



# Report Water Resource Management Group

## ● Water Surplus and Drought Management Update *Conditions as of 12/28/2020*

### Summary

This report provides a preliminary accounting of water supply, demand, and storage conditions for calendar year (CY) 2021. This report considers conditions as of December 28, 2020.

Based on the Department of Water Resources' latest allocation study, dated December 22, 2020, the State Water Project (SWP) allocation remains at 10 percent for CY 2021. The low allocation reflects the dry start of the water year in northern California and low storage levels in the SWP reservoirs. Storms in December brought some snow, such that the Northern Sierra snowpack measured 56 percent of normal. As for the Upper Colorado River Basin, snowpack measured 73 percent of normal.

It is early in the water year and a wide range of supply and demand balances remain possible. A supply/demand gap of 368,000 acre-feet is currently projected given a preliminary demand estimate of 1.57 million acre-feet, the 10 percent SWP allocation, and the Colorado River Aqueduct (CRA) supply estimate. Assuming no changes to the CRA supply and preliminary demand estimate, a final SWP allocation of 30 percent would be required to balance supply and demand without WSDM actions. Increases to the SWP allocation are possible and will depend on future hydrologic conditions. Should the allocation remain low, Metropolitan has WSDM actions it can implement including drawing on dry-year storage to satisfy any potential supply/demand gap for 2021.

### Purpose

Informational

### Attachments

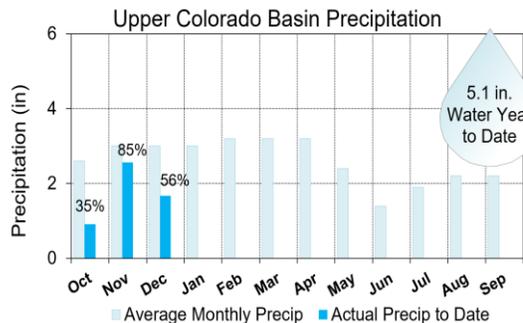
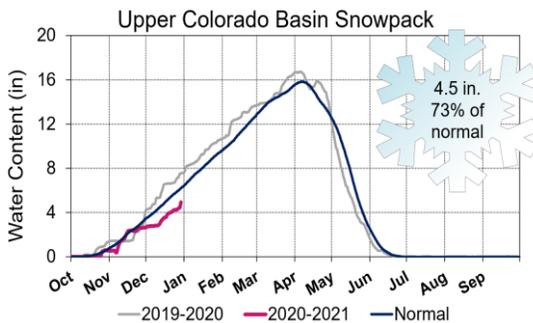
- Attachment 1: Projected 2021 WSDM Storage Detail (10 percent SWP allocation)
- Attachment 2: Agreements to Exchange or Return Stored Water and Cyclic Program Balances

### 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 2021.

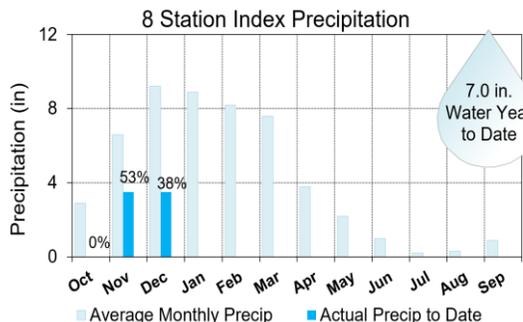
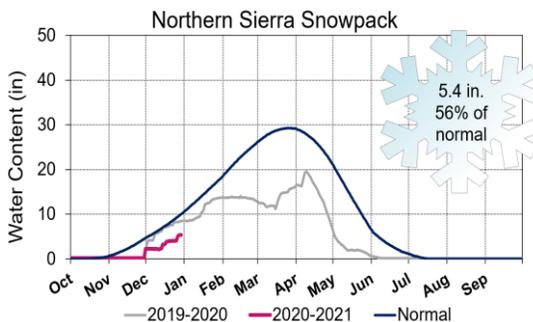
## HYDROLOGIC CONDITIONS

### Upper Colorado River Basin



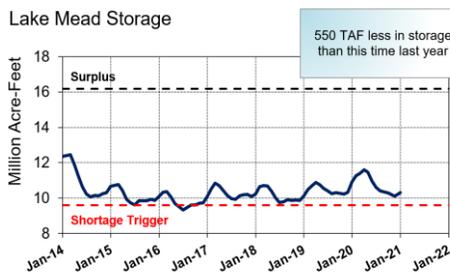
- Snowpack measured 73 percent of normal.
- Precipitation measured 5.1 inches or 62 percent of normal water year to date.

### Sacramento River Basin



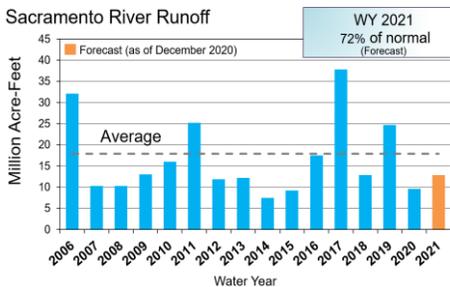
- Snowpack measured 56 percent of normal.
- Precipitation measured 7.0 inches or 39 percent of normal water year to date.

CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
PVID Fallowing Program	40,000
Exchange w/ SDCWA (IID/Canal Lining)	283,000
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>1,008,000</b>



- Lake Mead storage is currently at 10.31 MAF (elevation 1083.57 feet).

SWP Supplies	Acre-Feet
Table A (10% SWP allocation)	191,000
Article 21	0
Port Hueneme <sup>1</sup>	0
SWP Transfers	0
<b>Total SWP Supplies</b>	<b>191,000</b>
<b>Total Supplies (CRA + SWP)</b>	<b>1,199,000</b>
<b>(Prior to storage actions)</b>	



**SWP Allocation 10%**

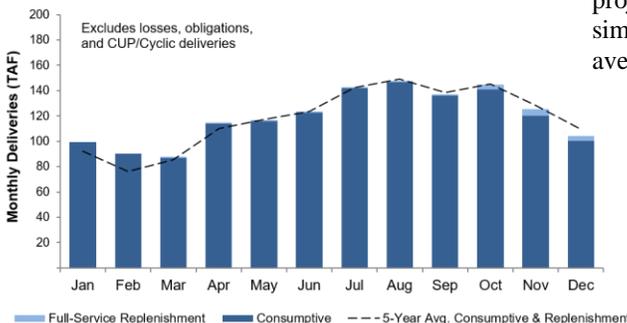
- Further increases to the allocation are still possible should hydrologic conditions in northern California improve.

<sup>1</sup> Rounded to the nearest thousand. Supply is 185 AF.

2021 WATER DEMANDS

Current Demand	Acre-Feet
Member Agency Consumptive <sup>1</sup>	1,432,000
Member Agency Replenishment	19,000
Coachella Valley Water District Agreement	50,000
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	50,000
Cyclic Deliveries	0
<b>Total Demands</b>	<b>1,567,000</b>

2021 Demand Estimate



- CY 2021 demand projections are similar to the 5-year average.

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

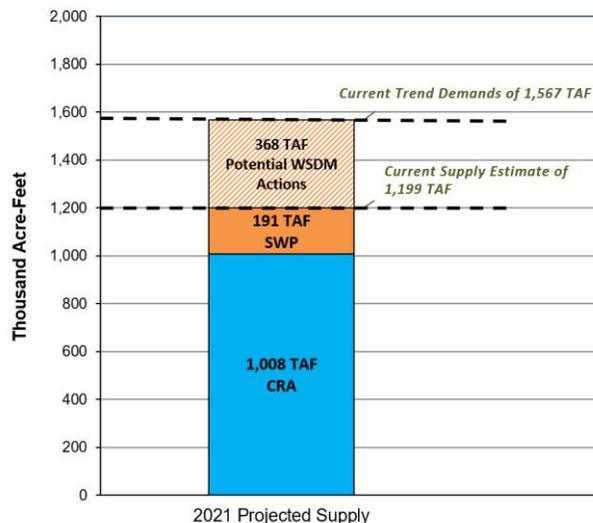
MANAGING SUPPLIES AND DEMANDS

Supply/Demand Balance	Acre-Feet
Total Supplies	1,199,000
Total Demands	1,567,000
<b>Current Balance Estimate</b>	<b>-368,000</b>

WSDM Strategies/Actions

- **Dry-Year WSDM Actions:** Metropolitan is monitoring supply development and updated demand projections. Appropriate WSDM actions will be taken to satisfy any supply/demand gap.

Balancing Supply and Demand



## 2021 WSDM Storage Detail

WSDM Storage	1/1/2021 Estimated Storage Levels	CY 2021 Take Capacity <sup>1</sup>	2021 Total Storage Capacity
<b>Colorado River Aqueduct Delivery System</b>	<b>1,292,000</b>	<b>242,000</b>	<b>1,657,000</b>
Lake Mead ICS	1,292,000	242,000 <sup>2</sup>	1,657,000
<b>State Water Project System</b>	<b>1,053,000</b>	<b>507,000</b>	<b>1,879,000</b>
MWD SWP Carryover <sup>3</sup>	208,000	208,000	350,000
DWCV SWP Carryover <sup>3</sup>			
MWD Articles 14(b) and 12(e)	0	0	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	142,000	0 <sup>4</sup>	350,000
Semitropic Storage Program	261,000	45,000	350,000
Kern Delta Storage Program	177,000	35,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	0	30,000
<b>In-Region Supplies and WSDM Actions</b>	<b>870,000</b>	<b>491,000</b>	<b>1,246,000</b>
Diamond Valley Lake	704,000	447,000	810,000
Lake Mathews and Lake Skinner	127,000	14,000	226,000
Conjunctive Use Programs (CUP) <sup>5</sup>	39,000	30,000	210,000
<b>Other Programs</b>	<b>694,000</b>	<b>64,000</b>	<b>1,181,000</b>
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	313,000	64,000	800,000
<b>Total</b>	<b>3,909,000</b>	<b>1,304,000</b>	<b>5,963,000</b>
Emergency	750,000	0	750,000
<b>Total WSDM Storage (AF) <sup>6</sup></b>	<b>3,159,000</b>	<b>1,304,000</b>	<b>5,213,000</b>

<sup>1</sup> Take capacity assumed under a 10 percent SWP Table A Allocation. Storage program losses included where applicable.

<sup>2</sup> Take capacity based on planned maintenance activities and current CRA supply estimate.

<sup>3</sup> Total storage capacity varies year to year based on prior year remaining balance added to current year contractual limits.

<sup>4</sup> Take amounts dependent on exchange capabilities.

<sup>5</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>6</sup> Total WSDM Storage level subject to change based on accounting adjustments.

## Agreements to Exchange or Return Stored Water

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

<sup>1</sup> Rounded to the nearest thousand.

<sup>2</sup> IID can request return in any year, conditional on whether or not Metropolitan is implementing a Water Supply Allocation Plan.

<sup>3</sup> Up to 30,000 AF per year beginning no earlier than 2022.

<sup>4</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	Sale Out of Cyclic	
2019	50,000	147,000	19,000	166,000	90,000	126,000
2020	126,000	2,000	0	2,000	50,000	78,000
2021 <sup>1</sup>	78,000	0	0	0	32,000	46,000

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