



Current Hydrology and Basin Status

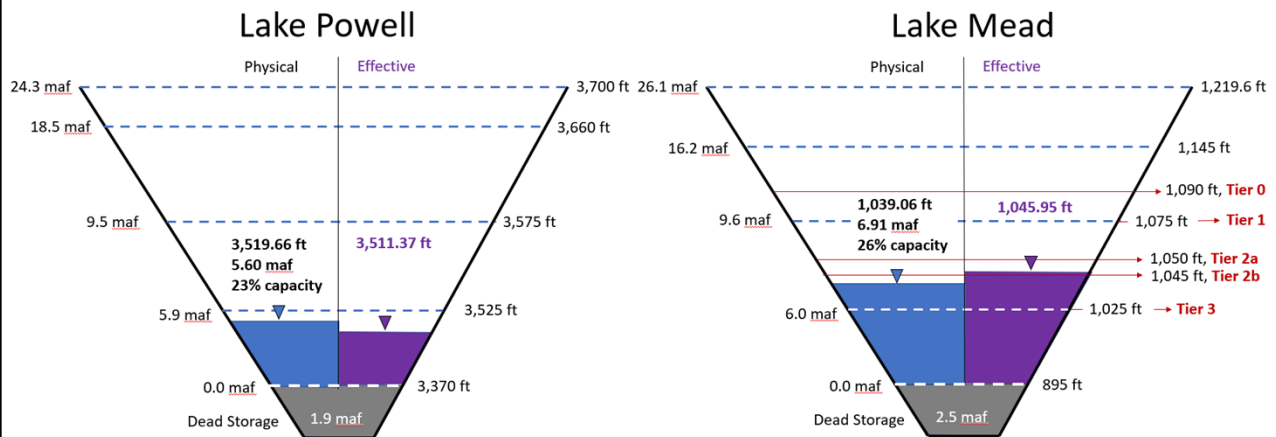
Patrick Dent, Assistant General Manager for Water Policy
 CAWCD Special Board Meeting | June 27, 2022

YOUR WATER. YOUR FUTURE.

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Lake Powell and Mead Contents

End of Calendar Year 2022 Projections
 June 2022 24-Month Study Most Probable Inflow Scenario



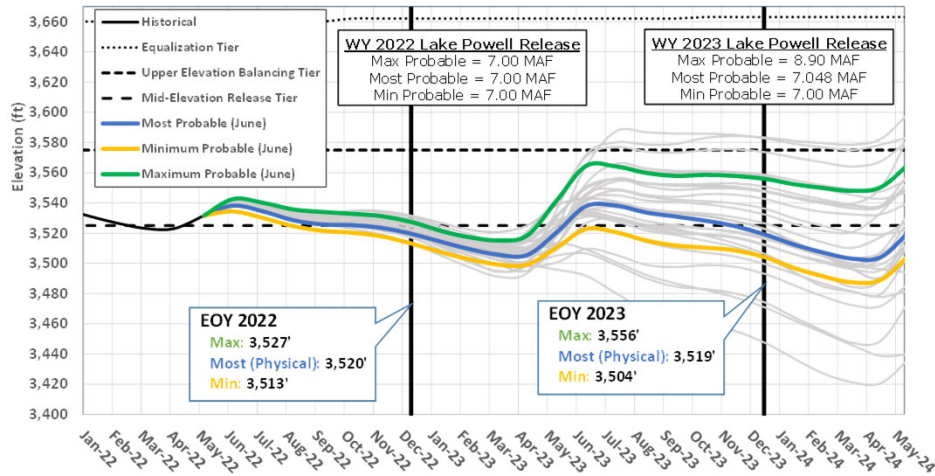
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Lake Powell Elevations

June 2022 24-Month Study + CRMMS-ESP



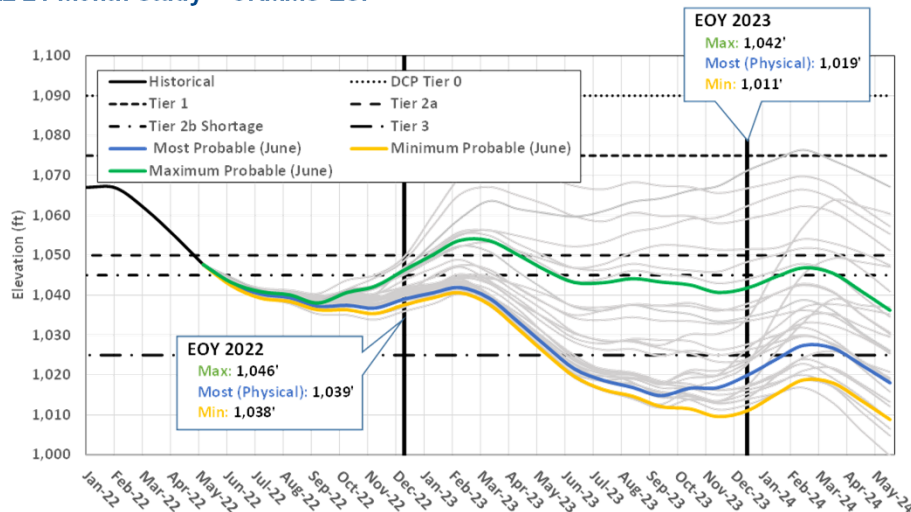
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Lake Mead Elevations

June 2022 24-Month Study + CRMMS-ESP



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Lower Basin “Mass Balance”

Estimated Calendar Year 2022 Physical Supply Accounting as of April 28, 2022 [Presented @ May 6, 2022 ADWR/CAP Joint Briefing]

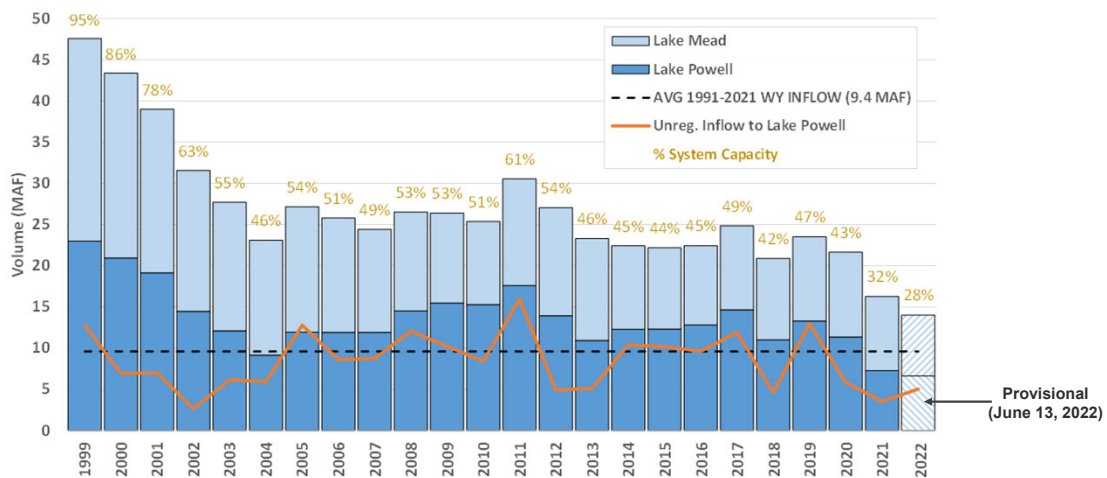
Supply / Demand	Volume (MAF)			
	Planned	“Normal”		
Powell release	7.00	8.23	Data based on Bureau of Reclamation reservoir release data, decree accounting, and 24-Month Study.	
Intervening flows	0.78	0.78		
Lake Mead evaporation	(0.45)	(0.45)		
Delivery Losses & Bypass Flows	(0.74)	(0.74)		
Consumptive uses	Nevada (0.26)	(8.38)	(8.38)	Basic apportionment is 0.3 MAF
	Arizona (2.11)			Basic apportionment is 2.8 MAF
	California (4.59)			Basic apportionment is 4.4 MAF (~0.2 MAF withdrawal of previously conserved water)
	Mexico (1.42)			Allocation is 1.5 MAF
Change in Lake Mead Storage	(1.79)*	(0.56)**	* Equivalent to a decline of ~23 feet of elevation. ** Equivalent to a decline of ~6 feet of elevation.	

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Combined Powell & Mead Contents

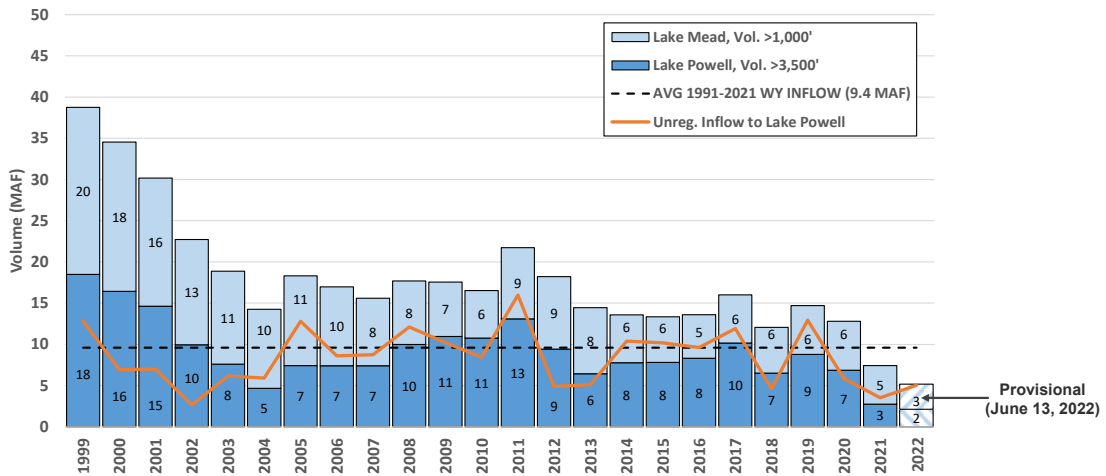


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Combined Powell & Mead Contents: Volume Above Critical Elevations

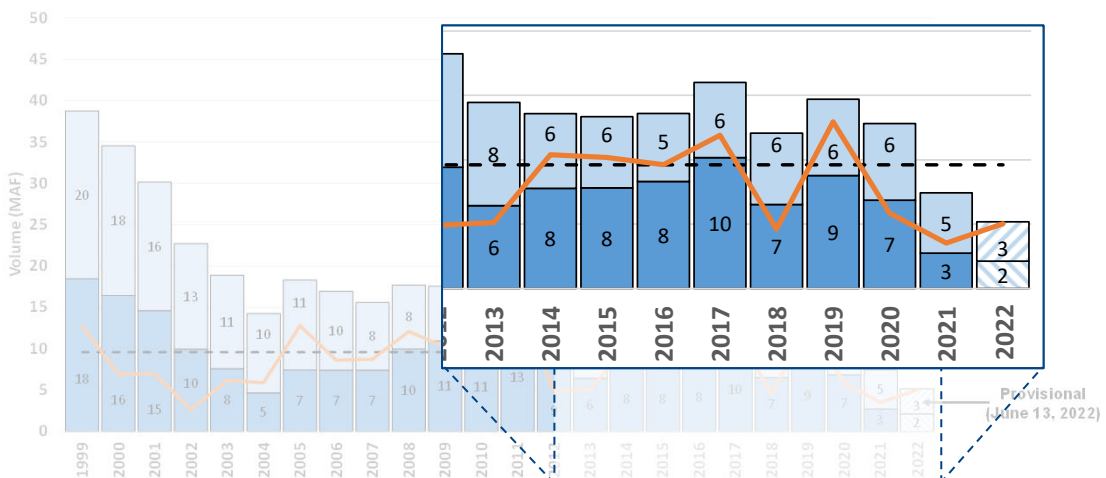


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Combined Powell & Mead Contents: Volume Above Critical Elevations



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Reclamation's Protection Volume Analysis

- Reclamation recently presented modeling results showing the volumes necessary to protect critical elevations
- Large annual reductions are required if inflows remain below average

2023-2026 Average Lake Powell Inflow	Annual Volumes (maf) Needed to Protect:	
Percent of 1991-2020 Avg*	Powell 3,525' & Mead 1,020' Avg (Min - Max)	Powell 3,500' & Mead 1,000' Avg (Min - Max)
Greater than 95%	0.6 (0.3 - 2.0)	0.2 (0.0 - 1.4)
80% - 95%	1.3 (0.3 - 2.8)	0.6 (0.0 - 2.1)
64% - 79%	2.1 (1.1 - 3.1)	1.3 (0.4 - 2.3)
50% - 63%	3.5 (2.5 - 4.5)	2.7 (1.7 - 3.7)
Less than 50%	4.2 (4.2 - 4.2)	3.5 (3.5 - 3.5)



Extracted from June 16, 2022 "Colorado River System Mid-term Projections" presentation at 42nd Annual Colorado Law Conference on Natural Resources, Boulder, Colorado



Reclamation's Protection Volume Analysis

- Reclamation's summary conclusions emphasize the urgency of acting and the implications of delay

Summary

- We do not know what runoff will be next year, but if it is below average, we are vulnerable to falling below the 3,525'/1,020' combined storage volume if we do not act.
- Even with a good year, we can quickly be back in the same position we are in today, or worse.
- If 2023 inflow is like 2022, Lake Powell and Lake Mead together need an additional 2.5 maf to stay above the 3,525'/1,020' combined storage volume.
- Each year we fall short of protecting whatever elevations we choose to protect, the volumes needed to stabilize the system in future years increase.



Slide from June 16, 2022 "Colorado River System Mid-term Projections" presentation at 42nd Annual Colorado Law Conference on Natural Resources, Boulder, Colorado



CAP Water Uses

- There is a very large range in size of Indian and M&I priority entitlements:
 - Largest: 191,200 AF (Gila River Indian Community)
 - Smallest: 64 AF (Water Utility of Greater Tonopah)
- Indian priority water has been fully ordered and used in recent years
 - ~40% of the Indian priority supply is leased to, or exchanged with, M&I water users
 - Most leases are long-term
- Almost all M&I subcontractors have been ordering and using their full entitlements

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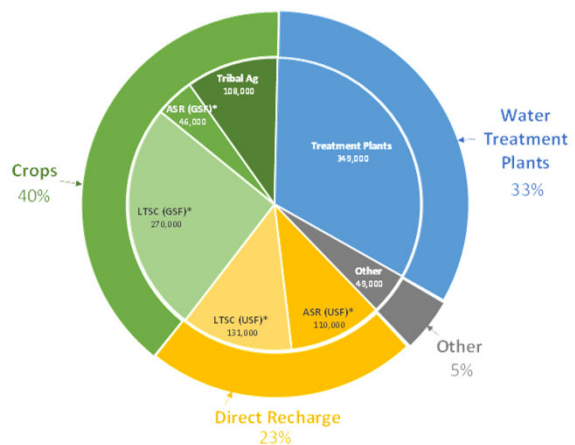


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CAP Water Use

- There is a diversity of end-uses: water treatment plants, annual storage & recovery, long-term storage credit accrual, mining, and some direct use by turf facilities and cooling towers
 - All uses are beneficial
 - All uses are compliant with contract and subcontract terms
- All users are impacted by shortage, though the specific impacts vary

Estimated 2023 Water Uses, by Destination and Type



*The split between Annual Storage & Recovery versus LTSC accrual is an estimate based on recent history and projections

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