WACO Meeting – June 4, 2021



Thank you for joining today's meeting. Participants will be muted.

To ask a question:

- Please raise your hand
- Use the chat box (to: Heather Host)
- Press *9 to raise hand on phone





Mark Monin
Director
El Toro Water District



I bledge allegiance to the flag of the United States of America, and to the republic for which it stands, one nation under God, indivisible, with liberty and justice for all

Program Speaker





Resource Planning Team Manager
Water Resource Management Group
Metropolitan Water District of Southern California





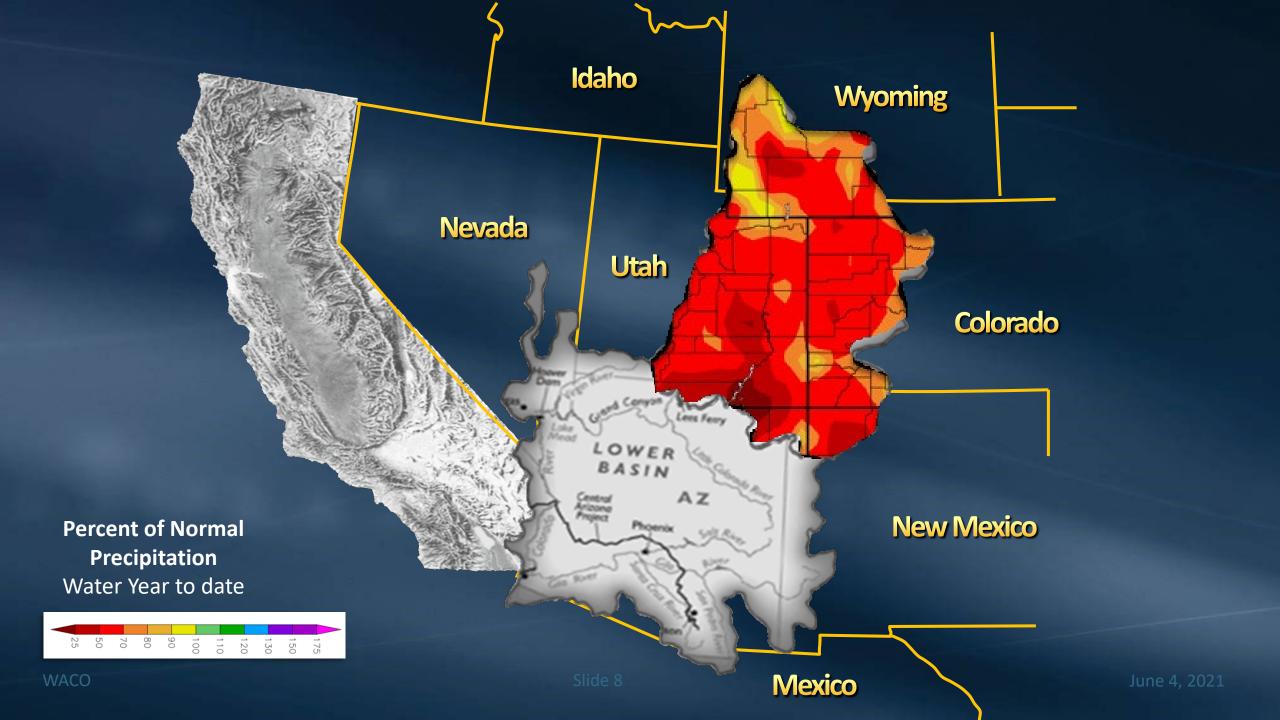
Planning for Wet and Dry Conditions

Water Advisory Committee of Orange County
June 4, 2021

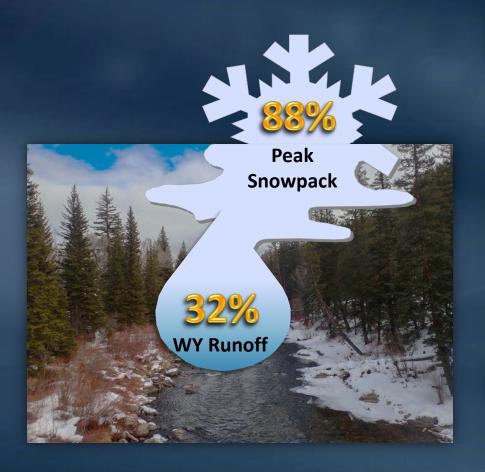
Outline

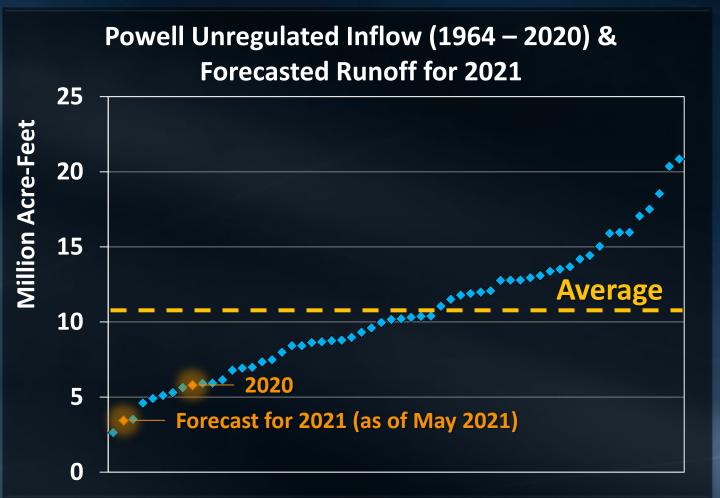
- Hydrologic Conditions
- 2021 Supply and Demand Balance
- Dry-Year Actions Underway
- WSDM and the Water Supply Allocation Plan Overview

Hydrologic Conditions

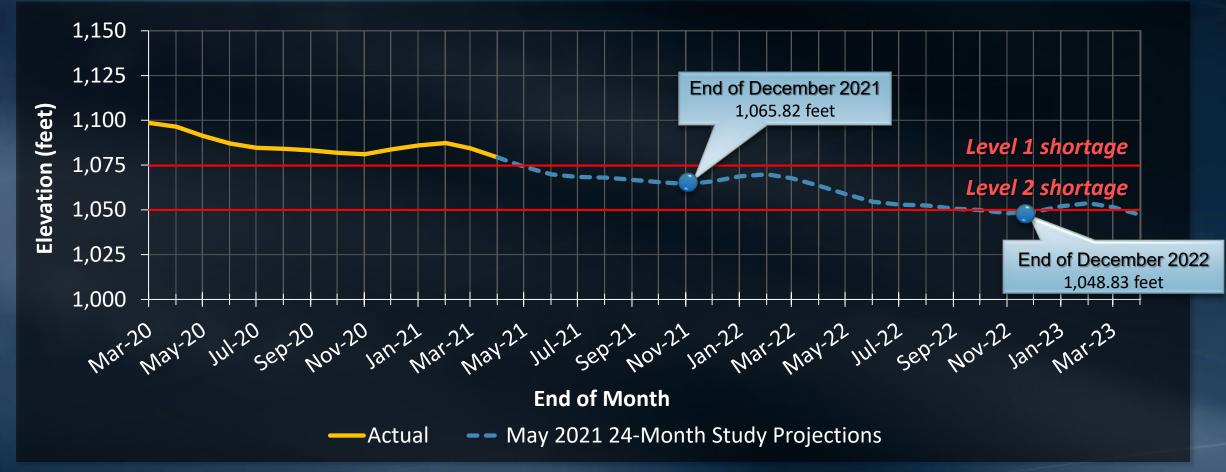


Below Normal Runoff Projected in the Upper Colorado River Basin



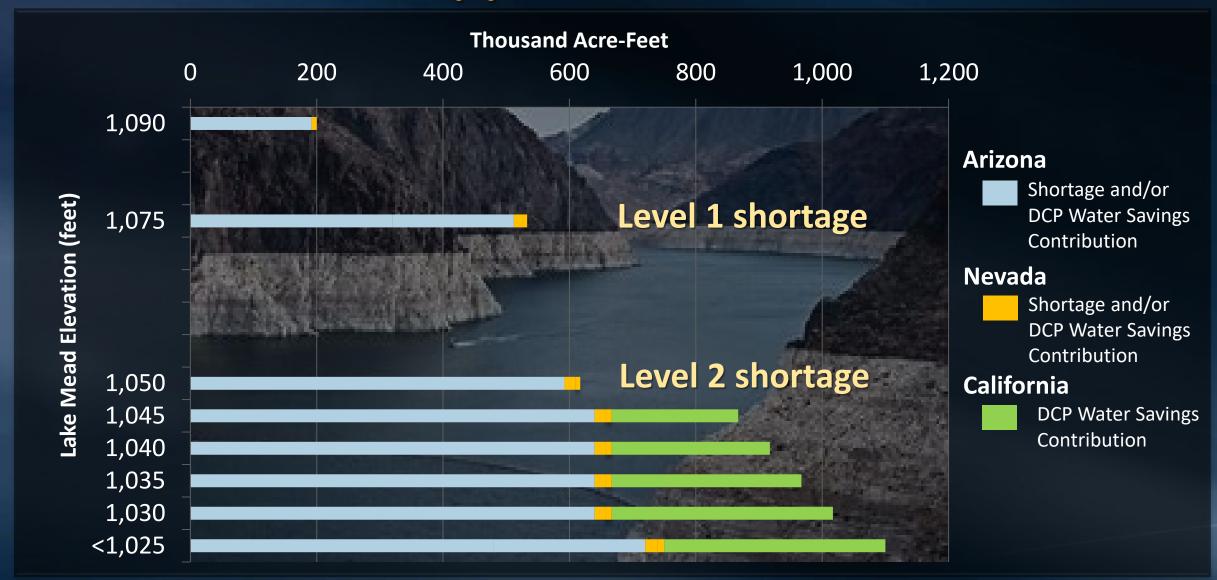


USBR's 24-Month Study Continues to Project Declining Lake Mead Elevation



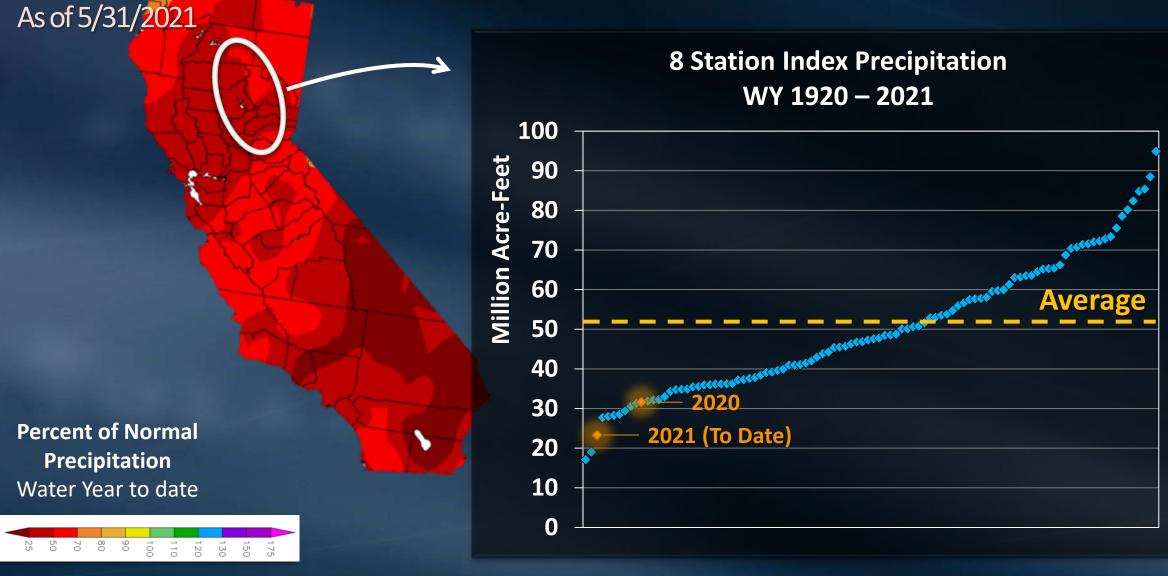
May 24-Month Study

Contribution to Support Lake Mead

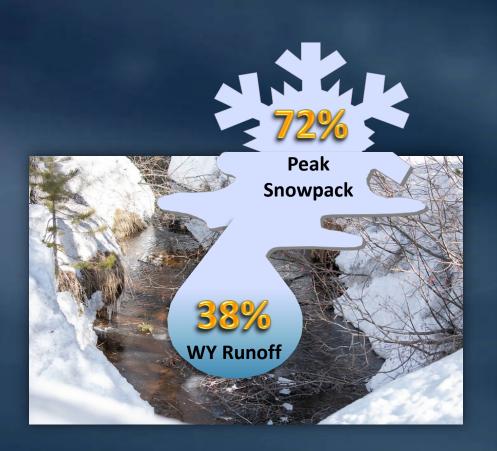


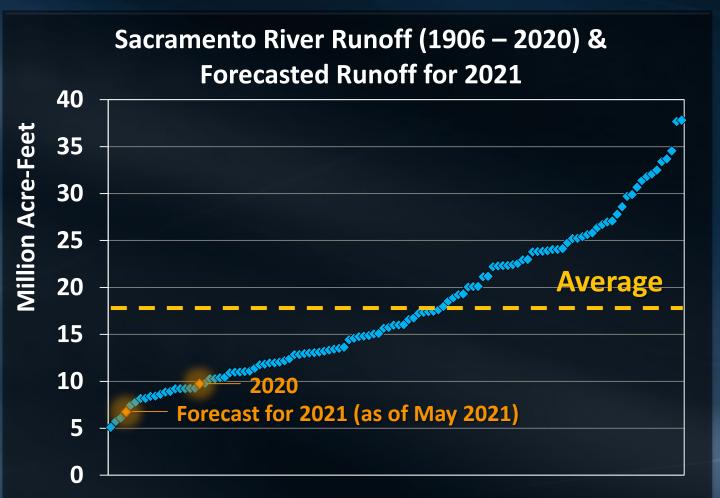


Below Normal Precipitation Statewide

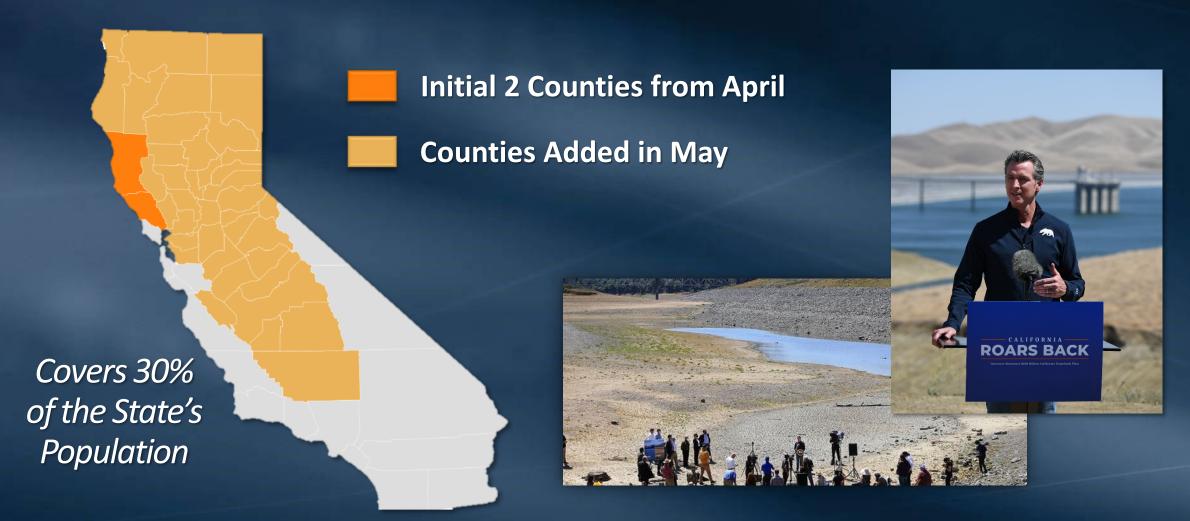


Below Normal Runoff Projected for the Sacramento River





Drought Emergency Declaration Now Covering 41 Counties in California



State and Federal Agencies Take Action to Respond to Drought Conditions

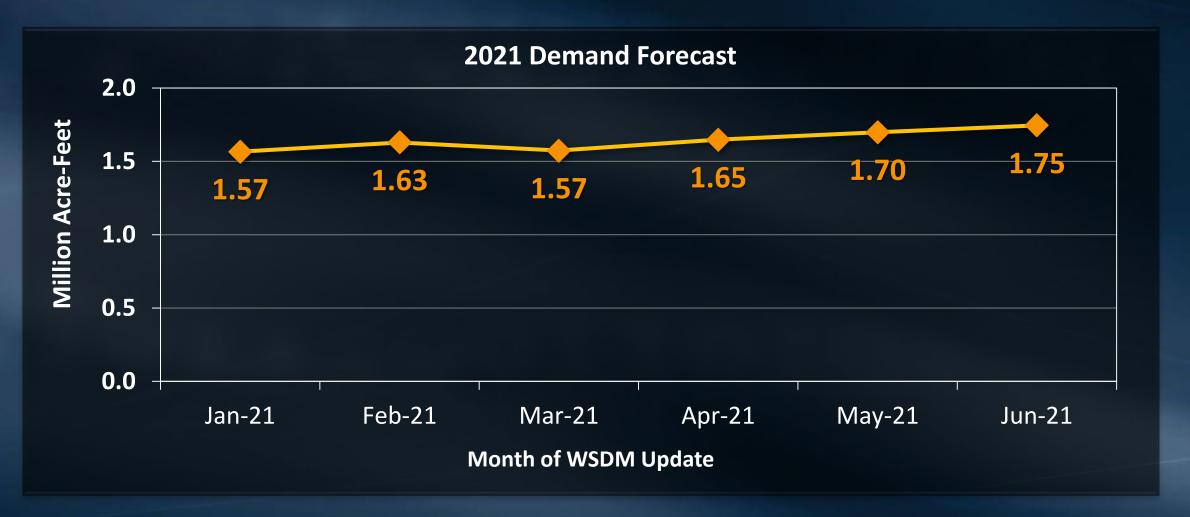
- DWR and USBR received conditional approval for the Temporary Urgency Change Petition
- DWR filed an application for water quality certification for the 2021 Emergency Drought Salinity Barrier Project



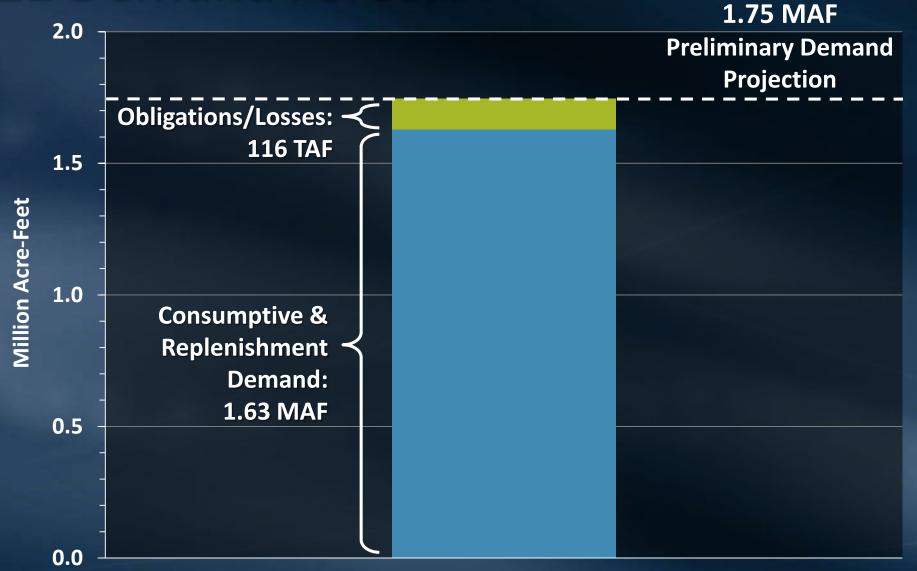
Emergency Drought Barrier Installation in 2015

2021 Supply/Demand Balance

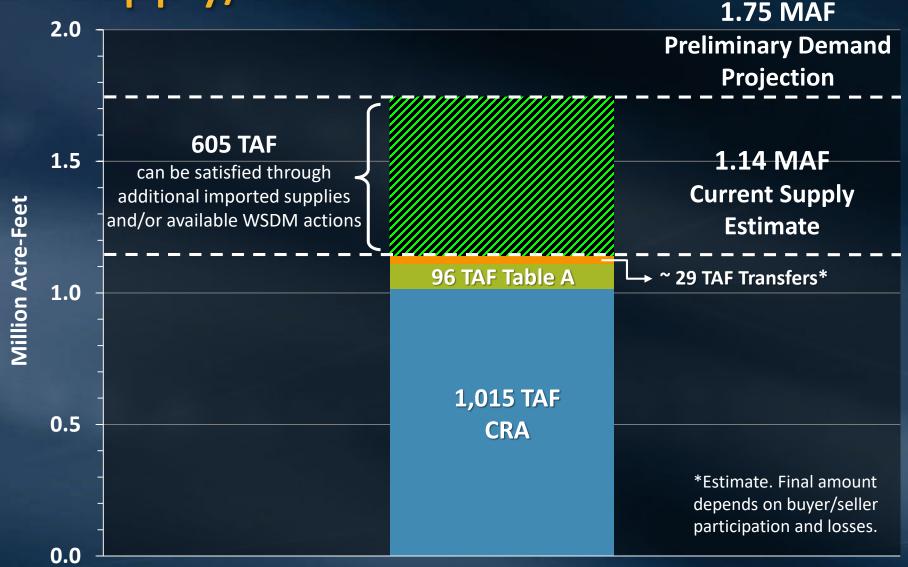
Metropolitan Builds Upon Member Agency Demand Projections to Develop Its Own Near-Term Forecast



2021 Demand Forecast

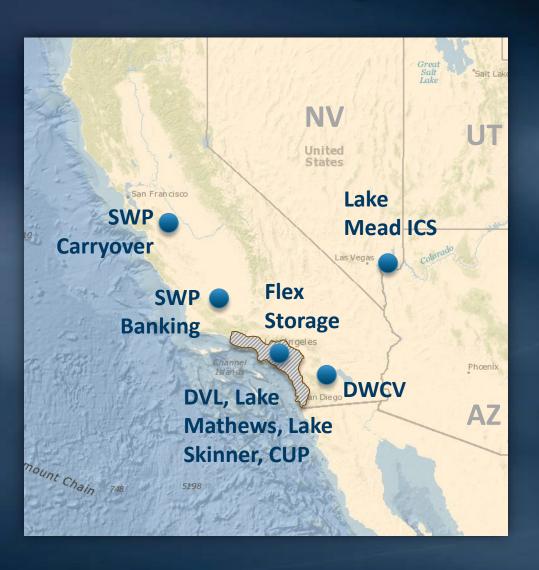


2021 Supply/Demand Balances



Dry-Year Actions Underway for 2021 and 2022

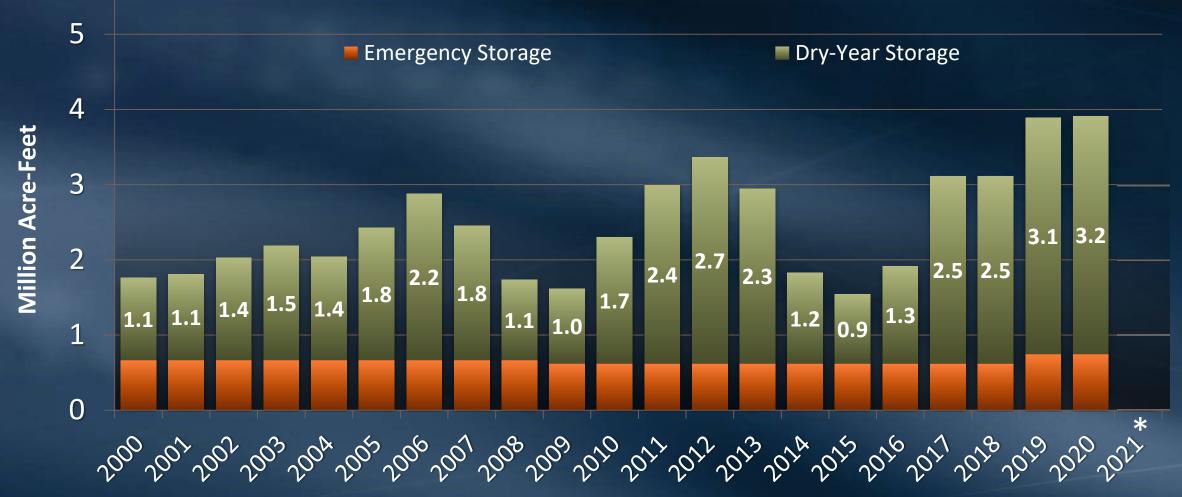
Withdrawing from Dry-Year Storage



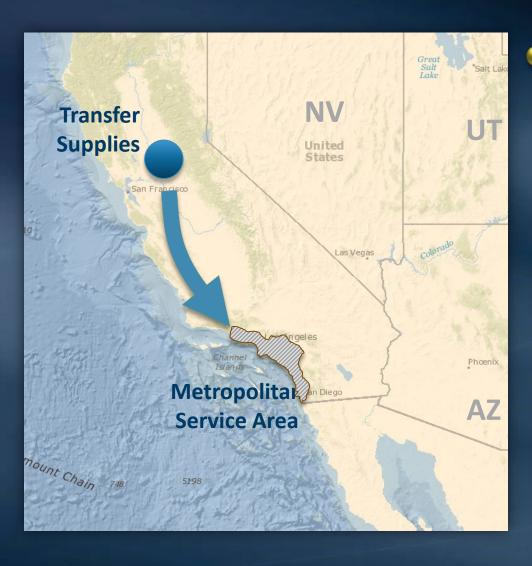
- Diamond Valley Lake
- Flex Storage (Castaic and Lake Perris)
- Conjunctive Use Programs
- SWP Carryover and Groundwater Banking Programs
- Lake Mead Intentionally Created Surplus (ICS)
- DWCV Advanced Delivery Account

Metropolitan Storage Balances

End of Year Balances

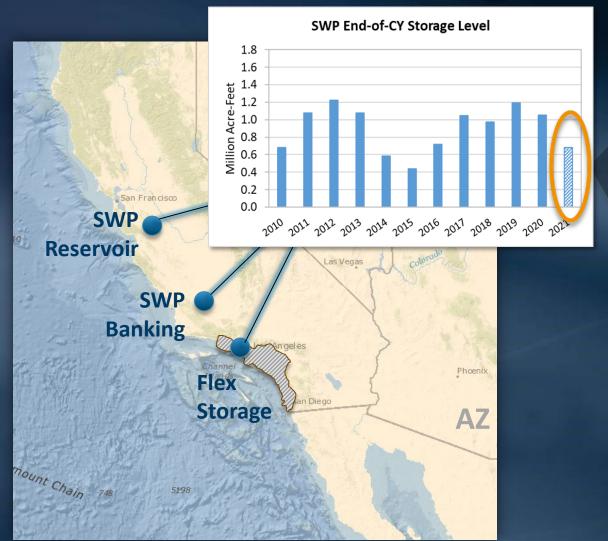


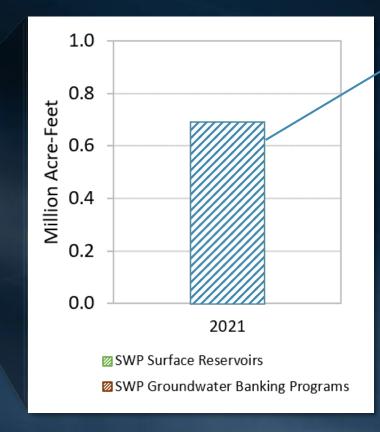
Dry-Year WSDM Actions Underway



- Purchasing ~42 TAF of transfer supplies (~29 TAF after losses)
 - State Water Contractors Buyers Group
 - Yuba Accord supplies

End-of-Year Storage Balances*

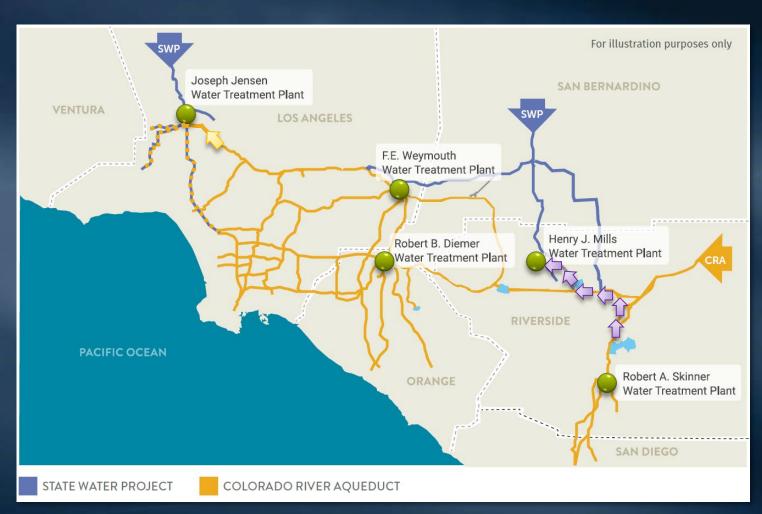




Water
Purchases
in 2021 will
bolster
SWP
supplies in
2022

^{*} Preliminary estimate for 2021. Does not include emergency storage.

Ongoing Operational Actions and Member Agency Coordination to Preserve SWP Supplies



- DVL to Lakeview
- DVL to Mills
- Greg Ave Pumping
- Shifting agency demands

Water Surplus and Drought Management Plan (WSDM Plan)

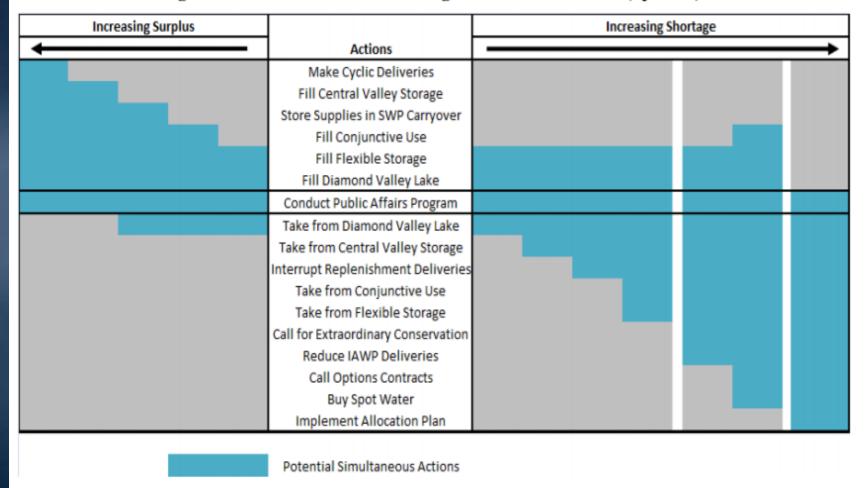
Guiding Principle for Managing Regional Storage



Encourage storage of water during periods of surplus and work jointly with its member agencies to minimize the impacts of water shortages on the region's retail consumers and economy during periods of shortage

WSDM Plan Action Matrix Framework for Generally Preferred Actions

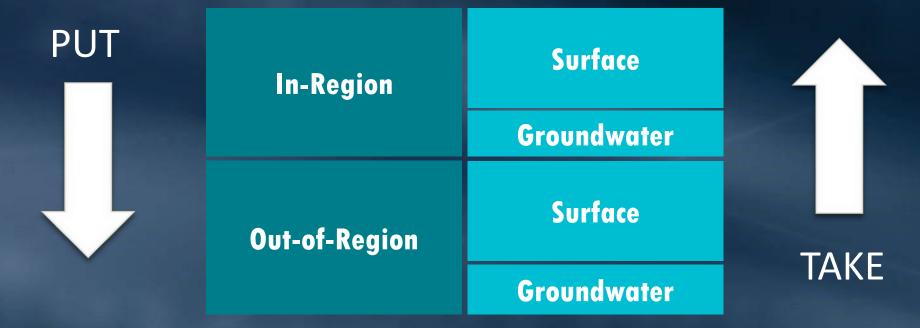
Figure 1: WSDM Plan Resource Stages and Actions Matrix (updated)



The WSDM Plan presents a resource management framework to guide Metropolitan's integrated approach to supply management

Underlying Objective for Storage Management

The WSDM framework values accessibility and security



"The resource management framework does not dictate a scripted response to shortage or surplus. The framework recognizes the complexity and variety of conditions that require action."

WSDM Plan Implementation Goals

- Encourage storage of surplus supplies to mitigate shortages and improve water quality
- Avoid mandatory imported water allocation to the extent practicable
- Equitably allocate water on the basis of agencies' needs

Overview of Metropolitan's Water Supply Allocation Plan

Water Supply Allocation Plan

- Method and policy for allocating available supplies to member agencies
- Adopted in 2008
 - Updated/Modified in 2010, 2011, 2014
- Implemented in 2009-10 (L2), 2010-11 (L2), 2015-16 (L3)

WACO Slide 33 June 4, 202

WSAP is a "Needs Based Approach"



Establishing Member Agency Needs (Baseline for WSAP)

Growth

Base Period Retail Demand Allocation Year Wholesale Demand

Allocation Year Local Supply

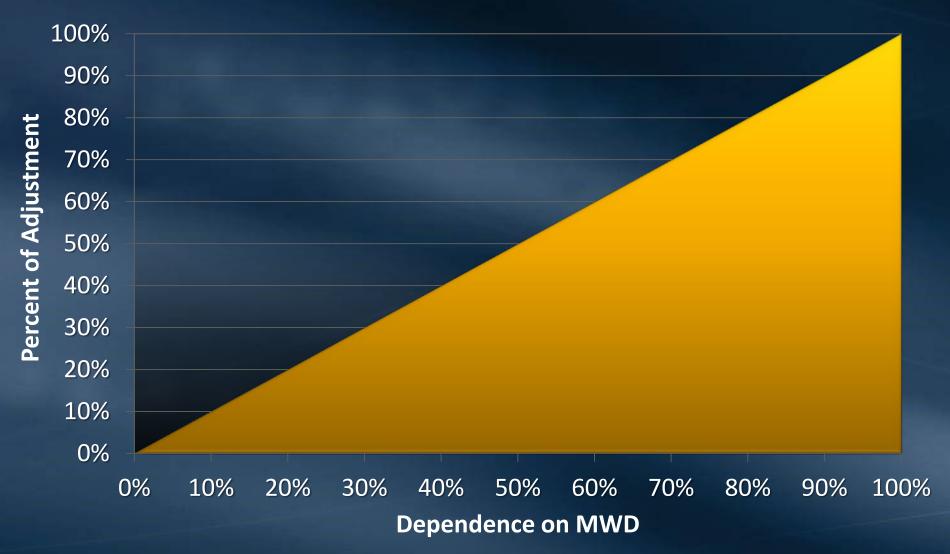
Three Main Parts to the WSAP

- Wholesale Minimum Allocation
 - Ensures a minimum level of Metropolitan water to each member agency
- Retail Impact Adjustment Allocation
 - Ensures that agencies with a high level of dependence on Metropolitan do not face disparate shortages
- Credits and adjustments

WSAP Calculation Factors

Regional Shortage Level	Wholesale Minimum Percentage	Max. Retail Impact Adjustment Percentage
1	92.5%	2.5%
2	85.0%	5.0%
3	77.5%	7.5%
4	70.0%	10.0%
5	62.5%	12.5%
6	55.0%	15.0%
7	47.5%	17.5%
8	40.0%	20.0%
9	32.5%	22.5%
10	25.0%	25.0%

Retail Impact Adjustment Factor



Credits and Adjustments

- Conservation Demand Hardening Credit
 - Based on observed GPCD reduction
- Minimum Per-Capita Water Use Credit
 - 100 GPCD total water use
 - 55 GPCD residential water use
- Allocation Surcharge Adjustments
 - Qualifying Income-Based Rates
 - Growth rate ETo adjustment
- Extraordinary Supply

WSAP Allocation Surcharge

Water Use	Allocation Surcharge
100% of Allocation	\$0
Between 100% & 115%	\$1,480
Greater than 115%	\$2,960

- Based on Turf Removal costs
- Turf removal saves ~44 gallons per year per square foot for 10 years
- \$2/sq.ft program = \$1,480
- \$4/sq.ft program = \$2,960

Summary

- Below normal runoff projected for both imported supply watersheds
- SWP allocation remains at 5%
- Drought emergency now covers 41 counties in California
- USBR studies indicating possible first shortage declaration for 2022 for the Colorado River System
- Implementing WSDM actions to satisfy 2021 supply-demand gap and preserve SWP Carryover storage for 2022



WSDM Plan – Surplus Actions



- Not meant to be a strict order
- Meant to adapt to current conditions
- Store water for most effective use in future droughts

WACO Slide 43 June 4, 202:

WSDM Plan – Drought Actions



- Not meant to be a strict order
- Take water strategically to be better prepared for future droughts

Six Operating Principles Guide Storage Strategy

OPERATIONAL FLEXIBILITY

Maintain flexibility to manage storage within the total storage portfolio, not individual accounts

INVASIVE SPECIES

Regional storage managed to minimize risk of infestation

EMERGENCY STORAGE

Reserve emergency storage in Southern California reservoirs to meet demands during catastrophic events

SYSTEM RELIABILITY

Manage storage to meet demands in the entire service area, including exclusive areas

WATER QUALITY

Consider salinity goals and other constituents when blending various supplies

SUPPLY ALLOCATIONS

Manage regional storage to avoid or reduce the frequency of severe water supply allocations and avoid large supply allocation increases from year-to-year, to the extent practicable

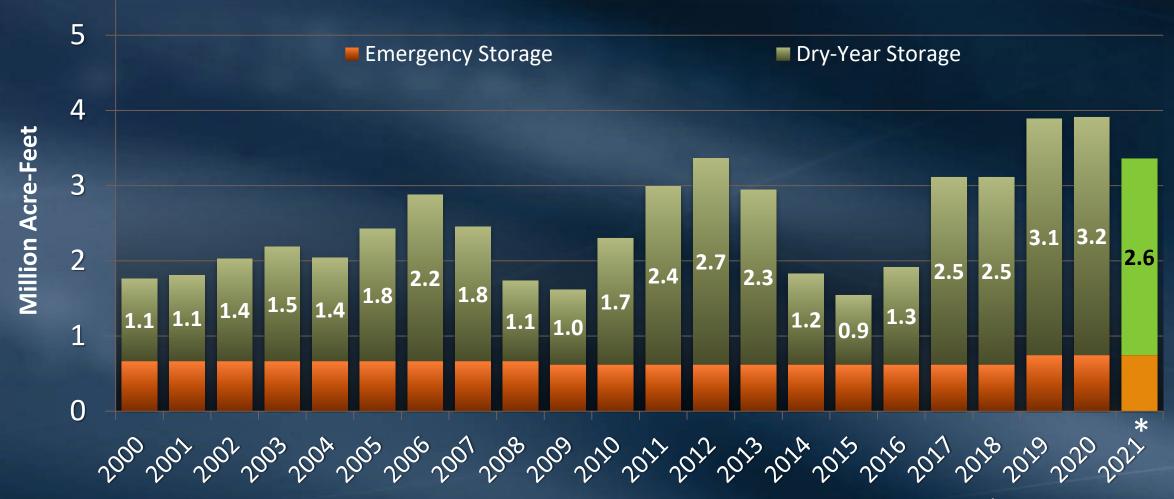
Flexibility Allows Adaptation to Changed Conditions and to Implement Lessons Learned

- System Needs
 - Maintain storage for areas served by a specific resource
 - Operational constraints and water quality considerations
 - Preserve SWP supplies in low SWP allocation years
- Contractual Requirements
 - SWP groundwater banking partnerships
 - Repayment of previously stored water
 - Potential DCP contributions
- Other Considerations
 - Balancing storage to maximize takes in multi-year droughts
 - Conditions reporting and WSAP implementation

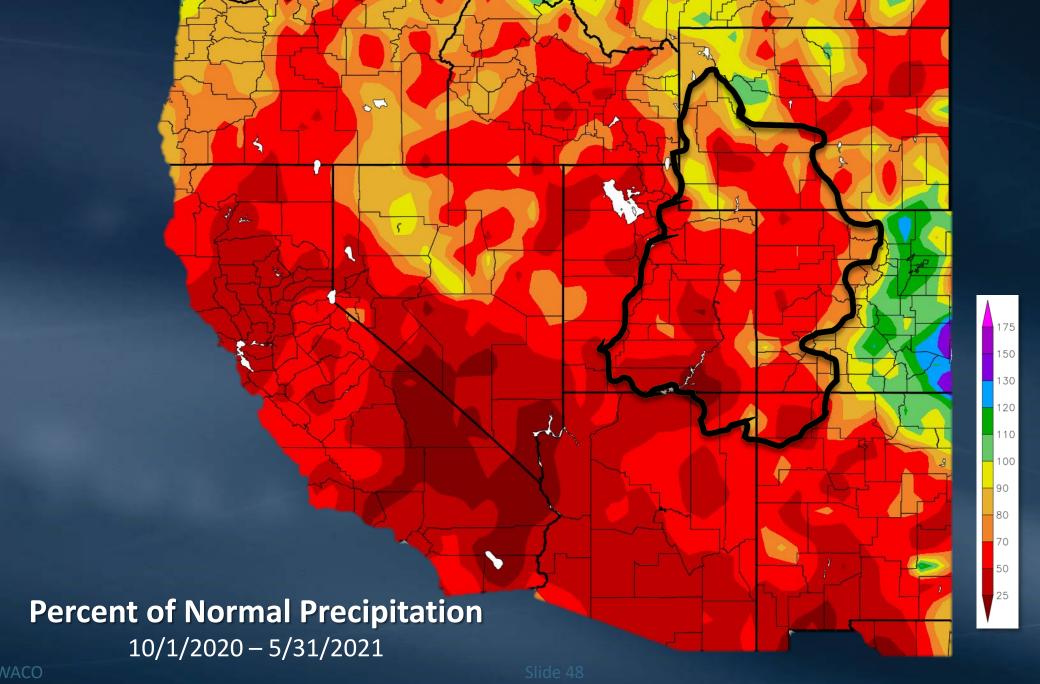
NACO Slide 46 June 4, 202:

WSDM Storage Management Success

End of Year Balances



* Projected balance

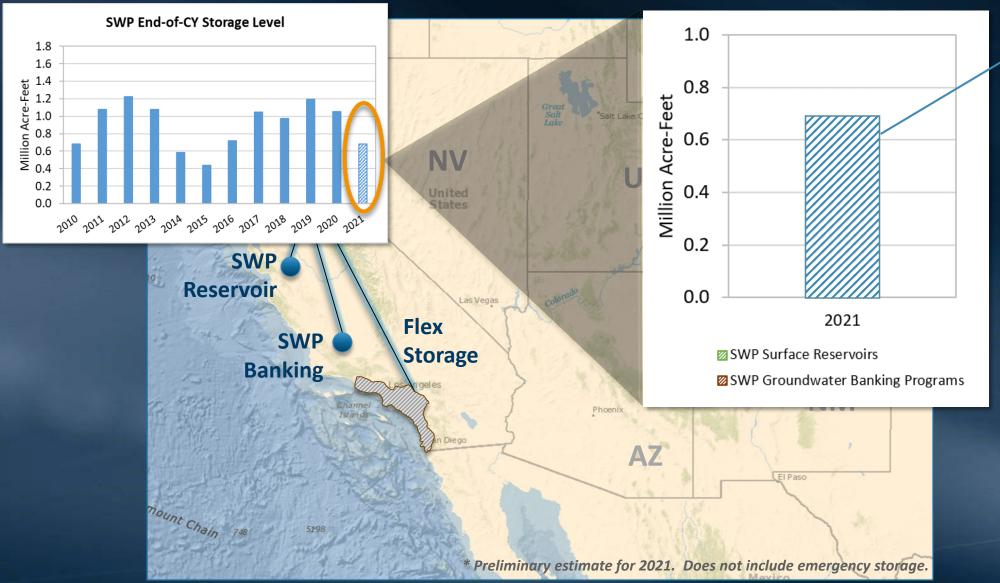


Metropolitan Storage Balances

End of Year Balances



End-of-Year Storage Balances*



Water
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Questions

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CSDA Report



California Special Districts Association

Districts Stronger Together



Chris Palmer
Public Affairs Field Coordinator
Southern Network
California Special Districts Association



MET Report





Linda Ackerman
Director
Metropolitan Water District
of Southern California



Alicia Dunkin Legislative Affairs Liaison Orange County Water District







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