



# Report Water Resource Management Group

## ● Water Surplus and Drought Management Update Conditions as of 5/26/2020

### Summary

This report provides a preliminary accounting of water supply, demand, and storage conditions for calendar year (CY) 2020. Based on conditions as of May 26, 2020, Metropolitan has ample dry-year storage available to satisfy a projected supply/demand gap for 2020 which has been reduced by 107 thousand acre-feet since last month's reporting.

On May 22, 2020, the Department of Water Resources (DWR) increased the State Water Project (SWP) allocation from 15 percent to 20 percent due to storms that brought above average precipitation in the Northern Sierra in May. The precipitation for the water year to date, however, remains below normal at 63 percent. While precipitation in the Upper Colorado River Basin is below normal at 83 percent of average, the Lower Basin experienced above normal precipitation. As a result, the agricultural water use is tracking lower than originally projected by the United States Bureau of Reclamation and will likely lead to increased water supply for Metropolitan.

The supply/demand gap projection for CY 2020 reduced to 234 thousand acre-feet. This supply/demand gap is based on a current demand estimate of 1.64 million acre-feet, the increased SWP allocation, and the Colorado River Aqueduct (CRA) supply estimate. Metropolitan is implementing modest dry-year WSDM actions to satisfy the projected supply/demand gap.

### Purpose

Informational

### Attachments

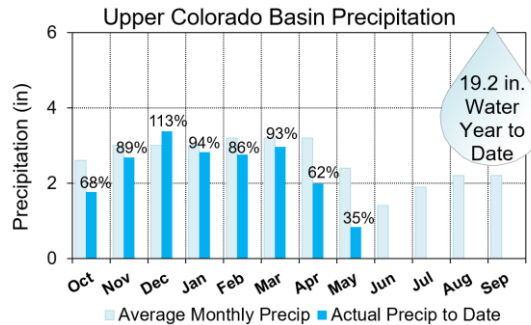
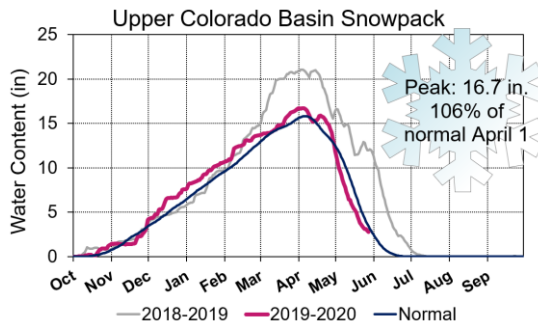
- Attachment 1: Projected 2020 WSDM Storage Detail (20% SWP allocation)
- Attachment 2: Agreements to Exchange or Return Stored Water and Cyclic Program Balances

### Detailed Report

This Water Surplus and Drought Management (WSDM) report provides an overview of developing hydrologic conditions and estimated water supply and demand conditions for CY 2020.

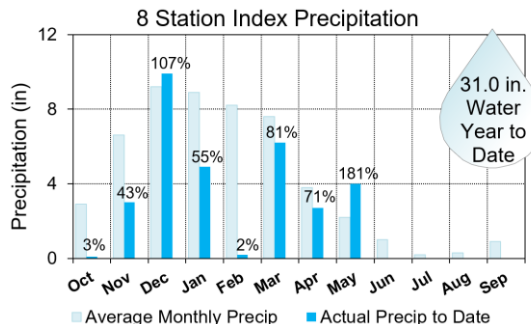
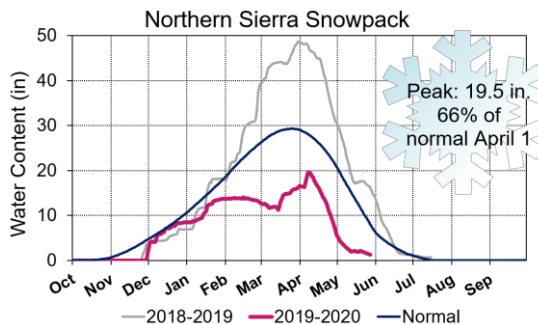
## HYDROLOGIC CONDITIONS

### Upper Colorado River Basin



- Snowpack peaked at 106% of the April 1 average.
- Precipitation measured 19.2 inches or 83% of normal water year to date.

### Sacramento River Basin



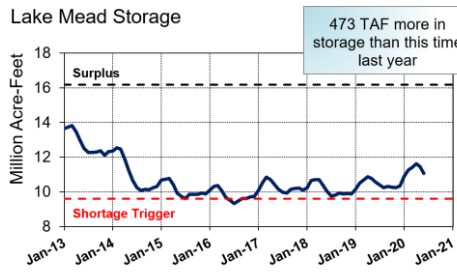
- Snowpack peaked at 66% of April 1 average.
- Precipitation measured 31.0 inches or 63% of normal water year to date.
- May storms delivered 181% of average in the Northern Sierra for this time of year.

CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
PVID Fallowing Program	50,000
Exchange w/ SDCWA (IID/Canal Lining)	270,000
Exchange w/ USBR (San Luis Rey Tribe)	16,000
Lower Colorado Water Supply Project	9,000
Bard Seasonal Fallowing Program	5,000
Higher Priority Water Use Adjustment <sup>1</sup>	0
<b>Total CRA Supplies</b>	<b>1,005,000</b>

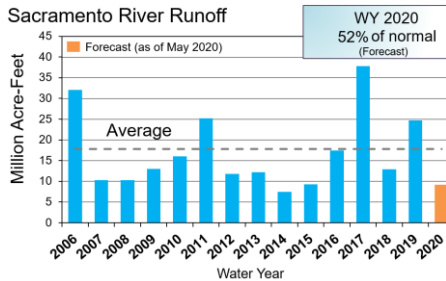
<sup>1</sup> Metropolitan closely monitors agricultural water use which is tracking lower than USBR's projections. This will likely lead to increased water supply for Metropolitan and will be reflected at the end of the year.

SWP Supplies	Acre-Feet
Table A (20% SWP allocation)	382,000
Article 21	0
Port Hueneme <sup>1</sup>	0
SWP Transfers	15,000
<b>Total SWP Supplies</b>	<b>397,000</b>
<b>Total Supplies (CRA + SWP)</b>	<b>1,402,000</b>
<b>(Prior to storage actions)</b>	

<sup>1</sup> Rounded to the nearest thousand. Supply is 370 AF.



- Lake Mead storage is currently at 11.07 MAF (elevation 1092.45 feet). The May United States Bureau of Reclamation projections show Lake Mead end of CY 2020 storage to be 10.55 MAF (elevation 1086.38 feet) which is above the shortage trigger.



**SWP Allocation 20%**

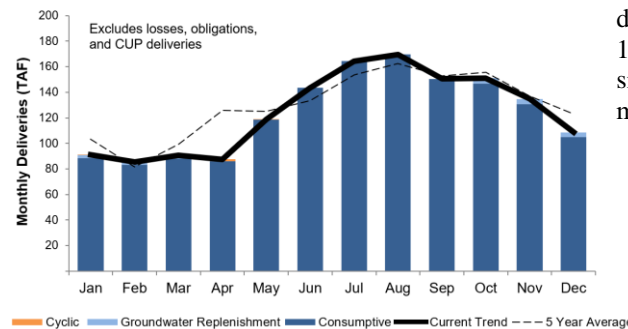
- DWR increased the SWP allocation from 15 percent to 20 percent due to May storms that brought above average precipitation in the Northern Sierra.

2020 WATER DEMANDS

Current Demand	Acre-Feet
Member Agency Consumptive <sup>1</sup>	1,485,000
Member Agency Replenishment	18,000
Coachella Valley Water District Agreement	50,000
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	65,000
Cyclic Deliveries	2,000
<b>Total Demands</b>	<b>1,636,000</b>

<sup>1</sup> Includes exchange w/ SDCWA (IID/Canal Lining) and CUP sales.

2020 Demand Estimate



- The 2020 projection of member agency demands of 1,636,000 AF is similar to last month's projection.

MANAGING SUPPLIES AND DEMANDS

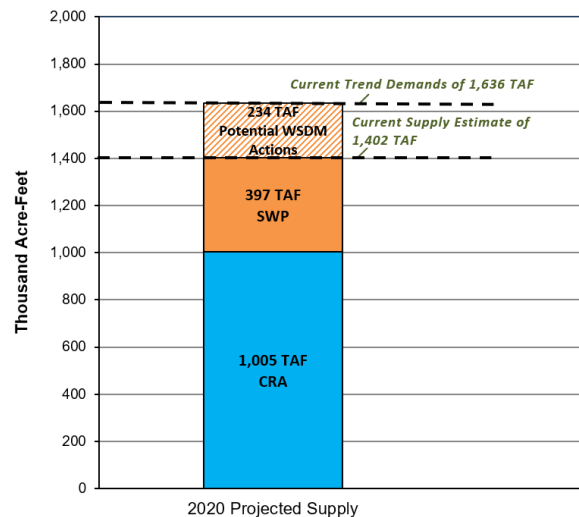
Supply/Demand Balance	Acre-Feet
Total Supplies	1,402,000
Total Demands	1,636,000
<b>Current Balance Estimate</b>	<b>-234,000</b>

WSDM Strategies/Actions

- Dry-Year WSDM Actions:** Metropolitan will satisfy the projected supply/demand gap primarily with takes from its record dry-year storage balance. With the increased SWP allocation, Metropolitan will coordinate with its SWP Banking Program partners to reduce takes for the remainder of the year.
- 2019 Supply Management:** A portion of Metropolitan's SWP water supply was not delivered due to conveyance constraints in 2019. Metropolitan has secured 34 TAF of these supplies for delivery in 2020.
- SWP Transfer Supplies:** Metropolitan is purchasing approximately 22 TAF of Yuba Accord surface water transfer supplies. After factoring in for losses, this results in 15 TAF of supplies to Metropolitan.

Date of Report: June 9, 2020

Balancing Supply and Demand



## 2020 WSDM Storage Detail

WSDM Storage	1/1/2020 Estimated Storage Levels	CY 2020 Take Capacity <sup>1</sup>	2020 Total Storage Capacity
<b>Colorado River Aqueduct Delivery System</b>	<b>979,000</b>	<b>0</b>	<b>1,714,000</b>
Lake Mead ICS	979,000 <sup>2</sup>	0 <sup>3</sup>	1,714,000 <sup>4</sup>
<b>State Water Project System</b>	<b>1,193,000</b>	<b>647,000</b>	<b>1,879,000</b>
MWD SWP Carryover <sup>5</sup>	297,000	297,000	350,000
DWCV SWP Carryover <sup>5</sup>			
MWD Articles 14(b) and 12(e)	34,000	34,000	N/A
Castaic Lake (DWR Flex Storage)	154,000	154,000	154,000
Lake Perris (DWR Flex Storage)	65,000	65,000	65,000
Arvin Edison Storage Program	143,000	0 <sup>6</sup>	350,000
Semitropic Storage Program	265,000	43,000	350,000
Kern Delta Storage Program	189,000	40,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	14,000	30,000
<b>In-Region Supplies and WSDM Actions</b>	<b>1,044,000</b>	<b>634,000</b>	<b>1,246,000</b>
Diamond Valley Lake	796,000	539,000	810,000
Lake Mathews and Lake Skinner	190,000	79,000	226,000
Conjunctive Use Programs (CUP) <sup>7</sup>	58,000	16,000	210,000
<b>Other Programs</b>	<b>677,000</b>	<b>94,000</b>	<b>1,181,000</b>
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	296,000	94,000	800,000
<b>Total</b>	<b>3,893,000</b>	<b>1,375,000</b>	<b>6,020,000</b>
Emergency	750,000	0	750,000
<b>Total WSDM Storage (AF)<sup>8</sup></b>	<b>3,143,000</b>	<b>1,375,000</b>	<b>5,270,000</b>

<sup>1</sup> Take capacity assumed under a 20% SWP Table A Allocation. Storage program losses included where applicable.

<sup>2</sup> Reflects USBR's final accounting for 2019, released in May 2020.

<sup>3</sup> No additional aqueduct capacity for the remainder of the year to move ICS supplies given current maintenance activities and current CRA supply estimate.

<sup>4</sup> Reflects Metropolitan making 25 TAF of ICS accumulation space available for use by Contractors in Arizona per the Lower Basin Drought Contingency Plan Agreement.

<sup>5</sup> Total Storage Capacity varies year to year based on prior year remaining balance added to current year contractual limits.

<sup>6</sup> Take amounts could depend on exchange capabilities.

<sup>7</sup> Total of all CUP programs including IEUA/TVMWD (Chino Basin); Long Beach (Central Basin); Long Beach (Lakewood); Foothill (Raymond and Monk Hill); MWDOC (Orange County Basin); Three Valleys (Live Oak); Three Valleys (Upper Claremont); and Western.

<sup>8</sup> Total WSDM Storage level subject to change based on accounting adjustments.

## Agreements to Exchange or Return Stored Water

	<b>Future Returns</b>
Unbalanced Exchanges with Other SWP Contractors <sup>1</sup>	0 <sup>2</sup>
California ICS Agreement – IID <sup>3</sup>	168,000
Storage and Interstate Release Agreement with Southern Nevada Water Authority <sup>4</sup>	330,000
<b>Total (AF)</b>	<b>498,000</b> <sup>5</sup>

<sup>1</sup> This includes water managed within Metropolitan's service area for Dudley Ridge Water District, a SWP contractor. The obligation is part of an unbalanced exchange under the MWDOC/IRWD Coordinated Operating Agreement. This water is to be returned by December 31, 2022.

<sup>2</sup> Rounded to the nearest thousand. Remaining balance of approximately 300 AF.

<sup>3</sup> IID can request return in any year, conditional on whether or not Metropolitan is implementing a Water Supply Allocation Plan.

<sup>4</sup> Up to 30,000 AF per year beginning no earlier than 2022.

<sup>5</sup> Subject to change based on accounting adjustments.

## Cyclic Program Activity

CY	Starting Balance (AF)	CY Actions (AF)				Ending Balance (AF)
		Cyclic Pre-Delivery	Cyclic Cost-Offset Pre-Delivery	Total Pre-Delivery	Scheduled Sale	
2019	50,000	147,000	19,000	166,000	90,000	126,000
2020 <sup>1</sup>	126,000	2,000 <sup>2</sup>	0	2,000	33,000	95,000

<sup>1</sup> Projected cyclic program activity for the year. Subject to change.

<sup>2</sup> This amount includes deliveries to complete cyclic orders made in 2019 and to support maintenance to maintain water quality goals.