



● Water Surplus and Drought Management Update *Conditions as of 9/27/2021* **Summary**

This report provides an accounting of water supply, demand, and storage conditions for calendar year (CY) 2021 as of September 27, 2021.

On September 16, 2021, a settlement agreement was signed between Metropolitan and Imperial Irrigation District (IID). Under the settlement agreement, IID can store additional amounts of conserved water in Metropolitan's Lake Mead account. If Lake Mead continues dropping to a level requiring California to make a contribution under the Drought Contingency Plan, IID will help make that contribution. In addition, the settlement resolves a dispute over water that Metropolitan diverted in 2018 through shared storage of water between agencies.

The State Water Project (SWP) supply estimate remains unchanged compared to last month's Water Surplus and Drought Management (WSDM) report. However, updates were made to the Colorado River supply estimate to reflect the higher priority water use adjustment forecast from the United States Bureau of Reclamation (USBR). Through the priority system, water not used by the higher priority water users becomes a supply to Metropolitan. The USBR forecast indicates that the higher priority water users are projected to use less water than their approved water orders, increasing Metropolitan's projected Colorado River supply by 39 thousand acre-feet (TAF). Per the settlement agreement with IID, Metropolitan will establish a subaccount under Metropolitan's Intentionally Created Surplus (ICS) account in Lake Mead and store up to 25 TAF for IID this year. Including the water projected to be stored in the subaccount, Metropolitan is projecting to add to its Lake Mead ICS account in CY 2021.

The CY 2021 supply/demand gap is currently estimated to be 617 TAF, a slight decrease from last month. Although the current demand estimate did increase slightly to 1.80 million acre-feet, the additional supply made available through the Colorado River priority system reduced the supply/demand gap. To satisfy this supply/demand gap, Metropolitan is withdrawing water from its dry-year storage programs and purchasing north of Delta water transfers. To preserve limited SWP supplies, Metropolitan is making operational adjustments to maximize use of Colorado River supplies, implementing the Operational Shift Cost-Offset Program, and developing additional drought actions. To help manage demands, Metropolitan declared a Water Supply Alert on August 17, 2021 to increase drought awareness and call for consumers and businesses to voluntarily reduce their water use.

Purpose

Informational

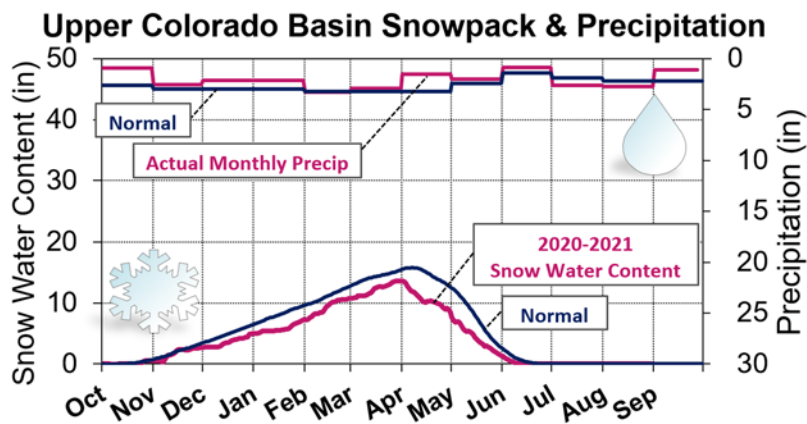
Attachments

Attachment 1: Projected 2021 WSDM Storage Detail (5 percent SWP allocation)

Attachment 2: Agreements to Exchange or Return Stored Water, Potential Magnitude of California's Drought Contingency Plan Contribution, and Cyclic Program Balances

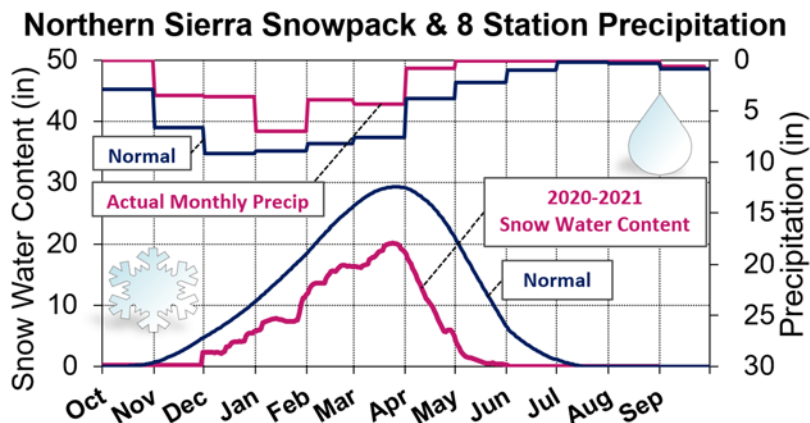
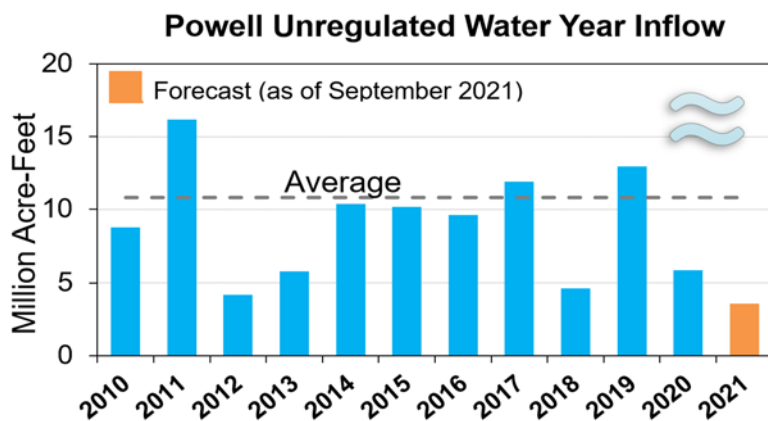
Detailed Report

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.



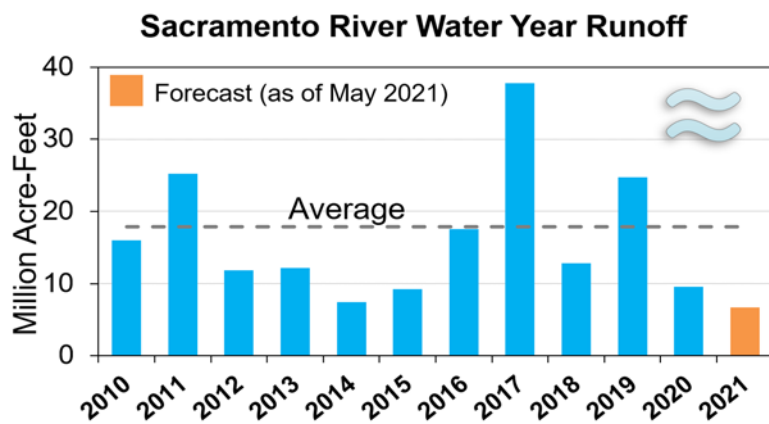
Upper Colorado River Basin

- * Snowpack peaked at 88% of April 1 normal.
- ◆ Precipitation measured 24.7 inches or 80% of normal water year to date.
- ≈ Runoff into Lake Powell is forecasted to be 33% of average.



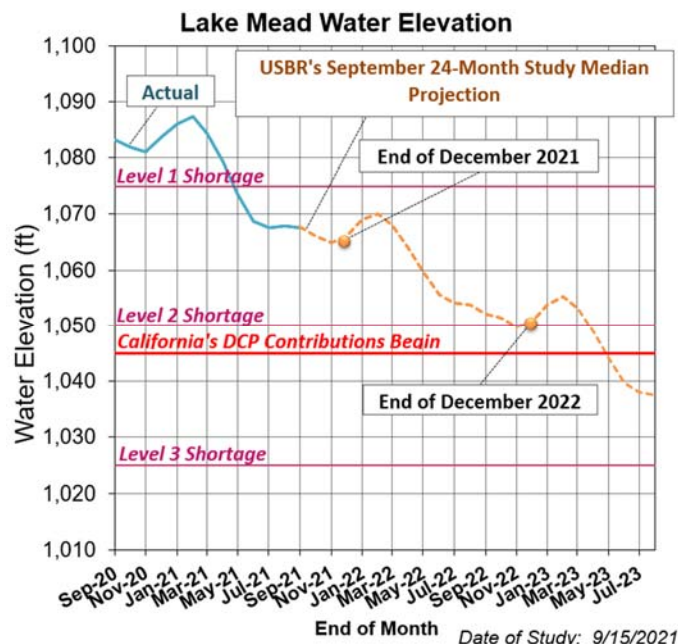
Sacramento River Basin

- * Snowpack peaked at 72% of April 1 normal.
- ◆ Precipitation measured 23.8 inches or 46% of normal water year to date.
- ≈ Sacramento River runoff is forecasted to be 38% of average.



CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
PVID Following 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 Following Program	6,000
Quechan Diversion Forbearance	6,000
Higher Priority Water Use Adjustment ¹	39,000
Total CRA Supplies	1,054,000

¹ Per USBR Forecast (9/27/21). Does not include up to 25 TAF of water to be stored in IID's subaccount within Metropolitan's ICS account.



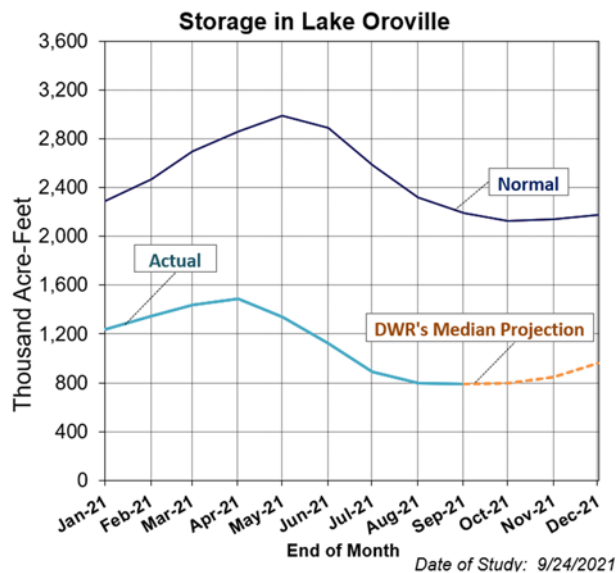
- Monsoon activity brought rainfall which decreased demands for the higher priority water users. Through the priority system, water not used by the higher priority water users becomes a supply to Metropolitan.
- Lake Mead storage is currently at 9.01 MAF (elevation 1067.56 feet).
- The Lower Basin will be in a Level 1 shortage in CY 2022. Supplies to Metropolitan will not be curtailed and Metropolitan will have full access to its ICS in CY 2022.

SWP Supplies	Acre-Feet
Table A (5% SWP allocation)	96,000
Article 21	0
Port Hueneme ¹	0
SWC Buyers Group Transfers ²	6,000
Yuba Accord Dry-Year Purchase Program ²	24,000
Total SWP Supplies	126,000
Total Supplies (CRA + SWP)	1,180,000
(Prior to storage actions)	

¹ Rounded to the nearest thousand. Supply is 92.5 AF.

² Current estimates subject to change based on buyer/seller participation and losses.

³ Staff is aware of two member agency-managed SWP storage programs. Neither are moving water into MWD service area in 2021.

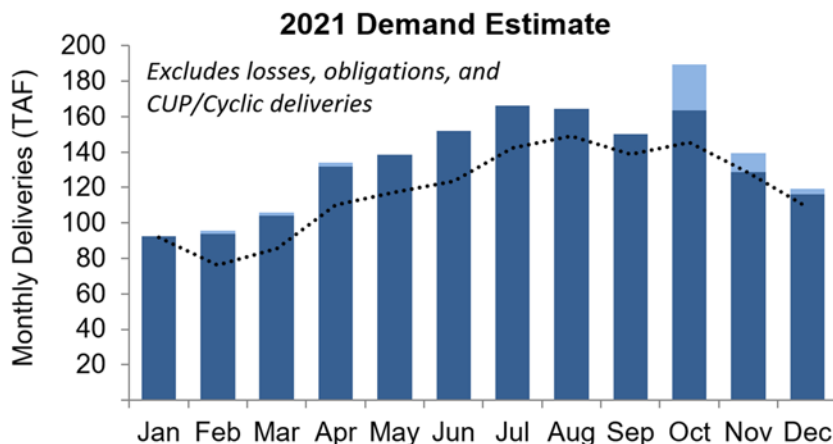


- Storage in Lake Oroville is currently at 788 TAF or 36% of average.
- Staff anticipates the initial SWP allocation for 2022 to be as low as 0%.
- Under a 0% SWP allocation, the Department of Water Resources may provide for, at a minimum, essential human health and safety needs for the SWP Contractors. Metropolitan is assessing its health and safety needs for the SWP only areas for CY 2022.

Current Demand	Acre-Feet
Member Agency Consumptive ¹	1,635,000
Member Agency Replenishment	46,000
Coachella Valley Water District Agreement	50,000
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	50,000
Cyclic Deliveries	0

Total Demands 1,797,000

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

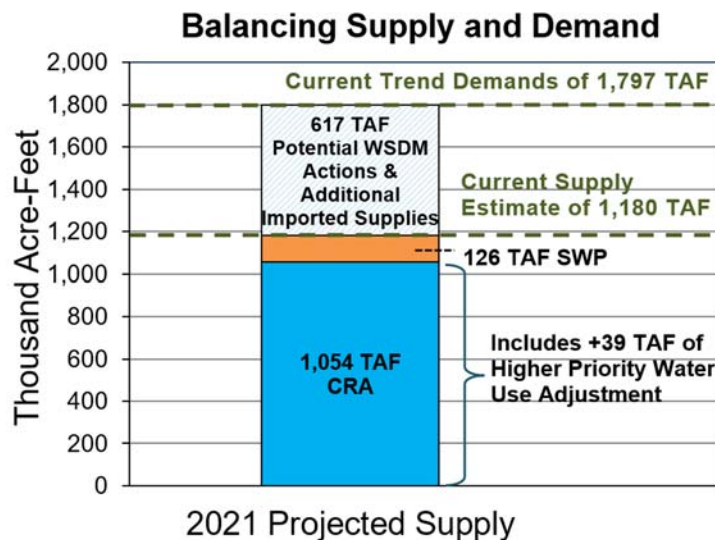


- CY 2021 demands are projected to be higher than the 5-year average and September consumptive demands are the highest since 2014.

Full-Service Replenishment
 Consumptive
 5-Year Avg Consumptive & Replenishment

MANAGING SUPPLIES AND DEMANDS

Supply/Demand Balance	Acre-Feet
Total Supplies	1,180,000
Total Demands	1,797,000
Current Balance Estimate	-617,000



Dry-Year WSDM Strategies/Actions

The following WSDM actions are being pursued or are underway to satisfy the estimated supply/demand gap and to preserve SWP storage for a potentially low SWP allocation in 2022.

- Withdrawing water from dry-year storage reserves.
- Purchasing north of Delta transfers through the Yuba Accord and the SWC Buyers Group.
- Adjusting system operations to preserve SWP supplies and maximize use of Colorado River or stored supplies. These actions include pumping at the Greg Avenue pump station, drafting water from Diamond Valley Lake to serve Mills Plant, and shifting demand to Colorado River service connections.
- Los Angeles Department of Water and Power and Three Valleys Municipal Water District continue to shift deliveries in September under the Operational Shift Cost-Offset Program.
- Metropolitan, in coordination with member agencies, are evaluating additional drought actions targeted at Metropolitan's SWP only areas. Categories for the drought actions are system and operations, shift timing of deliveries, increase local supplies, increase conservation, and expand WSDM programs.

2021 WSDM Storage Detail

	1/1/2021 Estimated Storage Levels	CY 2021 Take Capacity ¹	2021 Total Storage Capacity
WSDM Storage			
Colorado River Aqueduct Delivery System	1,293,000	21,000	1,657,000
Lake Mead ICS	1,293,000 ²	21,000 ³	1,657,000
State Water Project System	1,052,000	499,000	1,879,000
MWD SWP Carryover ⁴	207,000	207,000	350,000
DWCV SWP Carryover ⁴			
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	4,000 ⁵	350,000
Semitropic Storage Program	261,000	42,000	350,000
Kern Delta Storage Program	177,000	27,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	0	30,000
In-Region Supplies and WSDM Actions	872,000	491,000	1,246,000
Diamond Valley Lake	704,000	447,000	810,000
Lake Mathews and Lake Skinner	127,000	14,000	226,000
Conjunctive Use Programs (CUP) ⁶	41,000	30,000	210,000
Other Programs	694,000	57,000	1,181,000
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	313,000	57,000	800,000
Total	3,911,000	1,068,000	5,963,000
Emergency	750,000	0	750,000
Total WSDM Storage (AF) ⁷	3,161,000	1,068,000	5,213,000

¹ Take capacity assumed under a 5 percent SWP Table A Allocation. Storage program losses included where applicable.

² Reflects USBR's final accounting for 2020, released in May 2021.

³ Take capacity based on planned maintenance activities and current CRA supply estimate.

⁴ Total storage capacity varies year to year based on prior year remaining balance added to current year contractual limits.

⁵ Take amounts dependent on exchange capabilities. Began receiving exchange of surface water supplies in August.

⁶ 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.

⁷ Total WSDM Storage level subject to change based on accounting adjustments.

Agreements to Exchange or Return Stored Water

	Future Returns ¹
California ICS Agreement – IID ²	243,000
Storage and Interstate Release Agreement with Southern Nevada Water Authority ³	330,000
Total (AF)	573,000 ⁴

¹ Rounded to the nearest thousand.

² Increased by 79,000 AF due to the September 16, 2021 IID/MWD Settlement Agreement. IID can request return in any year, conditional on whether or not Metropolitan is implementing a Water Supply Allocation Plan.

³ Up to 30,000 AF per year beginning no earlier than 2022.

⁴ Subject to change based on accounting adjustments.

Potential Magnitude of California's Drought Contingency Plan Contribution

	2022	2023	2024	2025	2026
Likelihood of Required California Drought Contingency Plan Contribution ¹	0%	6%	64%	71%	72%
Average Metropolitan DCP Contribution When Contributions Are Required (AF)	0	180,000	264,000	286,000	303,000

¹ Results from USBR's August 2021 Colorado River Simulation System (CRSS) model run which resamples the 1988-2019 natural flow record. Study assumes no drought response activities; any new water added to Lake Mead would reduce the probabilities in the table.

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	91,000	125,000
2020	125,000	2,000	0	2,000	50,000	77,000
2021 ¹	77,000	0	0	0	32,000	45,000

¹ Projected Cyclic program activity for the year. Subject to change.