



### • Water Surplus and Drought Management Update Conditions As of 2/22/2019

#### Summary

This report provides a preliminary accounting of water supply, demand, and storage conditions for calendar year (CY) 2019. This report considers conditions as of February 22, 2019.

Storm activity continues in both the northern Sierra and the Upper Colorado River Basins increasing snow water content and the projected runoff in each basin. On February 20, the State Water Project (SWP) allocation was increased to 35 percent and the Department of Water Resources (DWR) indicated that it could reach 60% should wet conditions continue for the remainder of the water year. Concurrent with improving imported water supply conditions, local supply conditions and continued water use efficiency efforts in the region are suppressing imported water demand. The current water supply demand balance suggests a near balanced condition. Additional increases to the SWP allocation would likely result in a net gain in Metropolitan’s dry-year storage in CY 2019.

#### Purpose

Informational

#### Attachments

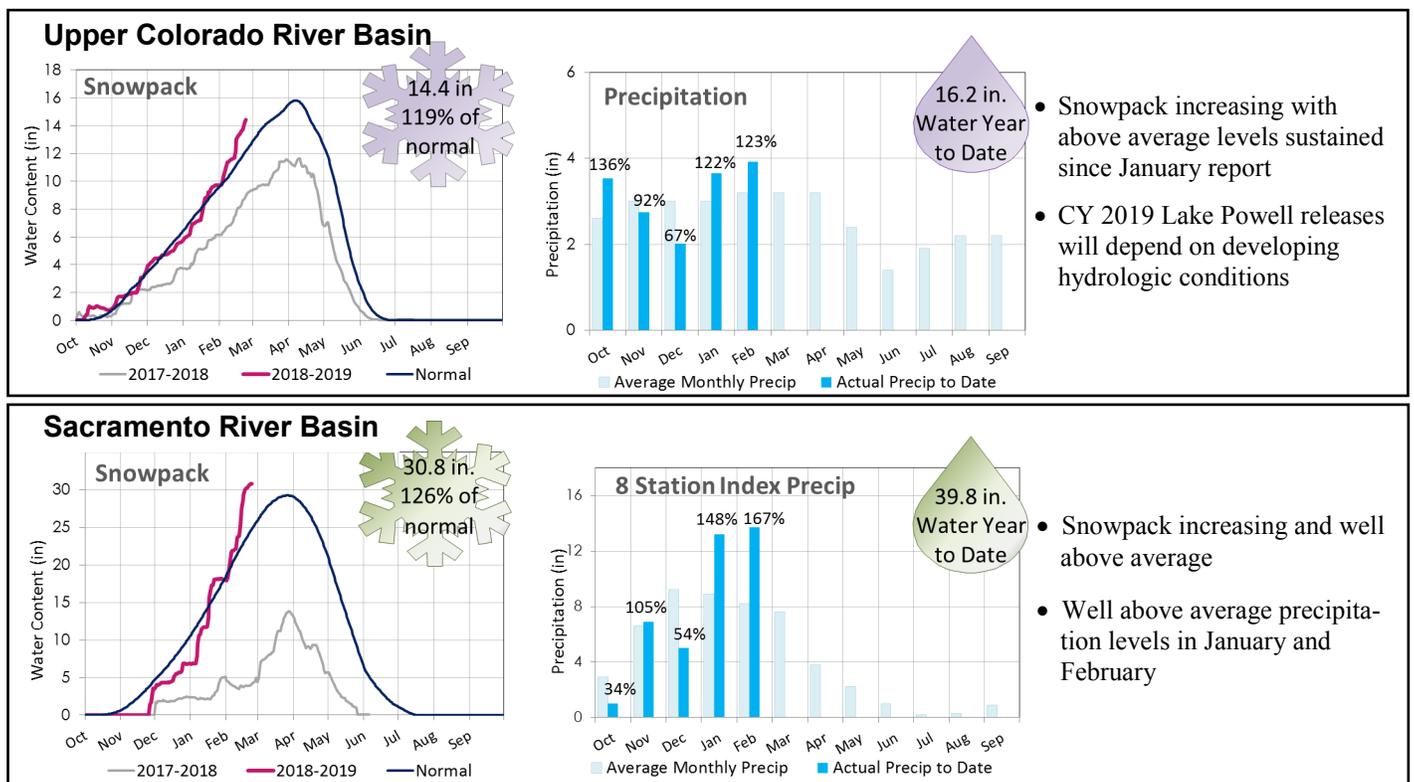
Attachment 1: 2019 WSDM Storage Detail (Put Capacity at 60% SWP allocation)

Attachment 2: Agreements to Exchange or Return Stored Water and Losses Summary

#### Detailed Report

This Water Surplus and Drought Management (WSDM) report and the charts below provide an update on hydrologic conditions and estimated water supply and demand conditions for CY 2019.

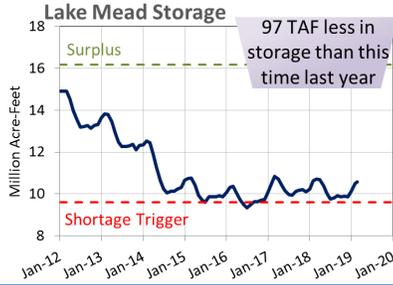
#### 2019 HYDROLOGIC CONDITIONS



**2019 SUPPLY ESTIMATE**

Conditions As of 2/22/2019

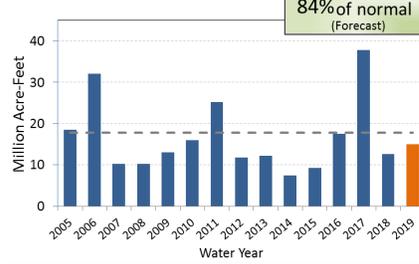
**Colorado River Aqueduct**



Basic Apportionment	550,000
IID/ MWD Conservation Program	85,000
PVID Following Program	49,000
Exch. w/ SDCWA (IID/Canal Lining)	238,000
Exch. w/ USBR (San Luis Rey Tribe)	16,000
Lower Colorado Water Supply Project	9,000
Agricultural Adjustment	0
<b>Total (AF)</b>	<b>947,000</b>

**State Water Project**

**Sacramento River Runoff**



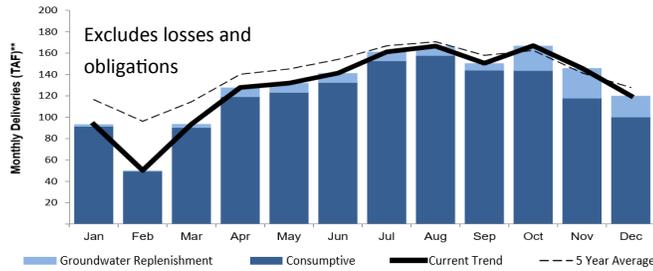
**Allocation: 35%**

- Improved runoff forecast supported an increase to the SWP Allocation
- Additional allocation increases anticipated

Table A (35% SWP allocation)	669,000
Article 21	14,000
Port Hueneme	1,000
<b>Total (AF)</b>	<b>684,000</b>

**Current Supply Estimate Without Storage Actions (AF): 1,631,000**

**2019 DEMAND ESTIMATE**



Member Agency Consumptive	1,437,000
Member Agency Replenishment	129,000
Coachella Valley Water District Agreement	35,000
Exch. w/ San Luis Rey Tribe	16,000
System and Storage Losses	67,000
<b>Total (AF)</b>	<b>1,684,000</b>

**Current Demand Estimate (AF): 1,684,000**

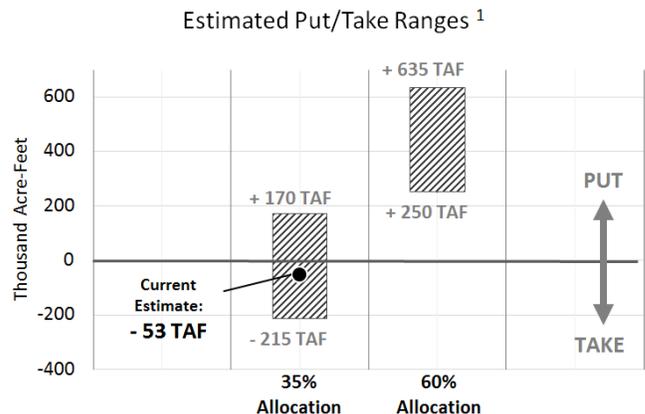
**2019 SUPPLY/DEMAND BALANCE ESTIMATE**

**Current Supply/Demand Balance Estimate (AF): - 53,000**

**2019 WSDM STRATEGY/ACTIONS**

1. Dry-Year Storage: Satisfy potential 2019 supply gaps primarily with available dry-year storage. Prepare storage programs for potential surplus conditions.
2. ICS: Prepared to increase CRA pumping later this year if the Drought Contingency Plan is not approved.
3. Article 21 Supplies: Maximize deliveries to minimize carryover loss and potentially increase overall 2019 supply.
4. Transfer Supply Purchase: Monitor supply availability and export capacity. Recommendation to proceed with a purchase is less likely given improving supply/demand balances.

**2019 STORAGE PUT/TAKE UNCERTAINTY**



<sup>1</sup> Ranges reflect uncertainty of Colorado River higher priority water use and Member Agency water demand on Metropolitan.

**REVISED****2019 WSDM Storage Detail**

<b>WSDM Storage</b>	<b>1/1/2019 Storage Levels</b>	<b>CY 2019 Put Capacity <sup>1</sup></b>	<b>2019 Total Storage Capacity</b>	
<b>Colorado River Aqueduct Delivery System</b>	<b>593,000</b>	<b>299,000</b>	<b>1,563,000</b>	
Lake Mead ICS	593,000	299,000	1,563,000	
<b>State Water Project System</b>	<b>982,000</b>	<b>194,000</b>	<b>1,879,000</b>	
MWD SWP Carryover <sup>2</sup>	256,000	94,000	350,000	
DWCV SWP Carryover <sup>2</sup>	0	0		
Castaic Lake (DWR Flex Storage)	154,000	0	154,000	
Lake Perris (DWR Flex Storage)	65,000	0	65,000	
Arvin Edison Storage Program	154,000	0 <sup>3</sup>	350,000	
Semitropic Storage Program	187,000	60,000	350,000	
Kern Delta Storage Program	138,000	30,000	250,000	
Mojave Storage Program	19,000	0	330,000	
AVEK Storage Program	9,000	10,000	30,000	
<b>In-Region Supplies and WSDM Actions</b>	<b>977,000</b>	<b>244,000</b>	<b>1,536,000</b>	
Diamond Valley Lake	702,000	108,000	810,000	
Lake Mathews	141,000	41,000	182,000	
Lake Skinner	37,000	7,000	44,000	
CUP - IEUA/TVMWD (Chino Basin)	42,000	88,000 <sup>4</sup>	100,000	
CUP - Long Beach (Central Basin)	0		13,000	
CUP - Long Beach (Lakewood)	0		4,000	
CUP - Foothill (Raymond and Monkhill)	0		9,000	
CUP - MWDOC (Orange County Basin)	0		66,000	
CUP - Three Valleys (Live Oak)	0		3,000	
CUP - Three Valleys (Upper Claremont)	1,000		3,000	
CUP - Western	5,000		12,000	
Cyclic - Upper San Gabriel	48,000		100,000	
Cyclic - Three Valleys	0		40,000	
Cyclic - Burbank	0		35,000	
Cyclic - Calleguas	0		5,000	
Cyclic - Eastern	1,000		10,000	
Cyclic - MWDOC	0		100,000	
<b>Other Programs</b>	<b>563,000</b>		<b>234,000</b>	<b>1,128,000</b>
Other Emergency Storage	328,000		0	328,000
DWCV Advanced Delivery Account	235,000		234,000	800,000
<b>Total</b>	<b>3,115,000</b>	<b>971,000</b>	<b>6,106,000</b>	
Emergency	626,000	0	626,000	
<b>Total WSDM Storage (AF) <sup>5</sup></b>	<b>2,489,000</b>	<b>971,000</b>	<b>5,480,000</b>	

<sup>1</sup> Put capacity assumed under a 60% SWP Table A Allocation.<sup>2</sup> Total Storage Capacity varies year to year based on prior year remaining balance added to current year contractual limits.<sup>3</sup> Puts are limited due to water quality considerations.<sup>4</sup> Total estimated put capacity across all Conjunctive Use and Cyclic programs.<sup>5</sup> Total WSDM Storage level is subject to change based on accounting adjustments.

## Agreements to Exchange or Return Stored Water and Losses

	<b>2019 Exchanges/</b>	<b>Future Returns</b>
Coachella Valley Water District Agreement <sup>1</sup>	35,000	
Exch. w/ USBR—Settlement <sup>1</sup>	16,000	
System and Storage Losses <sup>1</sup>	67,000	
Strand Ranch - Irvine Ranch <sup>2</sup>		4,000
Dudley Ridge WD – Irvine Ranch <sup>3</sup>		7,000
Storage and Interstate Release Agreement with Southern Nevada Water Authority <sup>4</sup>		330,000
California ICS Agreement - IID <sup>5</sup>		132,000
<b>Total (AF)</b>	<b>118,000</b>	<b>473,000</b>

<sup>1</sup> Included in 2019 demand estimate.

<sup>2</sup> To be returned no later than 2024 at Irvine Ranch's request.

<sup>3</sup> Half to be returned to Dudley Ridge Water District and the other half to Irvine Ranch no later than 2022.

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

<sup>5</sup> IID can request return in any year, conditional on whether or not Metropolitan is implementing a Water Supply Allocation Plan.