



### • Water Surplus and Drought Management Plan

#### Summary

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

On February 21, 2012, the California Department of Water Resources reduced the SWP Table A allocation from 60 to 50 percent due to the below average precipitation to-date. Under a 50 percent Table A allocation for CY 2012, Metropolitan anticipates 957 thousand acre-feet (TAF) from the SWP system; a 191 TAF decrease from last month. Supplies from the Colorado River Aqueduct (CRA) system for CY 2012 are expected to total 905 thousand acre-feet (TAF). This brings the total water supply available to Metropolitan from both the SWP and CRA systems to 1.862 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 adjusted to account for actual deliveries in January and February 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 1.658 to 1.972 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 204 TAF into storage. Under high demand conditions Metropolitan may need to withdraw 110 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	957,000	957,000
Total Supply	1,862,000	1,862,000
Member Agency Demand	1,658,000	1,972,000
<b>Net to Storage</b>	<b>204,000</b>	<b>-110,000</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 is 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. Projected supplies from the CRA system have not changed since last month.

<b>2012 Colorado River Aqueduct Supply</b>	
Basic Apportionment	550,000
IID/MWD Conservation Program	85,000
PVID Land Fallowing	77,000
Transfer to 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*

On February 23, 2012, the California Department of Water Resources reduced the SWP Table A allocation from 60 to 50 percent due to the below average precipitation to date. Under a 50 percent Table A allocation for CY 2012, Metropolitan anticipates 957 thousand acre-feet (TAF) from the SWP system; a 191 TAF decrease from last month. This total includes 1 TAF from the Port Hueneme transfer agreement.

<b>2012 State Water Project Supply</b>	
Table A	956,000
Port Hueneme	1,000
<b>SWP Supply</b>	<b>957,000</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 adjusted to account for actual deliveries in January and February 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 1.658 to 1.972 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>1,658,000</b>	<b>1,972,000</b>

\* Middle 50 percent of model outcomes based on a range of historical hydrologic impacts with adjustments for January and February 2012 actuals, near-term local supply and economic conditions.

## 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 1.862 MAF. The 10 percent reduction in SWP Table A allocation reduces Metropolitan's estimated water supply by 191 TAF. The total of Metropolitan's estimated demands, obligations, and losses is between 1.658 and 1.972 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 204 TAF into storage. Under high demand conditions Metropolitan may need to withdraw 110 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	957,000	957,000
Total Supply	1,862,000	1,862,000
Member Agency Demand	1,658,000	1,972,000
<b>Net to Storage</b>	<b>204,000</b>	<b>-110,000</b>

### *Storage*

Metropolitan's dry-year storage balance at the beginning of CY 2012 is currently estimated to have been 2.368 MAF, an increase of 10 TAF from last month due to accounting adjustments. [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 663 TAF. Since last month, there is a net increase of 128 TAF in storage capacity created from operational changes in MWD SWP Carryover and the DWCV Advance Delivery Account. Given the estimated CY 2012 put capacity, Metropolitan would be able to store the entire 204 TAF of available supplies under the low demand range; increasing Metropolitan's dry-year storage balance to 2.572 MAF by the end of 2012. Conversely, on the high demand range, Metropolitan would withdraw 110 TAF of available supplies; decreasing Metropolitan's dry-year storage balance to 2.258 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. Staff will continue to monitor and report on conditions affecting SWP supplies as the year progresses.

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>1,060,000</b>	<b>807,000</b>	<b>188,000</b>	<b>1,429,000</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	167,000	75,000	60,000	350,000
Semitropic Storage Program	245,000	161,000	105,000	350,000
Kern Delta Storage Program	142,000	65,000	50,000	250,000
Mojave Storage Program	45,000	45,000	15,000	60,000
<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>535,000</b>	<b>120,000</b>	<b>184,000</b>	<b>1,134,000</b>
Other Emergency Storage	334,000	0	0	334,000
DWCV Advance Delivery Account	201,000	120,000	184,000	800,000
<b>Total</b>	<b>2,994,000</b>	<b>2,034,000</b>	<b>663,000</b>	<b>5,644,000</b>
Emergency	626,000	0	0	0
<b>Total WSDM Storage<sup>3</sup></b>	<b>2,368,000</b>	<b>2,034,000</b>	<b>663,000</b>	<b>5,644,000</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.