user’s historic observed water use record.

Demand Assumptions

In all of the scenarios illustrated above, the Los Angeles Aqueduct supplies are assumed to increase above 2015 delivery levels based on the improved hydrologic condition and input from the Los Angeles Department of Water and Power. All scenarios assume the current WSAP is lifted and not reinstated for 2016/17 resulting in an increase in groundwater replenishment deliveries in CY 2016 except in the “High Storage” scenario which assumes a wet Fall and therefore no additional ground water replenishment deliveries. In all scenarios except for the “Low Storage” it is assumed that the Governor’s conservation regulations are relaxed between June and

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October 2016 and not reinstated beyond October 2016. A net demand change of +/- 100 TAF is anticipated for the “Low Storage” and “High Storage” scenarios respectively as compared to the “Current Trend” scenario.

2016 Storage Balances and 2017 SWP Allocation Target

As shown in the table above the resulting end-of-year storage balances for CY 2016 range from approximately 1.1 - 1.5 MAF in the “Low Storage” to “High Storage” scenarios with approximately 1.3 MAF dry-year storage balance in the “Current Trend” scenario. Therefore, in all scenarios, it is anticipated that Metropolitan will add to its regional dry-year storage supplies this year. Given this range of end-of-year storage balances and assuming demands in CY 2017 are consistent with the current trend demand level and CRA supplies also remains consistent with CY 2016 levels, the required minimum CY 2017 SWP Table A allocation to maintain end-of-year 2017 storage balances at or above 1.0 MAF ranges from 15 to 35 percent.

Based on the analysis detailed in this report, Metropolitan will be adding to storage in all scenarios. As such, and as defined in the WSDM plan, Metropolitan is no longer in an “Extreme Shortage”.

In addition, the Initial CY 2017 SWP Table A Allocation is estimated to be between 20 to 35 percent based on projected end-of-year storage levels in Oroville and San Luis Reservoir. Given DWR’s conservative allocation approach, it is likely that the CY 2017 SWP allocation will increase from this estimated Initial Allocation range, making it more likely that storage balances can be maintained in CY 2017.

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2016 WSDM Storage Detail

WSDM Storage	1/1/2016 Storage Levels	CY 2016 Take Capacity*	CY 2016 Put Capacity	Total Capacity
Colorado River Aqueduct Delivery System	80,000	49,000	200,000	1,530,000
Lake Mead Extraordinary Conservation ICS	0	0	200,000	1,450,000
Drop 2 Reservoir and Yuma Desalting Plant	80,000	49,000	0	80,000
State Water Project System	432,000	264,000	600,000	1,898,000
MWD SWP Carryover	0	0	250,000	300,000
Castaic Lake (DWR Flex Storage)	30,000	30,000	124,000	154,000
Lake Perris (DWR Flex Storage)	0	0	65,000	65,000
Arvin Edison Storage Program	123,000	68,000	45,000	389,000
Semitropic Storage Program	128,000	116,000	40,000	350,000
Kern Delta Storage Program	120,000	50,000	35,000	250,000
Mojave Storage Program	31,000	0	41,000	390,000
In-Region Supplies and WSDM Actions	497,000	199,000	738,000	1,389,000
Diamond Valley Lake	315,000	125,000	495,000	810,000
Lake Mathews	141,000	63,000	41,000	182,000
Lake Skinner	34,000	4,000	10,000	44,000
IEUA/TVMWD (Chino Basin)	0	0	25,000	100,000
Long Beach (Cent. Basin)	0	0	3,000	13,000
Long Beach (Lakewood)	0	0	1,000	4,000
Foothill (Raymond and Monkhill)	0	0	2,000	9,000
MWDOC (Orange County Basin)	6,000	6,000	16,000	66,000
Three Valleys (Live Oak)	1,000	1,000	1,000	6,000
Three Valleys (Upper Claremont)	0	0	1,000	3,000
Western	0	0	3,000	12,000
Cyclic - Upper San Gabriel	0	5,000	100,000	100,000
Cyclic - Three Valleys	0	0	40,000	40,000
Other Programs	528,000	116,000	149,000	1,128,000
Other Emergency Storage	328,000	0	0	328,000
DWCV Advance Delivery Account	200,000	116,000	149,000	800,000
Total	1,537,000	628,000	1,687,000	5,945,000
Emergency	626,000	0	0	626,000
Total WSDM Storage**	911,000	628,000	1,687,000	5,319,000

*Take capacity assumed under a 60% SWP Table A Allocation.

**Total WSDM Storage level is subject to change based on accounting adjustments.