



## ● Water Surplus and Drought Management Plan

### Summary

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This is the fifth monthly report on developing demand and supply conditions for calendar year (CY) 2012.

As of March 19, 2012, the State Water Project Table A allocation remains unchanged at 50 percent despite slightly improved hydrologic conditions last week. Under a 50 percent Table A allocation for CY 2012, Metropolitan anticipates 961 thousand acre-feet (TAF) from the SWP system; a 4 TAF increase from last month due to availability of SWP Turn-back Pool A water. 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 1.866 million acre-feet (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 and February and an estimate for March 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 1.657 to 1.963 MAF. The balance between currently allocated water supplies and estimated demands results in a range of potential storage activity in CY 2012. Under low demand conditions Metropolitan may be able to put 209 TAF into storage. Under high demand conditions Metropolitan may need to withdraw 97 TAF from storage.

2012 Supply and Demand Balance	Low Demand	High Demand
CRA Supply	905,000	905,000
SWP Supply	961,000	961,000
Total Supply	1,866,000	1,866,000
Member Agency Demand	1,657,000	1,963,000
<b>Net to Storage</b>	<b>209,000</b>	<b>-97,000</b>

### Attachments

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#### [Attachment 1: WSDM Storage Levels](#)

### Detailed Report

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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. 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;
- 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.

# Board Report (Water Surplus and Drought Management Plan)

## *Colorado River Aqueduct*

The current estimate of CRA supplies for CY 2012 remains unchanged at 905 TAF. 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.

<b>2012 Colorado River Aqueduct Supply</b>	
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
<b>CRA Supply</b>	<b>905,000</b>

## *State Water Project System*

As of March 19, 2012, the State Water Project Table A allocation remains unchanged at 50 percent despite of slightly improved hydrologic conditions. Under a 50 percent Table A allocation for CY 2012, Metropolitan anticipates 961 TAF from the SWP system; a 4-TAF increase from last month due to availability of SWP Turn-back Pool A water. Turn-back Pool A is water that is not needed by some State Water Contractors and is made available for others to purchase. The total from the SWP system includes 1 TAF from the Port Hueneme transfer agreement.

<b>2012 State Water Project Supply</b>	
Table A	956,000
Turn-Back Pool A	4,000
Port Hueneme	1,000
<b>SWP Supply</b>	<b>961,000</b>

## *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 (SDCWA). 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 and February and an estimate for March 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 1.657 to 1.963 MAF. This methodology also factored in anticipated changes in local supplies for CY 2012, as well as assumptions for near-term economic conditions.

<b>2012 Member Agency Demand</b>	<b>Low</b>	<b>High</b>
Member Agency Demand	<b>1,657,000</b>	<b>1,963,000</b>

# Board Report (Water Surplus and Drought Management Plan)

## *Supply and Demand Balance*

Under the current SWP Table A allocation of 50 percent, the total estimated water supply from the CRA and SWP systems is 1.866 MAF. The total of Metropolitan's estimated demands, obligations, and losses is between 1.657 and 1.963 MAF. The balance between currently allocated water supplies and estimated demands results in a range of potential storage activity in CY 2012. Under low demand conditions Metropolitan may be able to put 209 TAF into storage. Under high demand conditions Metropolitan may need to withdraw 97 TAF from storage.

<b>2012 Supply and Demand Balance</b>	<b>Low Demand</b>	<b>High Demand</b>
CRA Supply	905,000	905,000
SWP Supply	961,000	961,000
<b>Total Supply</b>	<b>1,866,000</b>	<b>1,866,000</b>
Member Agency Demand	1,657,000	1,963,000
<b>Net to Storage</b>	<b>209,000</b>	<b>-97,000</b>

## *Storage*

Metropolitan's dry-year storage balance at the beginning of CY 2012 was approximately 2.368 MAF. This balance can 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 50 percent SWP allocation, Metropolitan's estimated capacity to deliver supplies into storage during CY 2012 is 655 TAF. There is an 8 TAF decrease in storage capacity created due to accounting reconciliation for the DWCV Advance Delivery Account. Given the estimated CY 2012 put capacity, Metropolitan would be able to store the entire 209 TAF of available supplies under the low demand range; increasing Metropolitan's dry-year storage balance to 2.577 MAF by the end of 2012. Conversely, on the high demand range, Metropolitan would withdraw 97 TAF of available supplies; decreasing Metropolitan's dry-year storage balance to 2.271 MAF. As water supply and demand conditions change throughout the year, the estimated end of year storage balance will be updated accordingly.

## *Key Considerations*

On February 21, DWR announced a reduction of the SWP Table A allocation from 60 percent to 50 percent. On February 29, DWR released updated allocation studies which indicate that continued dry conditions could result in further SWP allocation reductions. Since that time, hydrologic conditions on the SWP have improved. As of March 19, the Northern Sierra 8-Station Index had received an additional 11 inches of precipitation; more than 160 percent of the average monthly total for March. Staff will continue to monitor conditions affecting SWP supplies, and will report to the Board on any changes.

2012 WSDM Storage	1/1/2012 Storage Levels	CY 2012 Take Capacity*	CY 2012 Put Capacity*	Total Capacity
<b>Colorado River Aqueduct Delivery System</b>	<b>403,000</b>	<b>403,000</b>	<b>200,000</b>	<b>1,590,000</b>
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
<b>State Water Project System</b>	<b>1,052,000</b>	<b>807,000</b>	<b>188,000</b>	<b>1,714,000</b>
MWD SWP Carryover <sup>1</sup>	200,000	200,000	0	200,000
Article 14b Carryover <sup>2</sup>	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	345,000
<b>In-Region Supplies and WSDM Actions</b>	<b>996,000</b>	<b>704,000</b>	<b>91,000</b>	<b>1,491,000</b>
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
<b>Other Programs</b>	<b>543,000</b>	<b>128,000</b>	<b>176,000</b>	<b>1,134,000</b>
Other Emergency Storage	334,000	0	0	334,000
DWCV Advance Delivery Account	209,000	128,000	176,000	800,000
<b>Total</b>	<b>2,994,000</b>	<b>2,042,000</b>	<b>655,000</b>	<b>5,929,000</b>
Emergency	626,000	0	0	0
<b>Total WSDM Storage<sup>3</sup></b>	<b>2,368,000</b>	<b>2,042,000</b>	<b>655,000</b>	<b>5,929,000</b>

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

<sup>1</sup>MWD SWP Carryover capacity is dependent on the SWP Table A Allocation. At 50% Table A allocation, Metropolitan can carryover 100,000 AF from 2012 into 2013. Metropolitan can also carryover 100 TAF of remaining 2011 supply into 2013.

<sup>2</sup>Article 14b Carryover must be withdrawn in 2012.

<sup>3</sup>Total WSDM Storage level is subject to change based on accounting adjustments.