



• Water Surplus and Drought Management Plan

Summary

This is the last monthly report on developing demand and supply conditions for spring 2012. Staff will return in October with a summary of demand and supply conditions for calendar year (CY) 2012 and an accounting of actions taken under the Water Surplus and Drought Management Plan (WSDM). If between now and October there are significant changes we will update the Board.

On April 16, 2012, the Department of Water Resources increased the CY 2012 State Water Project (SWP) Table A allocation from 50 to 60 percent. The increase is due in part to favorable hydrologic conditions in the Northern Sierra during March and April. The 10 percent increase in SWP Table A allocation results in 191 TAF of additional supplies for Metropolitan. Under the current 60 percent Table A allocation, Metropolitan anticipates 1.172 million acre-feet (MAF) from the SWP system. Supplies from the Colorado River Aqueduct (CRA) system for CY 2012 are expected to total 905 (TAF). This brings the total water supply available to Metropolitan from both the SWP and CRA systems to 2.077 MAF, without using storage to augment supplies. Member agency demands, obligations, and losses are based on a modeled forecast of 2012 demands under a range of historical hydrologic conditions. The forecast accounts for actual deliveries in January through March and an estimate for April of 2012. The range represents approximately the middle 50 percent of all modeled outcomes. Currently, the range of agency demands, obligations and losses for CY 2012 is expected to be 1.694 to 1.958 MAF. The balance between currently allocated water supplies and estimated demands results in a range of potential storage activity in CY 2012. Based on currently allocated supplies and the range of projected demands, Metropolitan anticipates putting 383 TAF into storage under low demand conditions, and 119 TAF under high demand conditions.

2012 Supply and Demand Balance	Low Demand	High Demand
CRA Supply	905,000	905,000
SWP Supply	1,172,000	1,172,000
Total Supply	2,077,000	2,077,000
Member Agency Demand	1,694,000	1,958,000
Net to Storage	383,000	119,000

Attachments

[Attachment 1: WSDM Storage Levels](#)

Detailed Report

This report provides the Board with an update on developing WSDM conditions, and identifies potential actions that may be required to balance water supplies and demands. All data contained in this report is current as of April 24, 2012. The report is structured to show:

- current estimates of water supplies available to the service area from the CRA and SWP systems;
- current estimates of the range of total demands on Metropolitan, including member agency demands, obligations, and losses;

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- the amount of additional water supply need, or potential water available for storage, resulting from the balance between supplies and demands; and
- the capability of Metropolitan storage resources to manage the projected conditions.

Colorado River Aqueduct

The current estimate of CRA supplies for CY 2012 remains unchanged at 905 TAF. The CRA supplies consist of Metropolitan's Basic Apportionment (550 TAF), and other CRA supply programs such as the Palo Verde Irrigation District (PVID) Land Fallowing program.

2012 Colorado River Aqueduct Supply	
Basic Apportionment	550,000
IID/MWD Conservation Program	85,000
PVID Land Fallowing	77,000
Exchange with SDCWA (IID Transfer and Canal Lining)	171,000
Canal Lining Water to MWD	16,000
Lower Colorado Water Supply Project	6,000
Agricultural Adjustments	0
CRA Supply	905,000

State Water Project System

On April 16, 2012, the Department of Water Resources increased the CY 2012 State Water Project Table A allocation from 50 percent to 60 percent. The increase is due in part to favorable hydrologic conditions in the Northern Sierra during March and April. Precipitation in March was 230 percent of normal, making it the fifth wettest March in historical record. As of April 24, precipitation for the month of April has reached 120 percent the normal monthly total.

Under the current 60 percent Table A allocation, Metropolitan anticipates 1.172 million acre-feet (MAF) from the SWP system. This is an increase of 211 TAF from last month; 191 TAF of which results from the increase in the SWP Table A allocation, and 20 TAF is from an agreement with San Bernardino Valley Municipal Water District (SBVMWD). Since April 2001, Metropolitan and SBVMWD have had a standing agreement to assist in coordinating the use of facilities and SWP water supplies.

2012 State Water Project Supply	
Table A	1,147,000
Turn-Back Pool A	4,000
SBVMWD Minimum Purchase	20,000
Port Hueneme	1,000
SWP Supply	1,172,000

Demands, Obligations, and Losses

Member agency demands on Metropolitan include water deliveries to the member agencies, as well as water exchanged with the San Diego County Water Authority. Losses for 2012 are an estimate of Metropolitan distribution system losses of around 50 TAF. Currently, there are no outstanding obligations for 2012 that would place an additional demand for supplies on Metropolitan.

Member agency demands, obligations, and losses are based on a modeled forecast of 2012 demands under a range of historical hydrologic conditions. The forecast accounts for actual deliveries in January through March and an estimate for April of 2012. The range represents approximately the middle 50 percent of all modeled outcomes.

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Currently, the range of agency demands, obligations, and losses for CY 2012 is expected to be 1.694 to 1.958 MAF. This methodology also factors in anticipated changes in local supplies for CY 2012, as well as assumptions for near-term economic conditions.

2012 Member Agency Demand	Low	High
Member Agency Demand*	1,694,000	1,958,000

Supply and Demand Balance

Under the current SWP Table A allocation of 60 percent, the total estimated water supply from the CRA and SWP systems is 2.077 MAF. The current estimate of Metropolitan's demands, obligations, and losses ranges from 1.694 to 1.958 MAF. The balance between currently allocated water supplies and estimated demands results in a range of potential storage activity in CY 2012. Based on currently allocated supplies and the range of projected demands, Metropolitan anticipates putting 383 TAF into storage under low demand conditions, and 119 TAF under high demand conditions.

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Storage

Metropolitan's dry-year storage balance at the beginning of CY 2012 was approximately 2.368 MAF; this balance may be subject to accounting revisions over time. [Attachment 1](#) provides details on the storage balance and capacities of each of Metropolitan's storage programs.

Under the current 60 percent SWP allocation, Metropolitan's estimated capacity to deliver supplies into storage during CY 2012 is 672 TAF. There was a net increase in storage capacity of 17 TAF from last month; this is primarily due to the SWP Table A allocation increase which enables Metropolitan to increase its share of carryover storage. Given the estimated CY 2012 put capacity, Metropolitan would be able to store the entire 383 TAF of available supplies under the low demand range; increasing Metropolitan's dry-year storage balance to 2.751 MAF by the end of 2012. Under a high demand range, Metropolitan would store 119 TAF of available supplies; increasing Metropolitan's dry-year storage balance to 2.487 MAF. As water supply and demand conditions change throughout the year, the estimated end of year storage balance will be updated accordingly. The approved budget for FY 2012-13 provides funding to store available supplies under these forecasted conditions.

2012 WSDM Storage	1/1/2012 Storage Levels	CY 2012 Take Capacity*	CY 2012 Put Capacity*	Total Capacity
Colorado River Aqueduct Delivery System	403,000	403,000	200,000	1,590,000
Lake Mead Extraordinary Conservation ICS	313,000	313,000	200,000	1,500,000
Drop 2 Reservoir and Yuma Desalting Plant	90,000	90,000	0	90,000
State Water Project System	1,052,000	807,000	228,000	1,799,000
MWD SWP Carryover ¹	200,000	200,000	40,000	240,000
Article 14b Carryover ²	42,000	42,000	-42,000	0
Castaic Lake (DWR Flex Storage)	154,000	154,000	0	154,000
Lake Perris (DWR Flex Storage)	65,000	65,000	0	65,000
Arvin Edison Storage Program	166,000	75,000	60,000	350,000
Semitropic Storage Program	245,000	161,000	105,000	350,000
Kern Delta Storage Program	135,000	65,000	50,000	250,000
Mojave Storage Program	45,000	45,000	15,000	390,000
In-Region Supplies and WSDM Actions	996,000	704,000	91,000	1,491,000
Diamond Valley Lake	786,000	606,000	24,000	810,000
Lake Mathews	142,000	64,000	40,000	182,000
Lake Skinner	37,000	3,000	7,000	44,000
IEUA/TVMWD (Chino Basin)	0	0	0	100,000
Long Beach (Cent. Basin)	6,000	6,000	0	13,000
Long Beach (Lakewood)	1,000	1,000	0	4,000
Foothill (Raymond and Monkhill)	0	0	0	9,000
MWDOC (Orange County Basin)	17,000	17,000	16,000	66,000
Three Valleys (Live Oak)	2,000	2,000	0	6,000
Three Valleys (Upper Claremont)	1,000	1,000	1,000	3,000
Compton	0	0	0	2,000
Western	4,000	4,000	3,000	12,000
Cyclic - Upper San Gabriel	0	0	0	100,000
Cyclic - Three Valleys	0	0	0	40,000
Cyclic - Inland Empire Utilities Agency	0	0	0	100,000
Other Programs	543,000	151,000	153,000	1,134,000
Other Emergency Storage	334,000	0	0	334,000
DWCV Advance Delivery Account	209,000	151,000	153,000	800,000
Total	2,994,000	2,065,000	672,000	6,014,000
Emergency	626,000	0	0	0
Total WSDM Storage³	2,368,000	2,065,000	672,000	6,014,000

*Put and take capacity assumed under a 50% SWP Table A Allocation.

¹MWD SWP Carryover capacity is dependent on the SWP Table A Allocation. At 60% Table A allocation, Metropolitan can carryover 140,000 AF from 2012 into 2013. Metropolitan can also carryover 100 TAF of remaining 2011 supply into 2013.

²Article 14b Carryover must be withdrawn in 2012.

³Total WSDM Storage level is subject to change based on accounting adjustments.