



# Report Water Resource Management Group

## ● Water Surplus and Drought Management Update *Conditions as of 3/30/2020*

### Summary

This report provides a preliminary accounting of water supply, demand, and storage conditions for calendar year (CY) 2020. This report considers conditions as of March 30, 2020.

Storms in March provided some relief in northern California but snowpack and precipitation totals are still below normal for the year. The Northern Sierra snowpack and precipitation both measured below normal at 56 percent. Because of the overall dry conditions, the State Water Project (SWP) allocation remains at 15 percent. Although it is still possible for the SWP allocation to increase, it is becoming less likely as we move through spring and beyond the primary precipitation-producing months in California. As for the Upper Colorado River Basin, precipitation measured slightly below normal at 91 percent, while the snowpack measured above normal at 108 percent.

A supply gap of 380 thousand acre-feet is currently projected for CY 2020. This supply gap is based on a current demand estimate of 1.67 million acre-feet, the 15 percent SWP allocation, and the Colorado River Aqueduct (CRA) supply estimate. Metropolitan is implementing dry-year WSDM actions to satisfy the supply gap. In addition to operational actions that maximize water deliveries from available sources, Metropolitan will initiate takes from the SWP Banking Programs. Metropolitan has ample dry-year storage available to satisfy the supply gap for 2020.

### Purpose

Informational

### Attachments

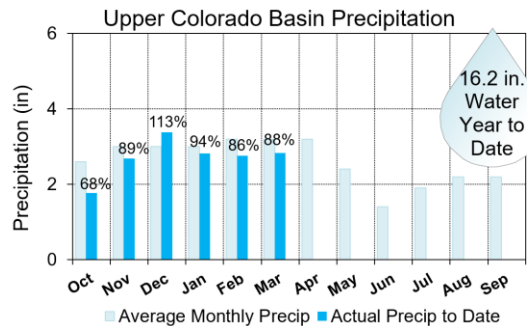
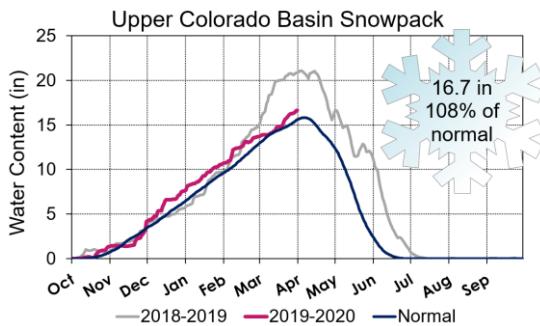
- Attachment 1: Projected 2020 WSDM Storage Detail (15% SWP allocation)
- Attachment 2: Agreements to Exchange or Return Stored Water and Cyclic Program Balances

### 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.

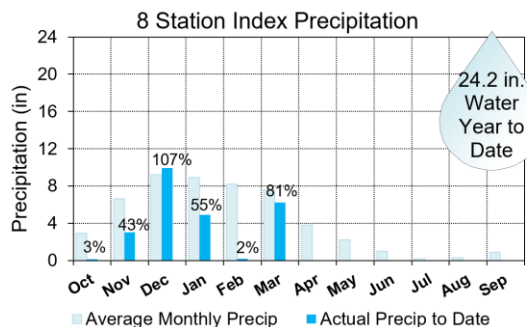
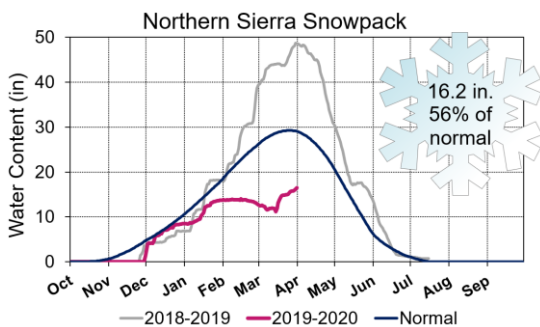
## HYDROLOGIC CONDITIONS

### Upper Colorado River Basin



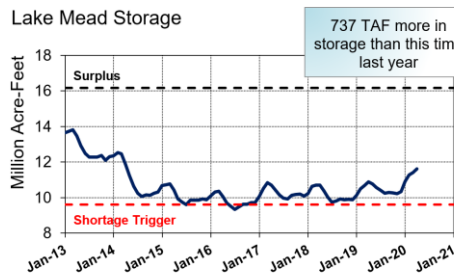
- Snowpack measured roughly 108 percent of normal.
- Precipitation measured 16.2 inches or 91% of normal to date.

### Sacramento River Basin



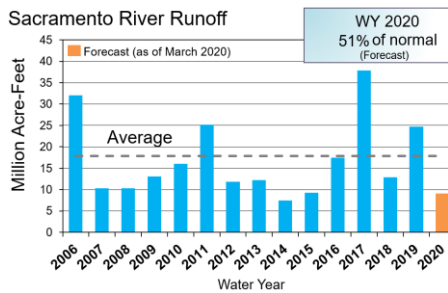
- March storms boosted snowpack but still below normal.
- Precipitation measured 24.2 inches or 56% of normal to date.

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	0
<b>Total CRA Supplies</b>	<b>1,005,000</b>



- Metropolitan’s Lake Mead ICS beginning of calendar year 2020 account balance was reduced by roughly 14 TAF to reflect the Lower Basin Drought Contingency Plan Agreement provisions relating to system and evaporation assessments. Final accounting will be completed in mid-May.

SWP Supplies	Acre-Feet
Table A (15% SWP allocation)	287,000
Article 21	0
Port Hueneme <sup>1</sup>	0
<b>Total SWP Supplies</b>	<b>287,000</b>
<b>Total Supplies (CRA + SWP)</b>	<b>1,292,000</b>
<b>(Prior to storage actions)</b>	



**SWP Allocation 15%**

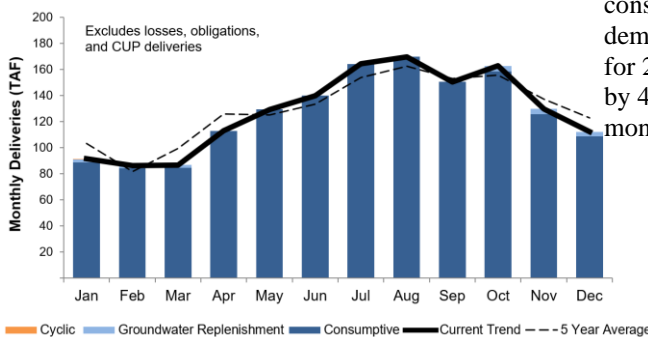
- Further increases to the allocation are still possible should hydrologic conditions in northern California improve, however it is becoming less likely as we move beyond the primary precipitation-producing months.

<sup>1</sup> Rounded to the nearest thousand. Supply is 278 AF.

2020 WATER DEMANDS

Current Demand	Acre-Feet
Member Agency Consumptive <sup>1</sup>	1,527,000
Member Agency Replenishment	18,000
Coachella Valley Water District Agreement	50,000
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	60,000
Cyclic Deliveries <sup>2</sup>	1,000
<b>Total Demands</b>	<b>1,672,000</b>

2020 Demand Estimate



- The member agency consumptive demand projection for 2020 increased by 40 TAF since last month.

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

<sup>2</sup> These deliveries complete cyclic orders made in 2019.

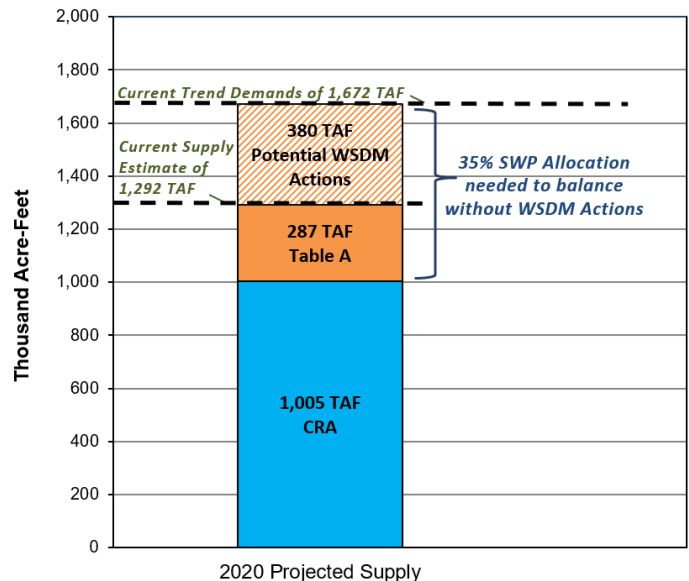
MANAGING SUPPLIES AND DEMANDS

Supply/Demand Balance	Acre-Feet
Total Supplies	1,292,000
Total Demands	1,672,000
<b>Current Balance Estimate</b>	<b>-380,000</b>

WSDM Strategies/Actions

- SWP Banking Programs:** Metropolitan will satisfy a potential supply gap with takes from its record dry-year storage balance. Metropolitan is coordinating with its SWP Banking Program partners to maximize 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 is working with DWR to obtain approval to take delivery of that supply in 2020.
- SWP 2019-2020 Carryover:** Metropolitan is closely monitoring San Luis Reservoir levels to safeguard carryover supplies. At this time, it is unlikely that San Luis will fill.
- Cyclic Deliveries:** Ceased until further notice.

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>980,000</b>	<b>0</b>	<b>1,739,000</b>
Lake Mead ICS	980,000 <sup>2</sup>	0 <sup>3</sup>	1,739,000
<b>State Water Project System</b>	<b>1,159,000</b>	<b>618,000</b>	<b>1,879,000</b>
MWD SWP Carryover <sup>4</sup>			
DWCV SWP Carryover <sup>4</sup>	297,000	297,000	350,000
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>5</sup>	350,000
Semitropic Storage Program	265,000	46,000	350,000
Kern Delta Storage Program	189,000	45,000	250,000
Mojave Storage Program	19,000	4,000	330,000
AVEK Storage Program	27,000	7,000	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>6</sup>	58,000	16,000	210,000
<b>Other Programs</b>	<b>677,000</b>	<b>83,000</b>	<b>1,181,000</b>
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	296,000	83,000	800,000
<b>Total</b>	<b>3,860,000</b>	<b>1,335,000</b>	<b>6,045,000</b>
Emergency	750,000	0	750,000
<b>Total WSDM Storage (AF) <sup>7</sup></b>	<b>3,110,000</b>	<b>1,335,000</b>	<b>5,295,000</b>

<sup>1</sup> Take capacity assumed under a 15% SWP Table A Allocation. Storage program losses included where applicable.

<sup>2</sup> Adjusted downward by 14,096 AF to reflect the true-up assessments for ICS created in 2016, 2017, and 2018 to bring the total assessed loss for each year up to 10% per the Lower Basin Drought Contingency Plan Agreement.

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

<sup>5</sup> Take amounts could depend on exchange capabilities.

<sup>6</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>7</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	49,000	144,000	19,000	163,000	90,000	122,000
2020 <sup>1</sup>	122,000	1,000 <sup>2</sup>	0	1,000	33,000	90,000

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

<sup>2</sup> These deliveries reflect completion of cyclic orders made in 2019.