



# Southern California Water Dialogue

September 28, 2022

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# Drought-Ravaged States Face Another Round of Water Cuts

Bloomberg • Economy News • 2022-08-16 19:18

# Water cutbacks 'to avoid a collapse' of Colorado

PUBLISHED WED, AUG 17 2022•11:23 AM EDT | UPDATED WED, AUG 17 2022•12:52 PM EDT

CNN US Crime + Justice Energy + Environment More

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# New water cuts coming for Southwest as Colorado River falls into Tier 2 shortage



By [Ella Nilsen](#) and [Rachel Ramirez](#), CNN

Updated 10:47 PM ET, Tue August 16, 2022

...e Lake Mead, Lake

# Western states hit with more cuts to Colorado River water

By [SAM METZ](#), [SUMAN NAISHADHAM](#) and [KATHLEEN RONAYNE](#) August 16, 2022

# ...ENSIONS Rise As Water Cuts

# The Southwest is running out of fresh water. Could the ocean provide a cure?

# Water cuts lo

By Alex Hager/KUNC

Published: Tuesday, August 16, 2022 - 12:24pm

Updated: Tuesday, August 16, 2022 - 1:42pm

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# Colorado River Basin Map

- Supplies water to 40 million people
- Includes 30 Tribes
- Irrigates ~5 million acres of farmland
- Includes 60 million acre-feet of storage capacity
- Generates clean hydropower for the Western power grid
- Supports National Parks, wildlife refuges, recreation areas and monuments



# Central Arizona Project

- 336-mile aqueduct stretches from Lake Havasu to Tucson
- Deliveries began in 1985
- Construction complete in 1993
- Serves 3 counties and more than 5 million people
- Delivers to 9 Tribes with CAP contracts



# Arizona's Water Supply

**36%**

COLORADO RIVER

**5%**

RECLAIMED WATER

**18%**

IN-STATE RIVERS

**41%**

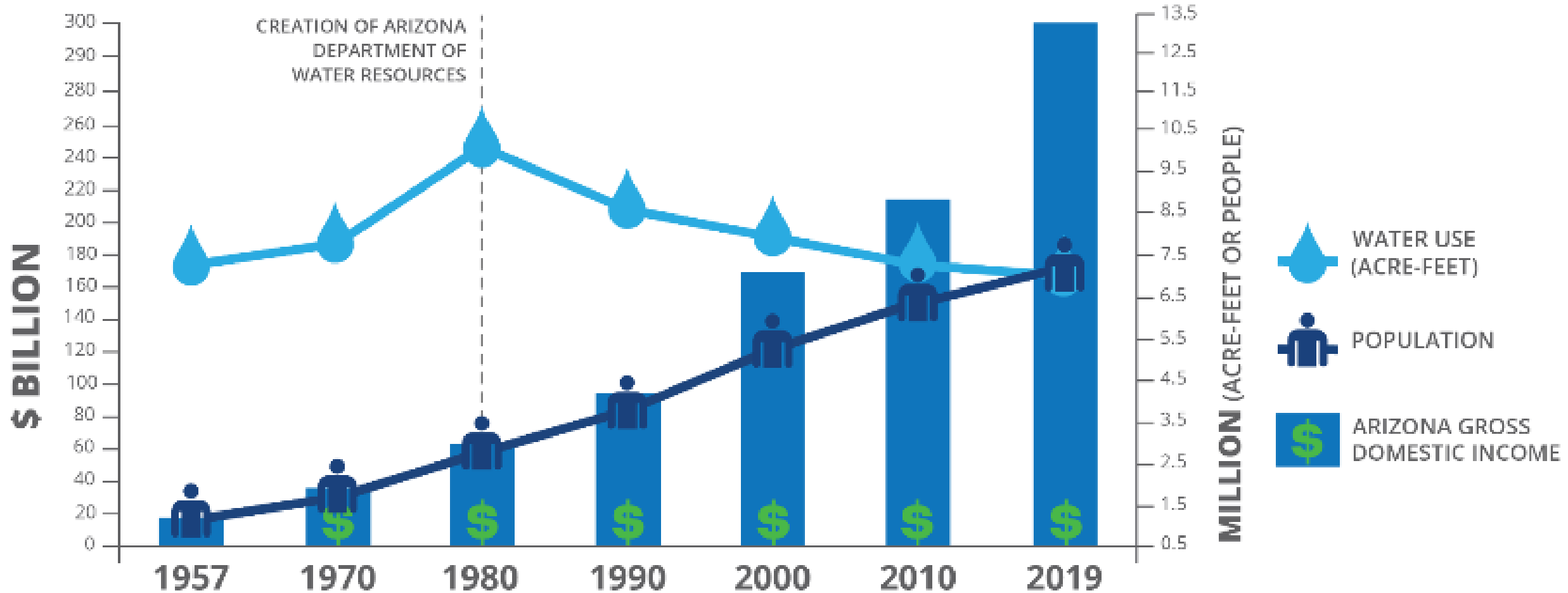
GROUNDWATER



Source: ADWR, 2020

# ARIZONA'S WATER MANAGEMENT SUCCESS

## ARIZONA WATER USE, POPULATION AND ECONOMIC GROWTH (1957 - 2019)

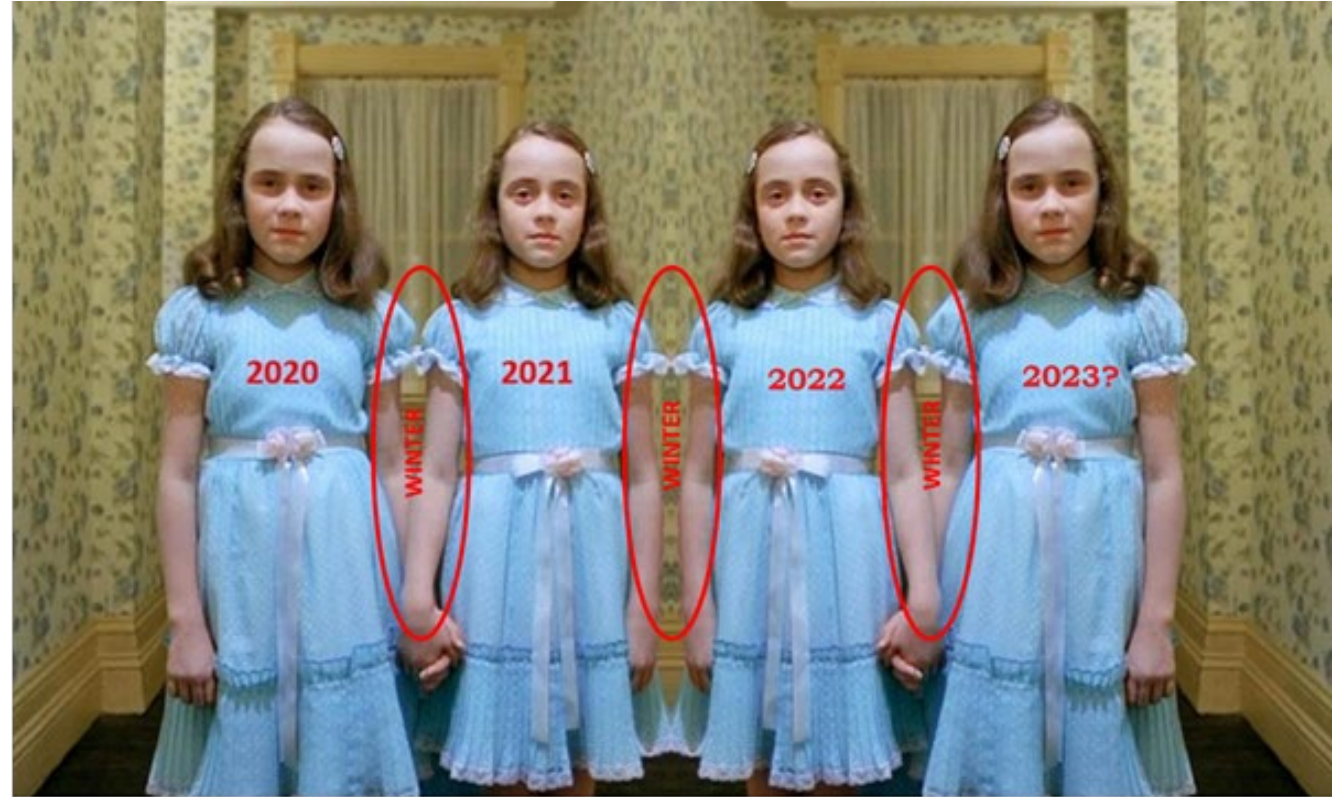




# Recent Hydrology

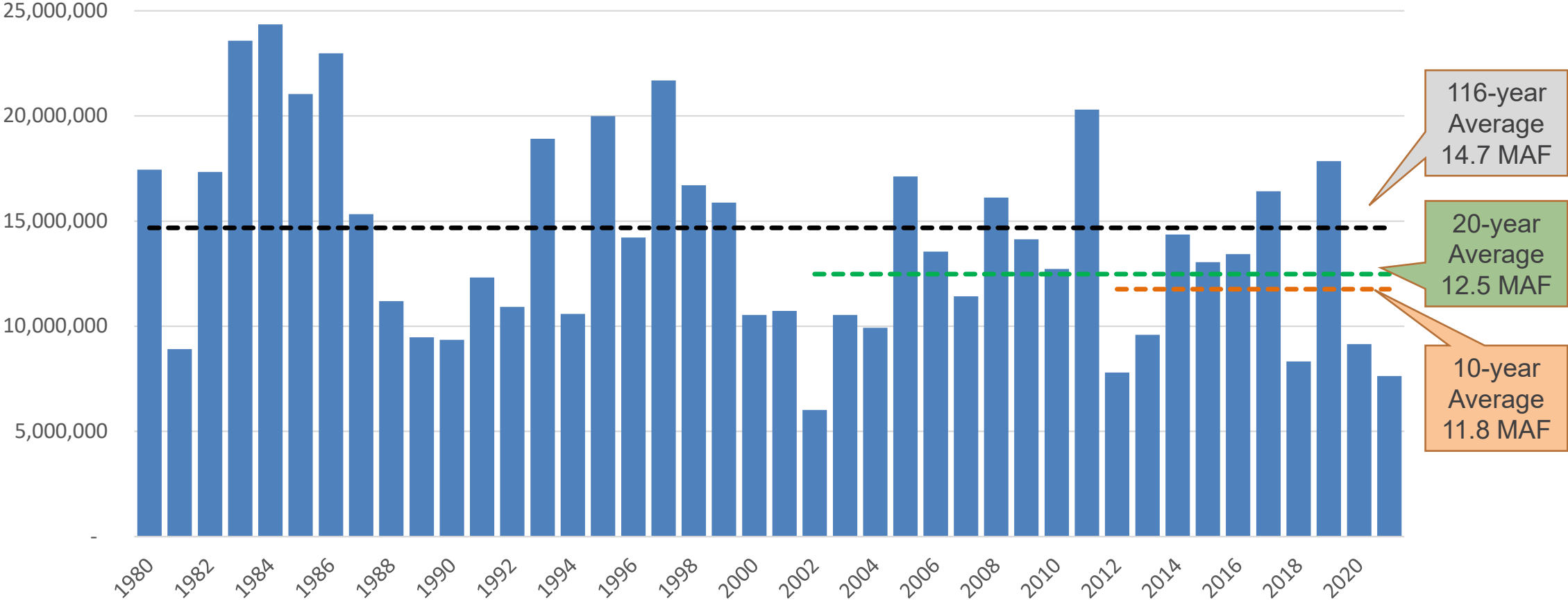
Snowpack vs. Runoff (% of average)

	Snowpack	Runoff
2020	105%	56%
2021	86%	41%
2022	90%	63%



# Colorado River Flow

Natural Flow At Lee Ferry, Calendar Year 1980--2021





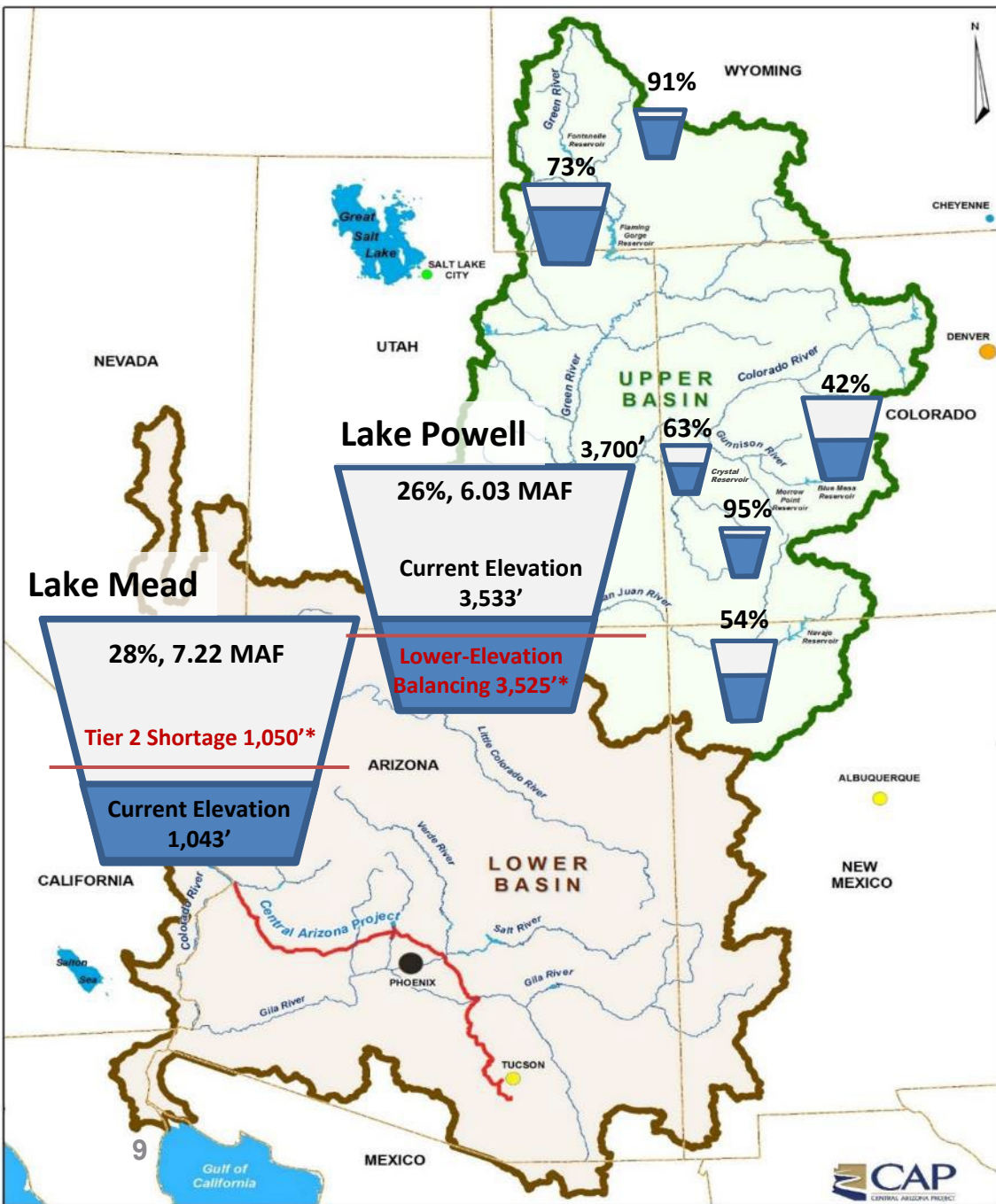
# Colorado River Water Supply Report

System Contents: 17.70 MAF

As of August 22, 2022

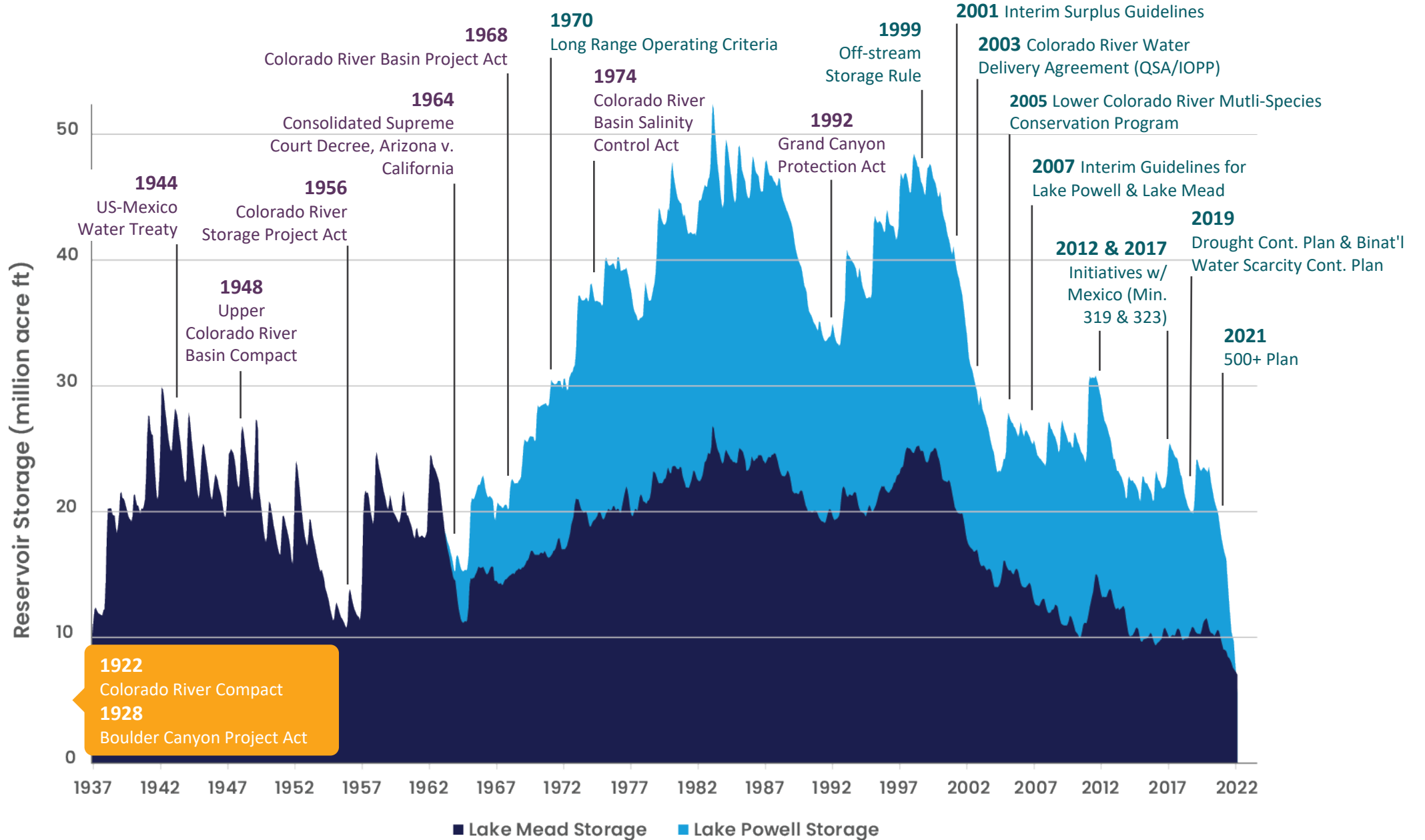
Last Year System Contents: 21.43 MAF

\* Tier determination elevations use projections of Jan. 1 elevations from the August 24 Month Study, not current elevations.



YOUR WATER. YOUR FUTURE.

# Lake Powell & Lake Mead Combined Storage



# Steps to protect the river

## 2007 Guidelines

- Established common commitment for sharing water surplus and shortage
- Created opportunities to conserve water in Lake Mead, including intentionally created surplus (ICS)
- Formalized procedures for coordinated reservoir operations
- Established elevation triggers for reservoir releases and shortage declaration

## Minute 323

- Signed in 2017 expanding collaboration and sharing between Mexico and the U.S.

## Drought Contingency Plan

- 7 states agreements to protect the Colorado River system through reductions, contributions and conservation

## 500+ Plan

- Lower Basin states agreed to target a combined minimum of 500 KAF per year in Lake Mead to protect against elevation falling to 1020'



## 2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan, and Binational Water Scarcity Contingency Plan Total Volumes (kaf)

	Lake Mead Elevation (feet msl)	2007 Interim Guidelines Shortages		Minute 323 Delivery Reductions	Total Combined Reductions	DCP Water Savings Contributions			Binational Water Scarcity Contingency Plan Savings	Combined Volumes by Country <i>US: (2007 Interim Guidelines Shortages + DCP Contributions)</i> <i>Mexico: (Minute 323 Delivery Reductions + Binational Water Scarcity Contingency Plan Savings)</i>					Total Combined Volumes
		AZ	NV	Mexico	<b>Lower Basin States + Mexico</b>	AZ	NV	CA	Mexico	AZ Total	NV Total	CA Total	Lower Basin States Total	Mexico Total	<b>Lower Basin States + Mexico</b>
Tier Zero	1,090 - 1,075	0	0	0	<b>0</b>	192	8	0	41	192	8	0	200	41	<b>241</b>
Tier 1	1,075 - 1050	320	13	50	<b>383</b>	192	8	0	30	512	21	0	533	80	<b>613</b>
Tier 2A	1,050 - 1,045	400	17	70	<b>487</b>	192	8	0	34	592	25	0	617	104	<b>721</b>
Tier 2B	1,045 - 1,040	400	17	70	<b>487</b>	240	10	200	76	640	27	200	867	146	<b>1,013</b>
Tier 2C	1,040 - 1,035	400	17	70	<b>487</b>	240	10	250	84	640	27	250	917	154	<b>1,071</b>
Tier 2D	1,035 - 1,030	400	17	70	<b>487</b>	240	10	300	92	640	27	300	967	162	<b>1,129</b>
Tier 2E	1,030 - 1,025	400	17	70	<b>487</b>	240	10	350	101	640	27	350	1,017	171	<b>1,188</b>
Tier 3	<1,025	480	20	125	<b>625</b>	240	10	350	150	720	30	350	1,100	275	<b>1,375</b>

← 2023 Reductions + Contributions

The Secretary of the Interior will take affirmative actions to implement programs designed to create or conserve 100,000 acre-ft per annum or more of Colorado River System water to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the lower basin. All actions taken by the United States shall be subject to applicable law, including availability of appropriations.

# Long-Term Solutions

## Augmentation

- Desalination
- Wheeling

## Conservation

- Following partnerships
- Finding innovative ways to conserve including agricultural efficiency and Brock Reservoir storage

## Reuse

- Exploring interstate and local projects to purify and treat wastewater for reuse