



2023 Shortage Conditions

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24-Month Study



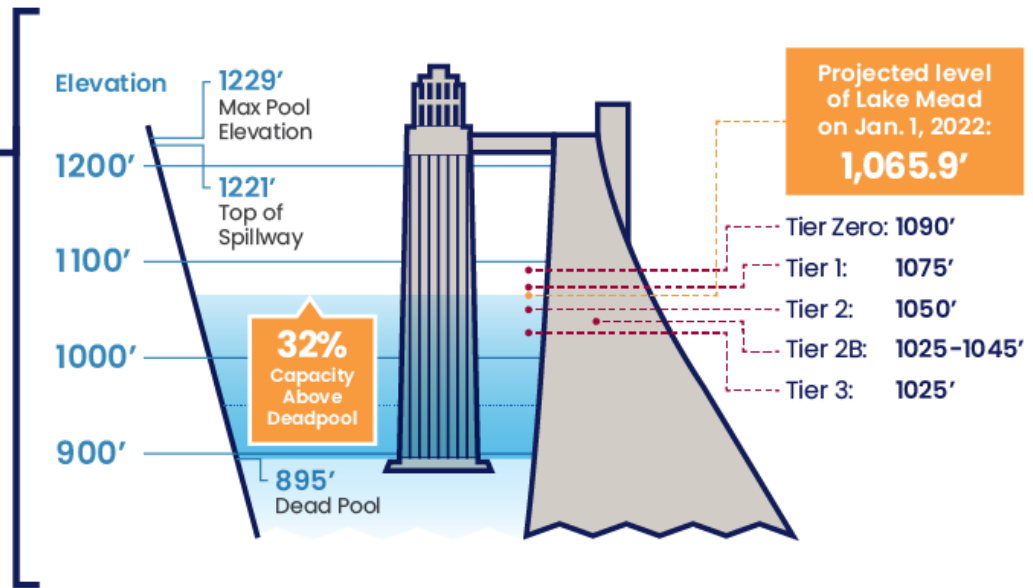
The 24-Month Study projects out Colorado River system conditions for 2 years using:

- Previous end-of-month reservoir elevations
- Considers three hydrologic scenarios – minimum, most and maximum
- Water demands
- Operating policies
- **Two important months**
 - April - conclusion of the snow accumulation season, when an accurate projection of runoff can be determined
 - August - runoff period has fully concluded and storage contents in the reservoirs are fully known

August 24-Month Study



24-Month Study – Lake Mead August 2021



NOT TO SCALE

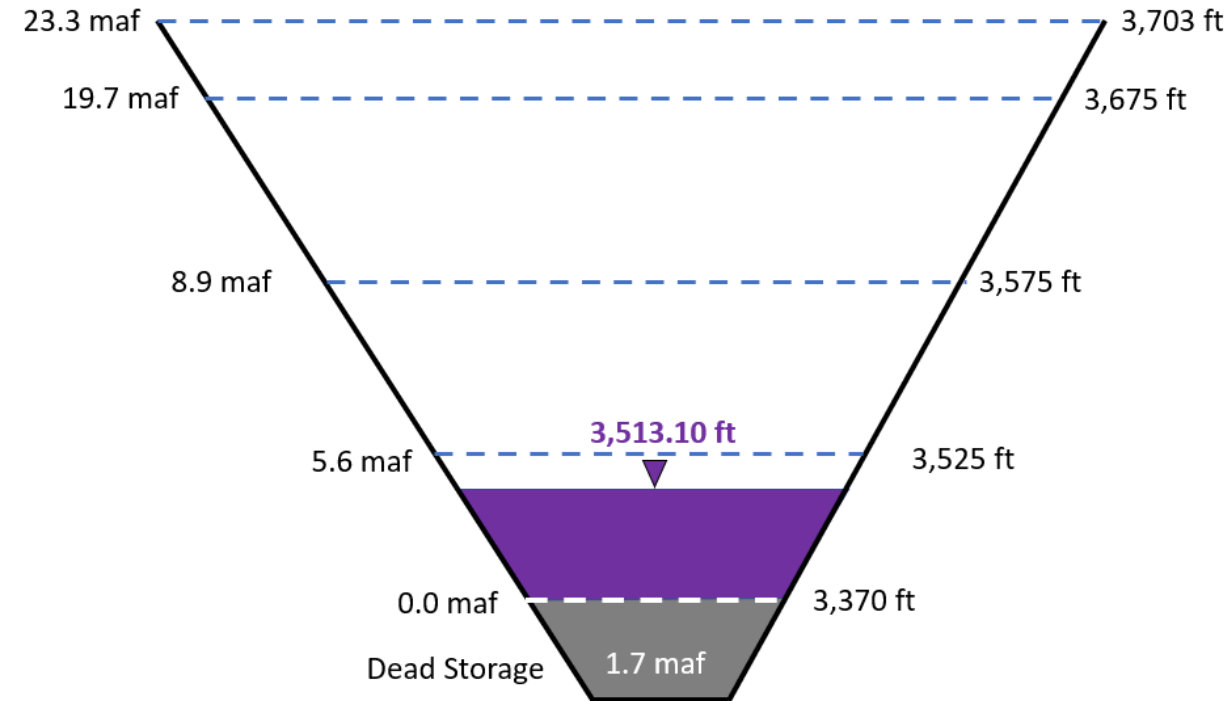
Shortage levels based on the Drought Contingency Plan & 2007 Shortage Sharing Guidelines

End of Calendar Year 2022 Projections

August 2022 24-Month Study Most Probable Inflow Scenario

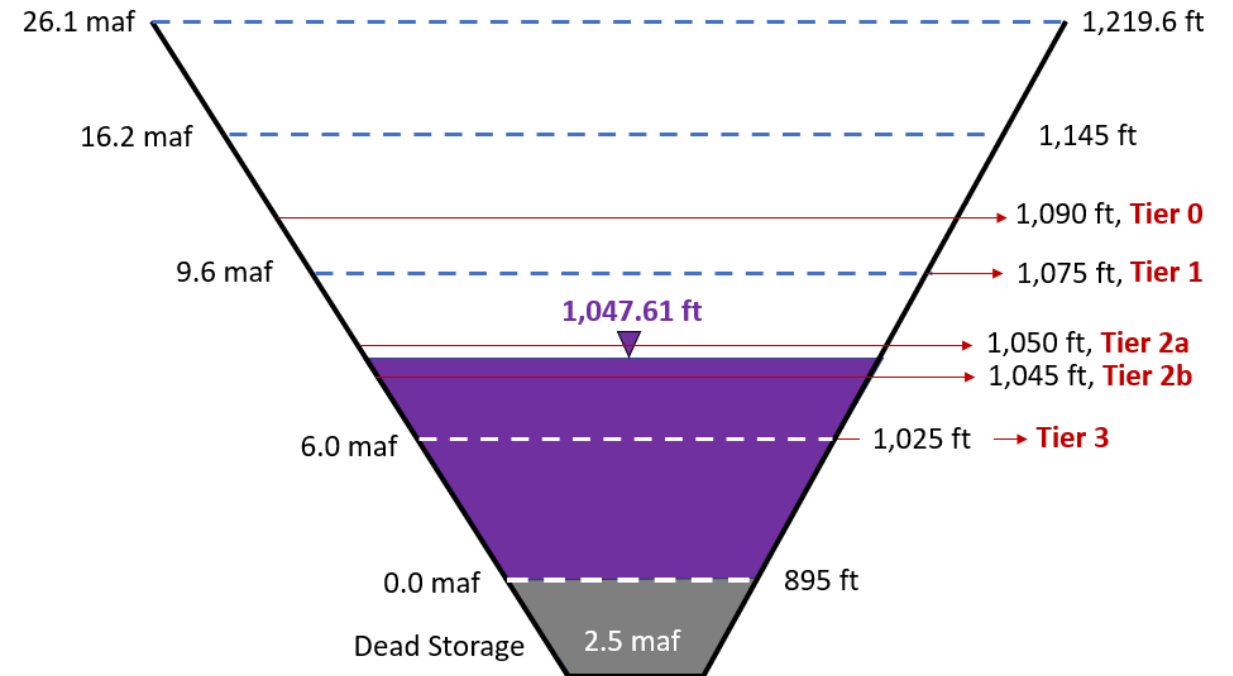
Lake Powell

Effective Elevation



Lake Mead

Effective Elevation



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	<i>Lower Basin States + Mexico</i>	AZ	NV	CA	Mexico	AZ Total	NV Total	CA Total	<i>Lower Basin States Total</i>	<i>Mexico Total</i>	<i>Lower Basin States + Mexico</i>
1,090 - 1,075	0	0	0	0	192	8	0	41	192	8	0	200	41	241
1,075 - 1050	320	13	50	383	192	8	0	30	512	21	0	533	80	613
1,050 - 1,045	400	17	70	487	192	8	0	34	592	25	0	617	104	721
1,045 - 1,040	400	17	70	487	240	10	200	76	640	27	200	867	146	1,013
1,040 - 1,035	400	17	70	487	240	10	250	84	640	27	250	917	154	1,071
1,035 - 1,030	400	17	70	487	240	10	300	92	640	27	300	967	162	1,129
1,030 - 1,025	400	17	70	487	240	10	350	101	640	27	350	1,017	171	1,188
<1,025	480	20	125	625	240	10	350	150	720	30	350	1,100	275	1,375

Tier zero →

Tier 1 →

Tier 2a →

Tier 2b →

Tier 2c →

Tier 2d →

Tier 2e →

Tier 3 →

← 2023 Reductions+ Contributions

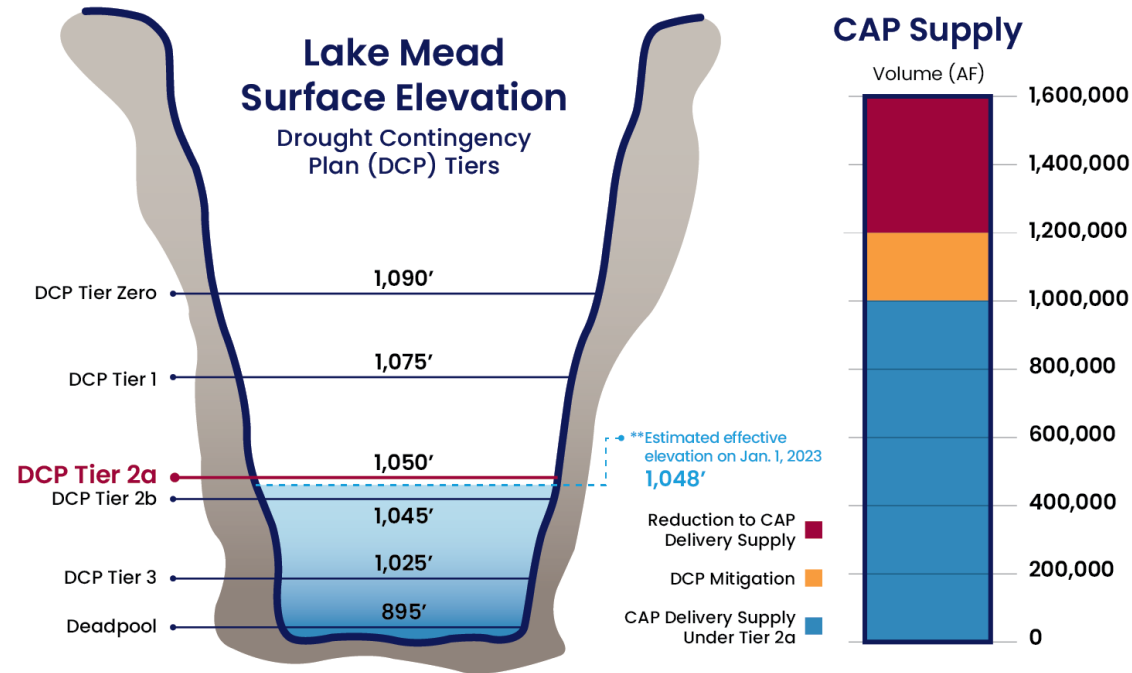
The Secretary of the Interior will take affirmative actions to implement programs designed to create or conserve 100,000 acre-ft per annum or more of Colorado River System water to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the lower basin. All actions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



CAP Contributions in Shortage: 2023

2023 Tier 2a Shortage

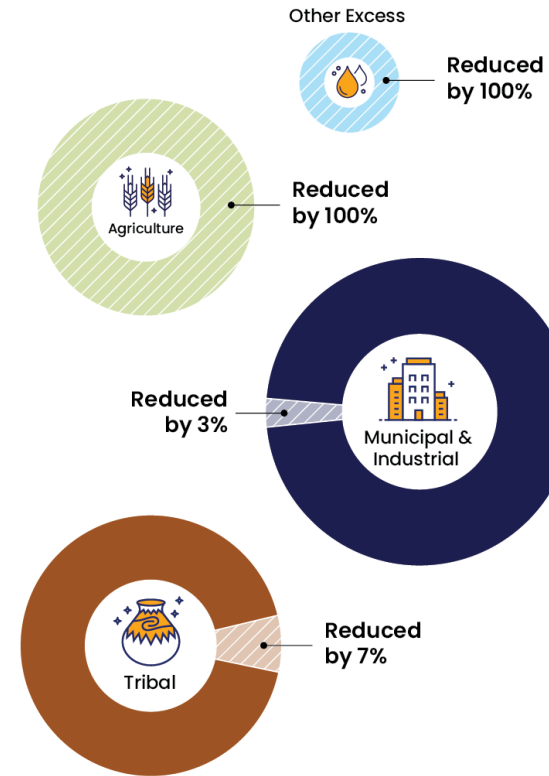
CAP Delivery System under Tier 2a



*Graphics are not to scale and serve only as a representation.
**The "effective" elevation includes about 7 feet of water that is actually stored in Lake Powell. The projected "actual" elevation is 1040.78.

To learn more, please visit: www.cap-az.com/colorado-river-shortage

2023 Reductions to CAP Contract Categories



This year is different

- May - Lake Powell protection Actions
 - Reduce Powell releases to 7.0 MAF for WY 2022
 - Increase Flaming Gorge releases by 500 KAF
- June - The Commissioner identified protection volumes in June 2022 (2-4 MAF/year above Tier Reductions) considering the dire conditions.
- August - Deadline for the Basin States to develop a plan or implement actions prescribed by the Secretary.
- August - Reclamation announcements in addition to 24 MS:
 - Explore their Authorities to implement Protection Volumes
 - Engage with the Basin States to identify voluntary actions in 2023
 - Initiate conversations with Mexico



Key Takeaways

- The drought conditions in the Colorado River Basin has persisted for over 22 years and the storage in Lakes Mead and Powell have declined
- Since 2014, Arizona has left more than 2.6 maf in Lake Mead to protect the system
- Lake Mead will operate in a Tier 2a shortage condition in 2023. Arizona will take a reduction of 592 KAF in 2023
- All the conservation and mandatory reductions have not been enough in the face of the multidecade drought. We will likely see deeper reductions in the coming years