



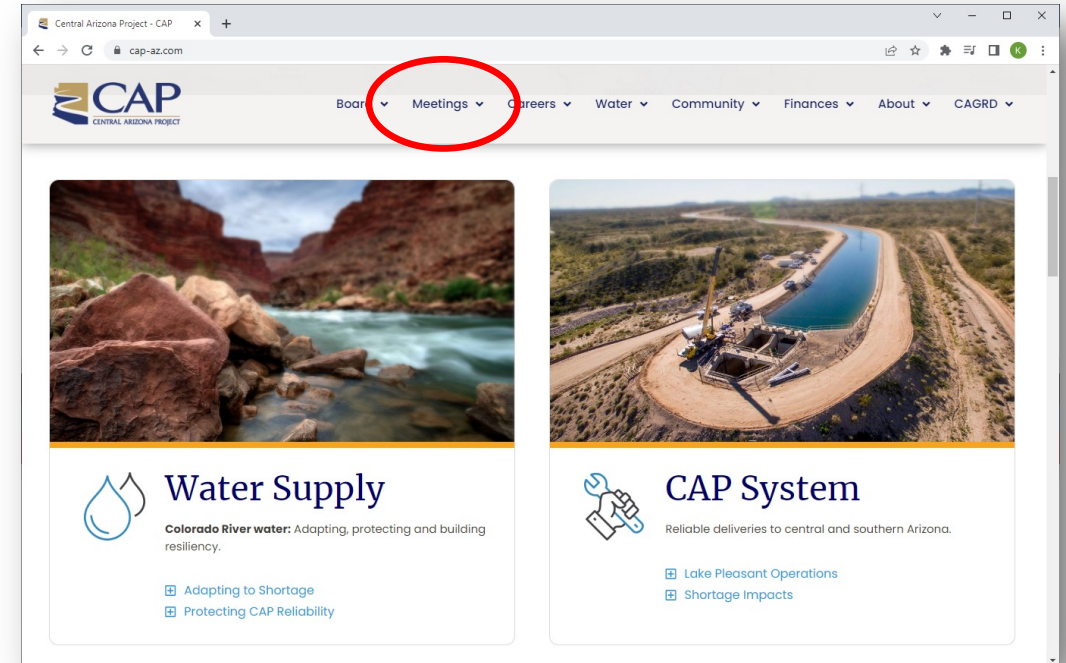
CAP Water User's Briefing: 2023 Look Ahead

CAP Headquarters and Livestreamed
June 23, 2022

YOUR WATER. YOUR FUTURE.

Meeting Logistics

- Comments and questions may be sent by email to: **questions@cap-az.com**
- Meeting material is posted on the CAP website under “Meetings” → “Briefings and Roundtables”
 - **www.cap-az.com**



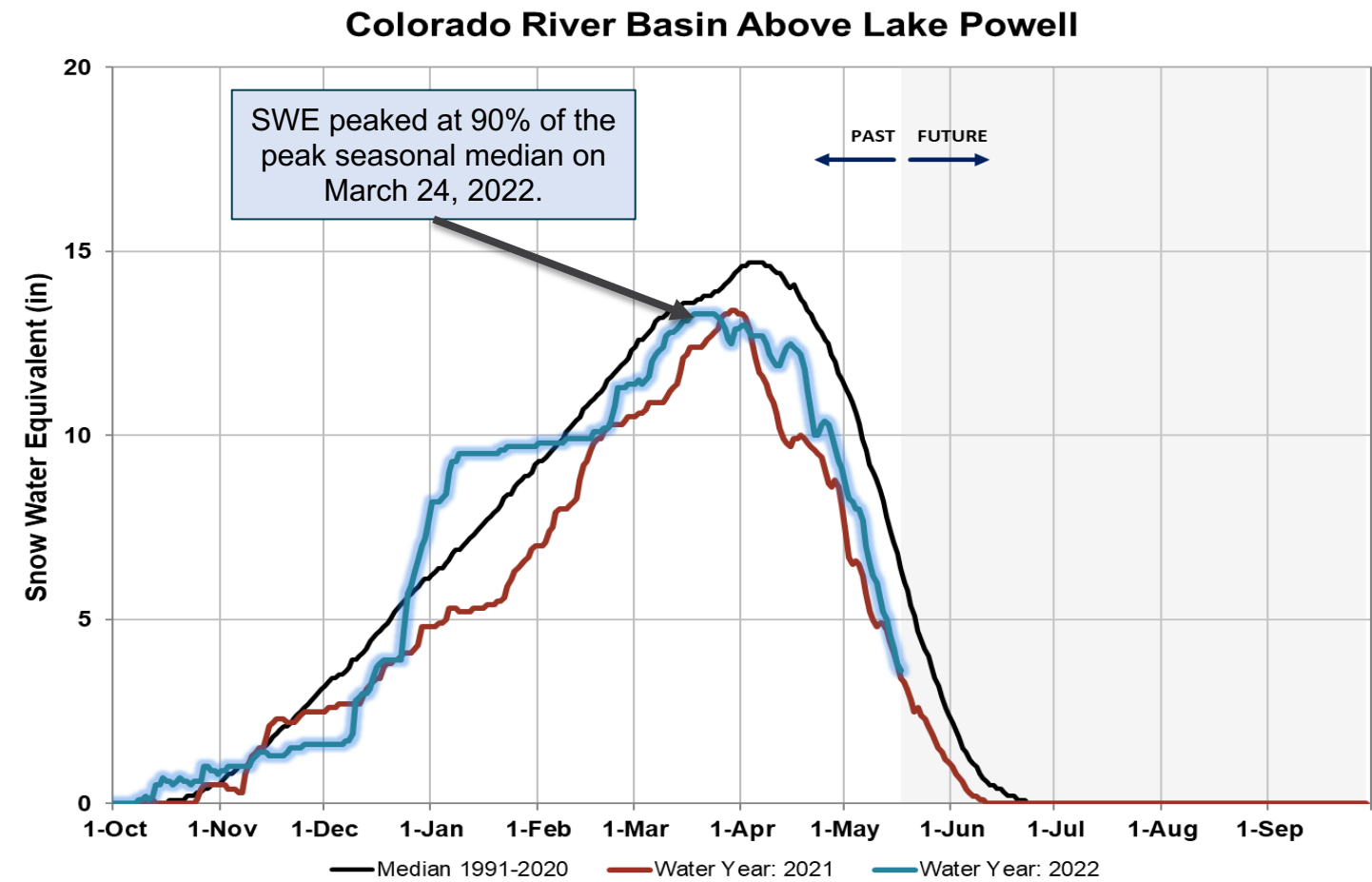
Agenda

- Welcome and Opening Remarks—*Cooke*
- Current Hydrology and Basin Status—*Dent*
- 2023 CAP Shortage Impacts and Preparation
 - Shortage Projections—*Seasholes*
 - Water and Power Operations—*Francom*
 - Finances—*Dunlap*
 - Communications and Outreach—*Schwartz-Manock*
- Questions
- Next Steps

Current Hydrology and Basin Status

Patrick Dent
Assistant General Manager, Water Policy

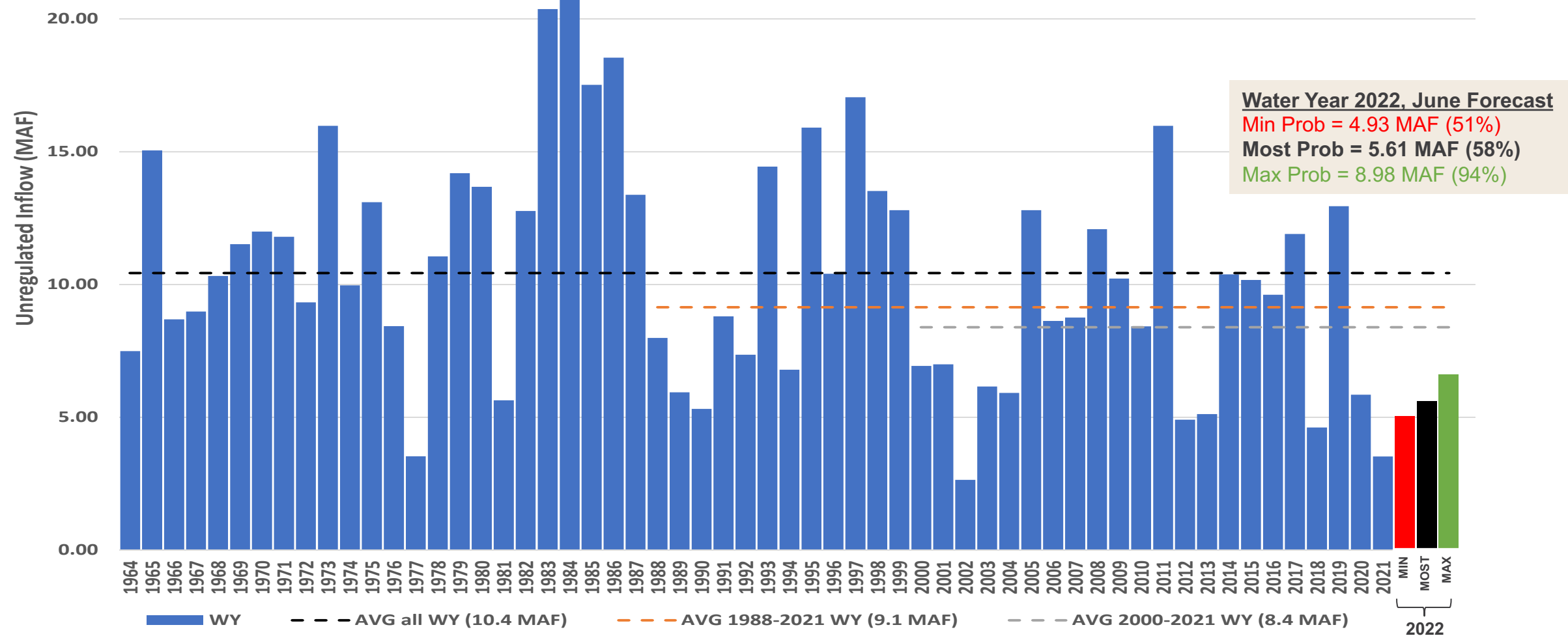
Lake Powell Inflows



Inflow Year	MAF	% of 1991 to 2020 Average
WY 2022*	5.61	58%
WY 2021	3.50	37%
WY 2020	5.85	61%
3-year average**	4.99	52%
Average for WY 2001 - WY 2004	5.43	56%

*Colorado Basin River Forecast Center, June 3, 2022 forecast
** Includes WY 2022 forecasted volume.

Lake Powell Inflows

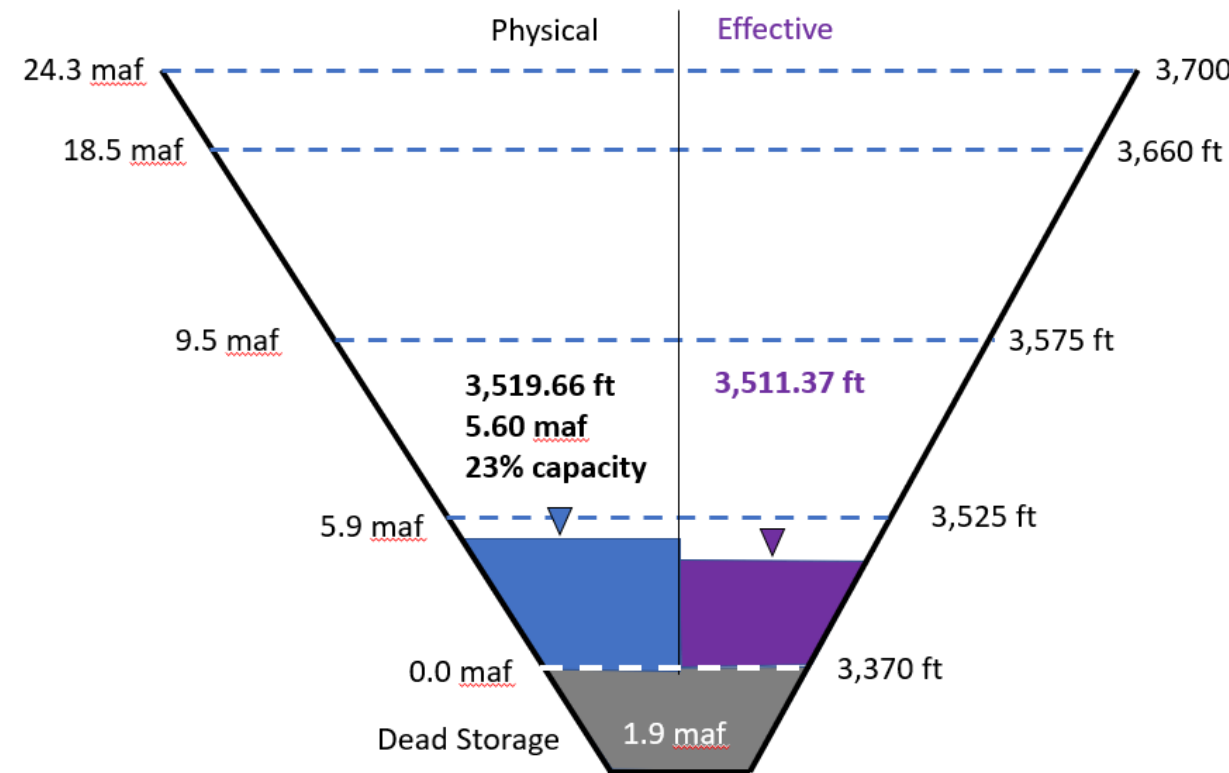


Lake Powell and Mead Contents

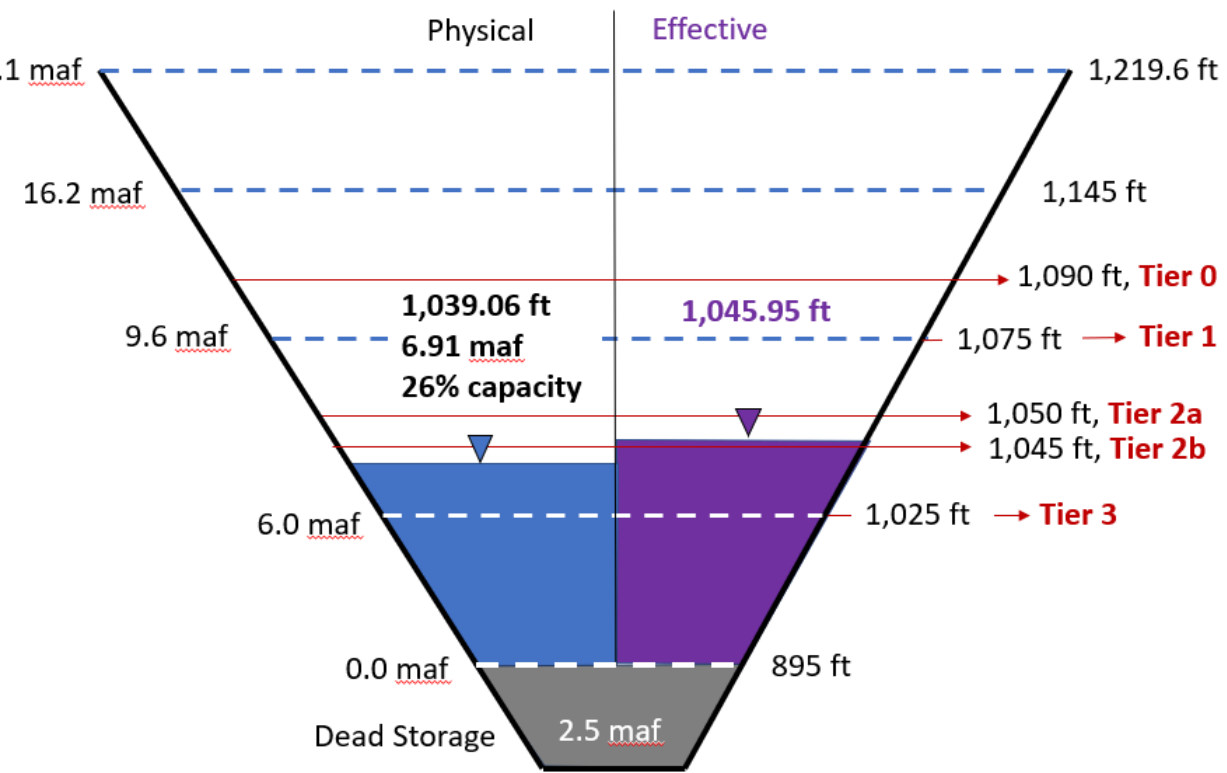
End of Calendar Year 2022 Projections

June 2022 24-Month Study Most Probable Inflow Scenario

Lake Powell

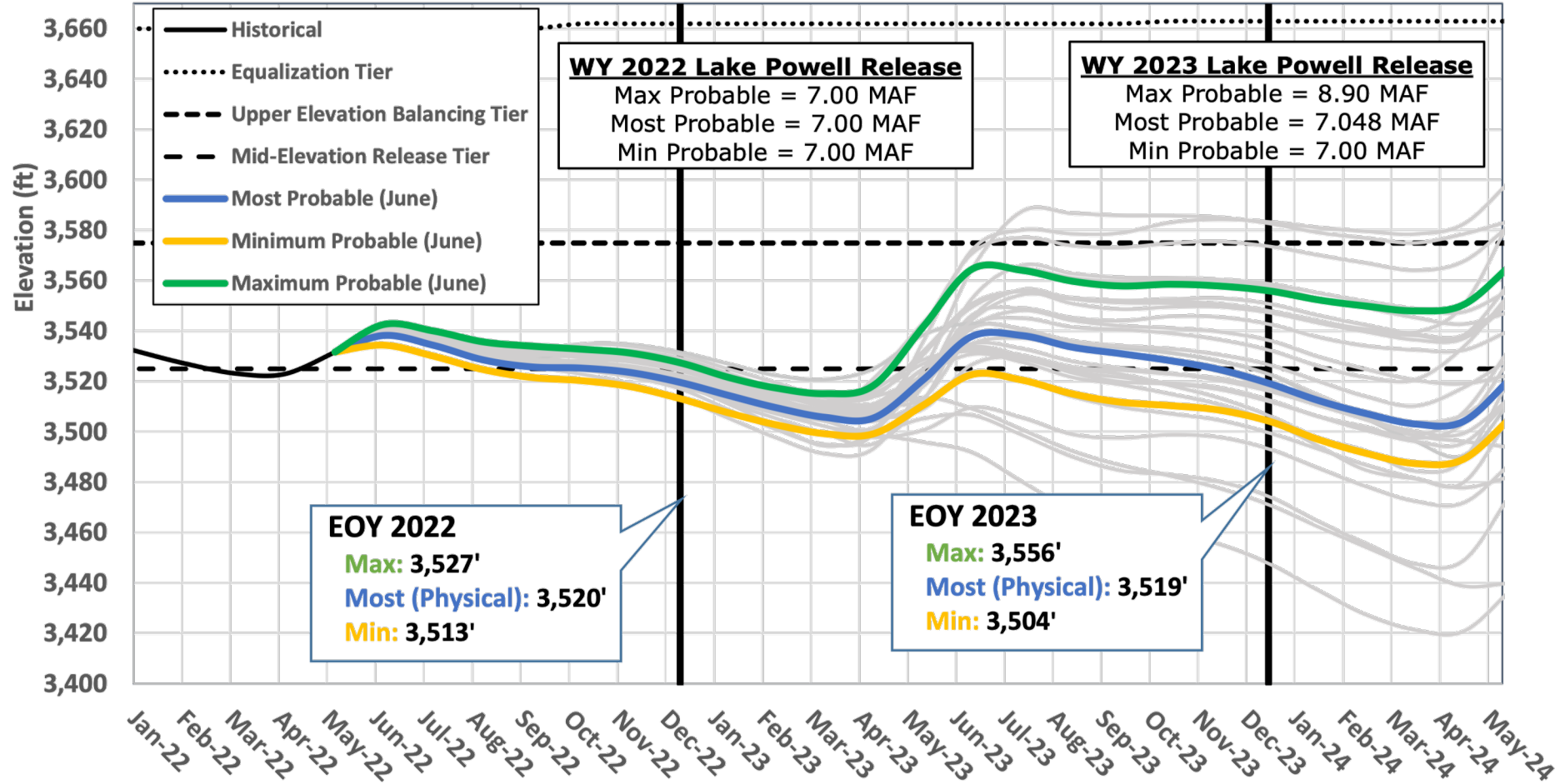


Lake Mead



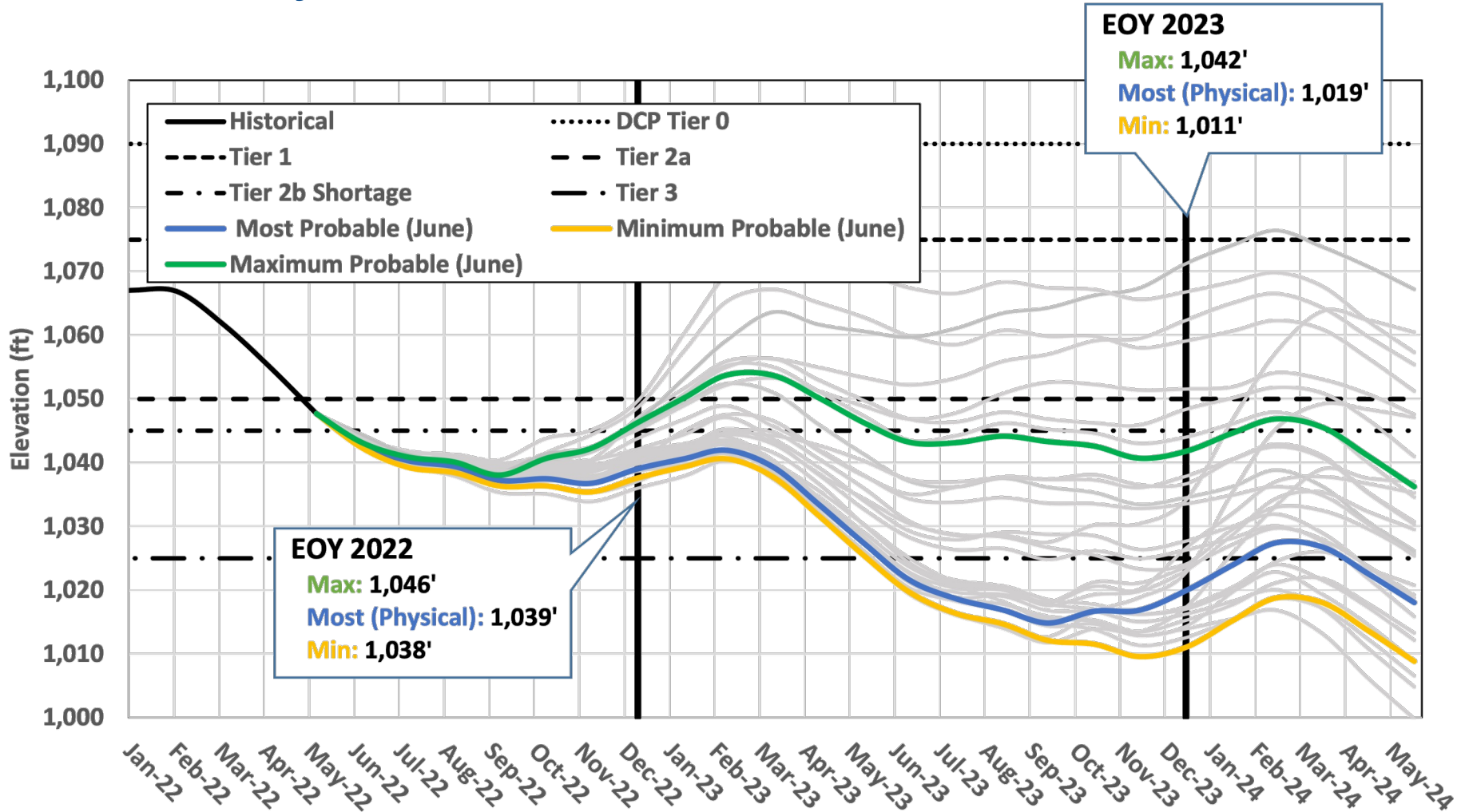
Lake Powell Elevations

June 2022 24-Month Study + CRMMS-ESP

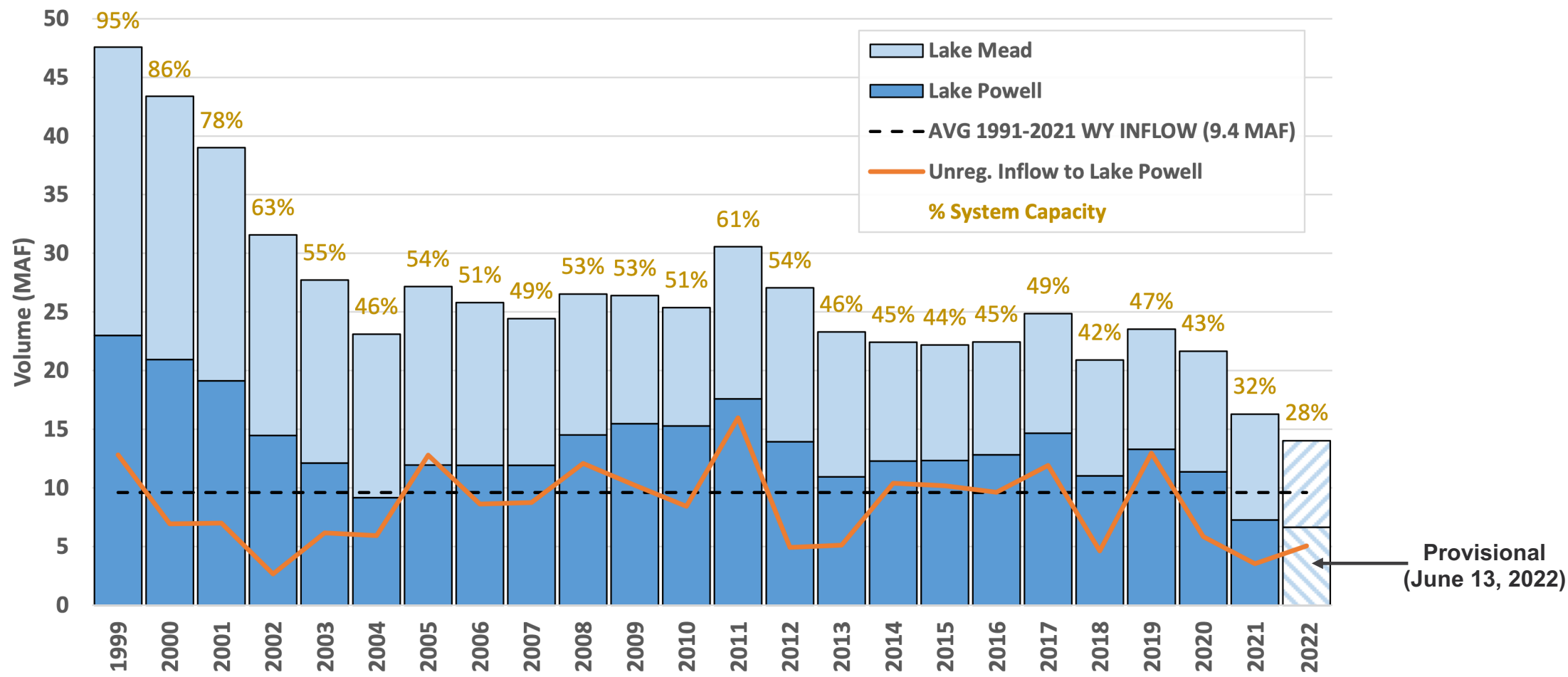


Lake Mead Elevations

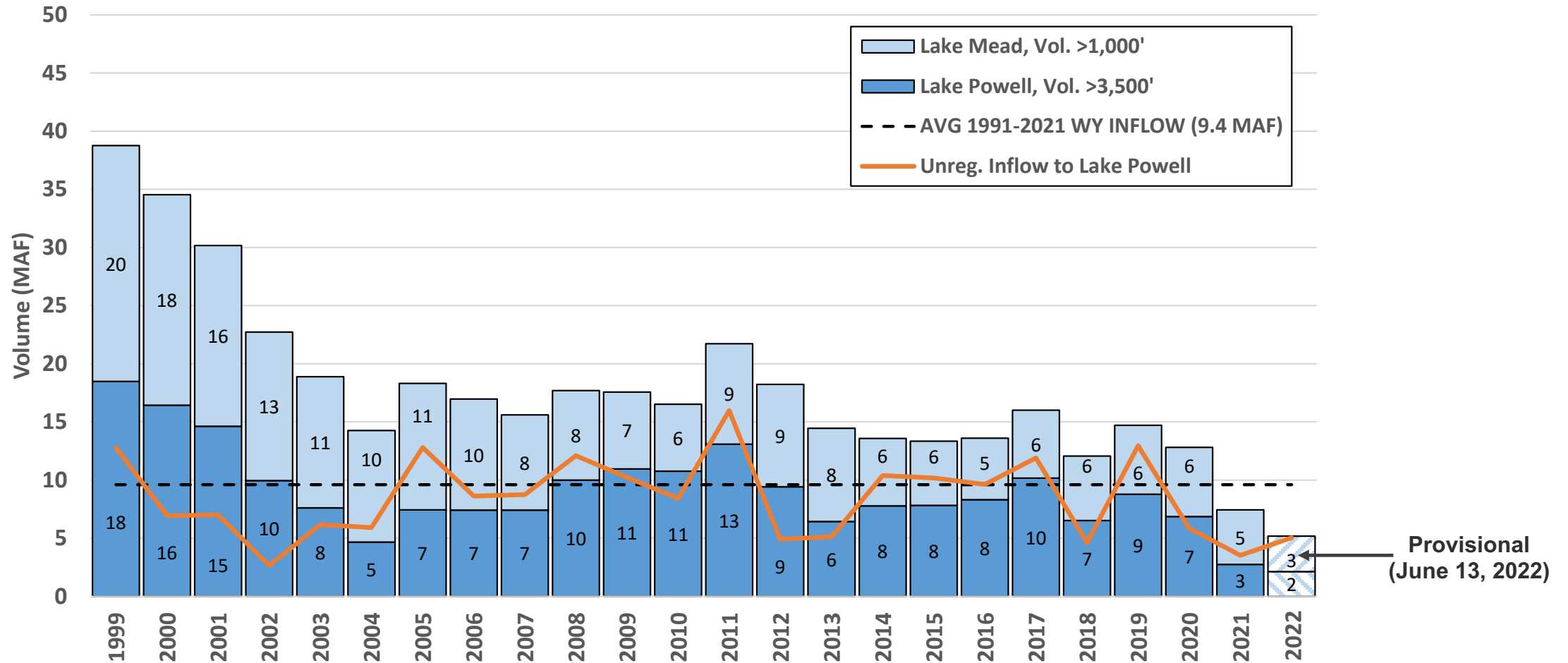
June 2022 24-Month Study + CRMMS-ESP



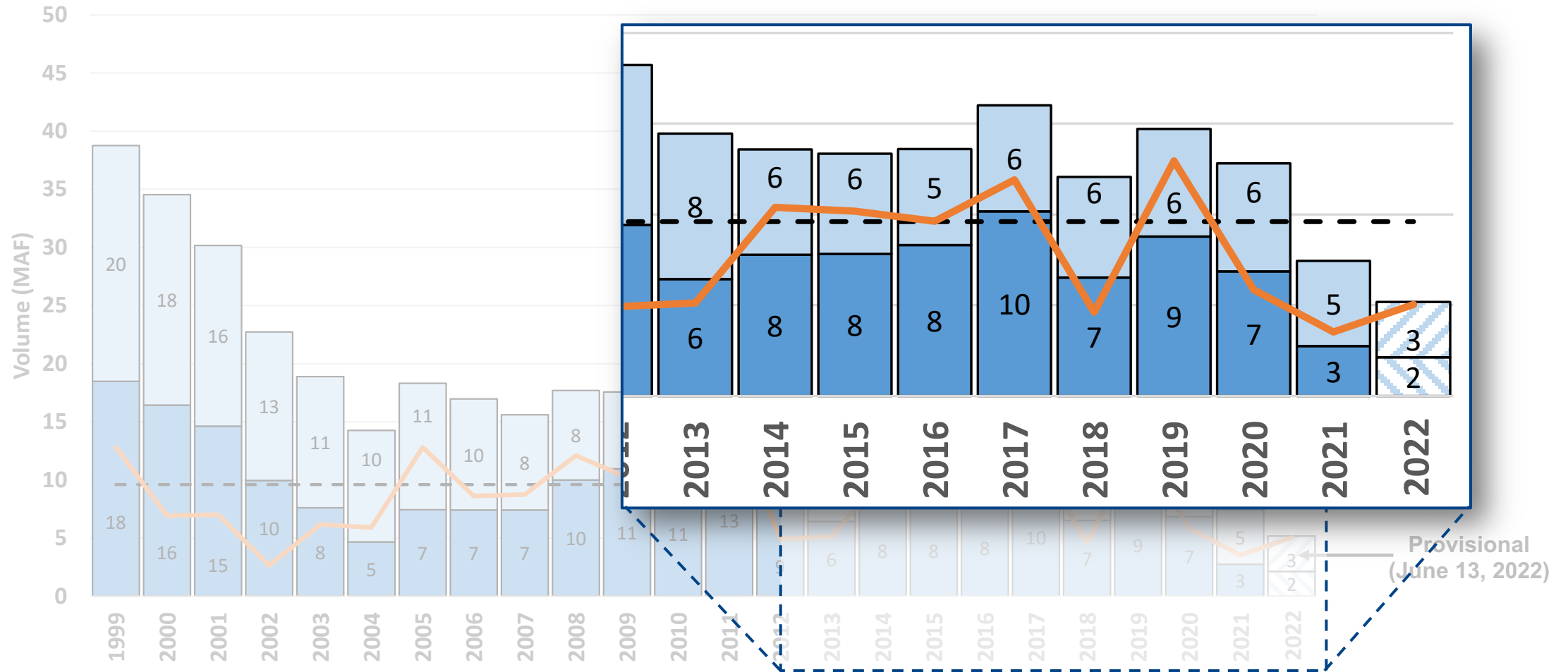
Combined Powell & Mead Contents



Combined Powell & Mead Contents: Volume Above Critical Elevations



Combined Powell & Mead Contents: Volume Above Critical Elevations



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)**	<p>* Equivalent to a decline of ~23 feet of elevation.</p> <p>** Equivalent to a decline of ~6 feet of elevation.</p>

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.



21 - June 16, 2022

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

2023 CAP Shortage Impacts and Preparation: Shortage Projections

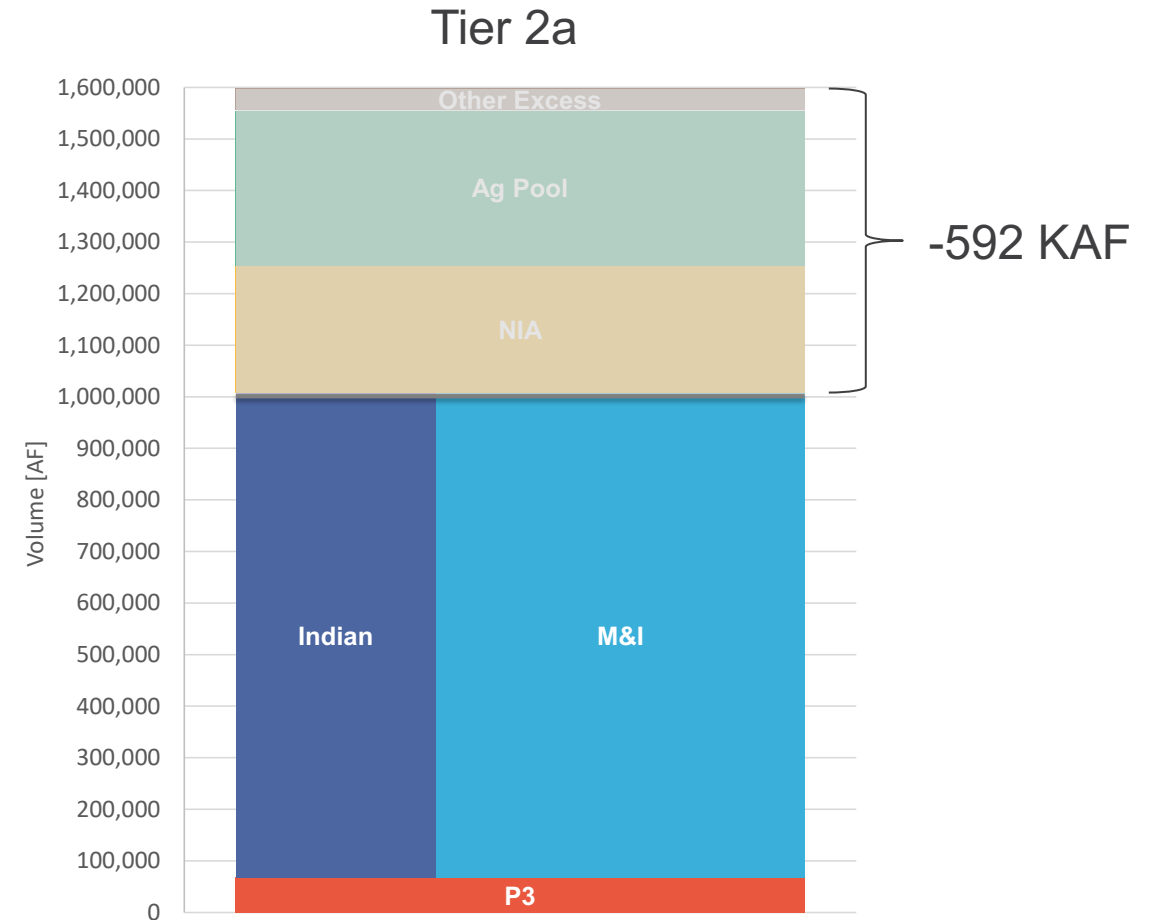
Ken Seasholes
Manager, Resource Planning & Analysis

Estimated 2023 Shortage Impacts

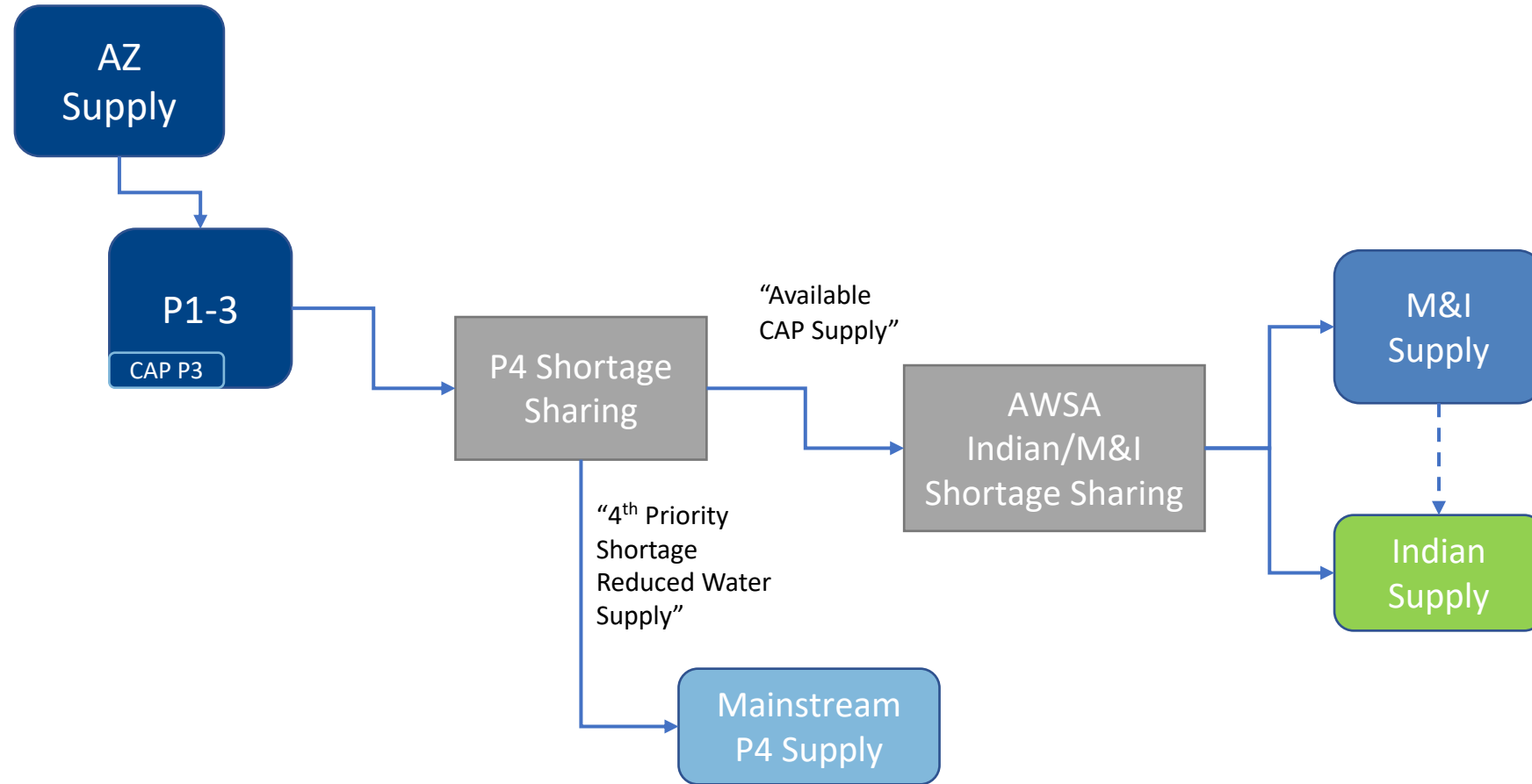
2007 Guideline Reductions and LBDCP Mandatory Contributions

- Current official projections still indicate the likelihood of Tier 2a determination in 2023

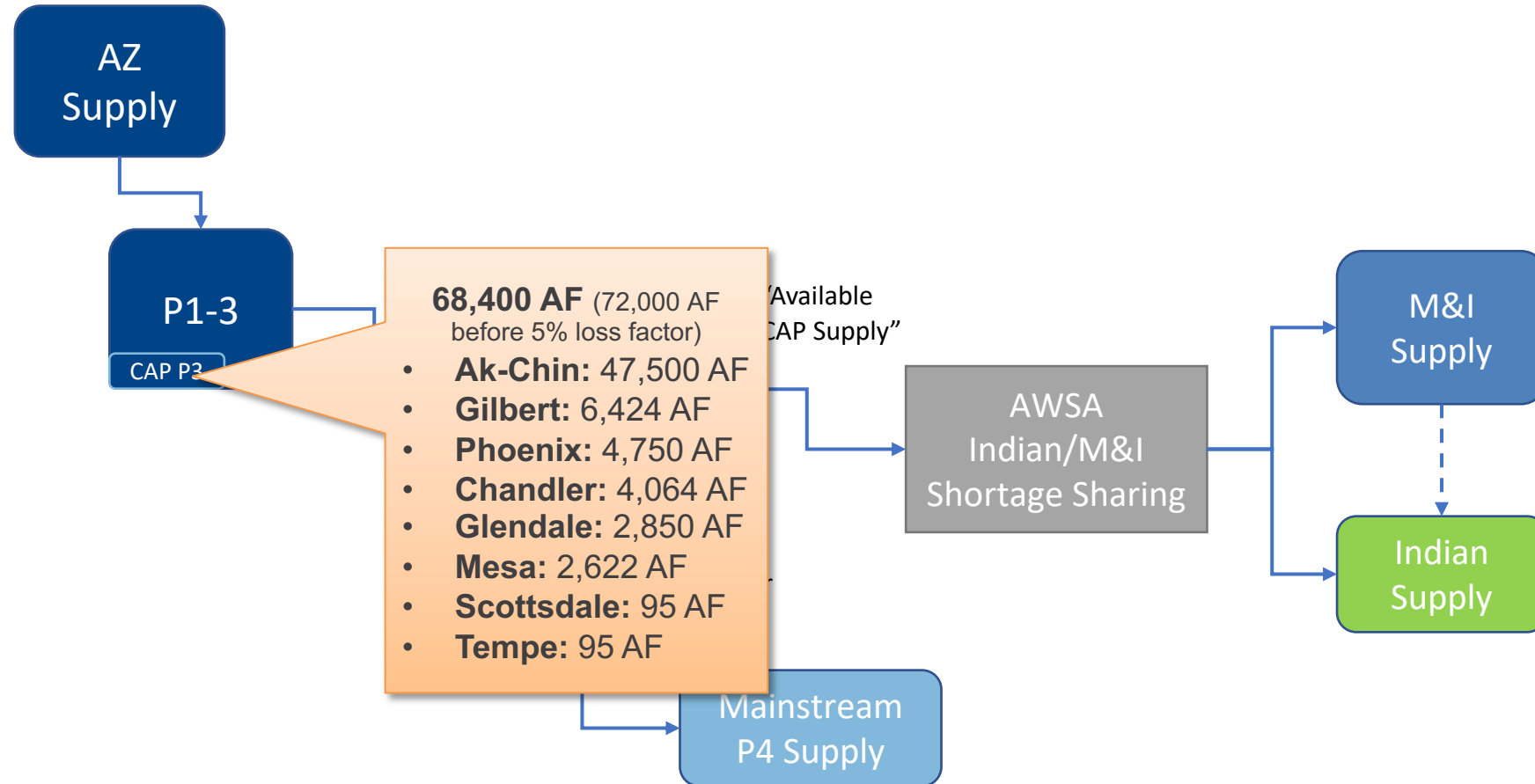
- 1050' <= Tier 2a > 1045'



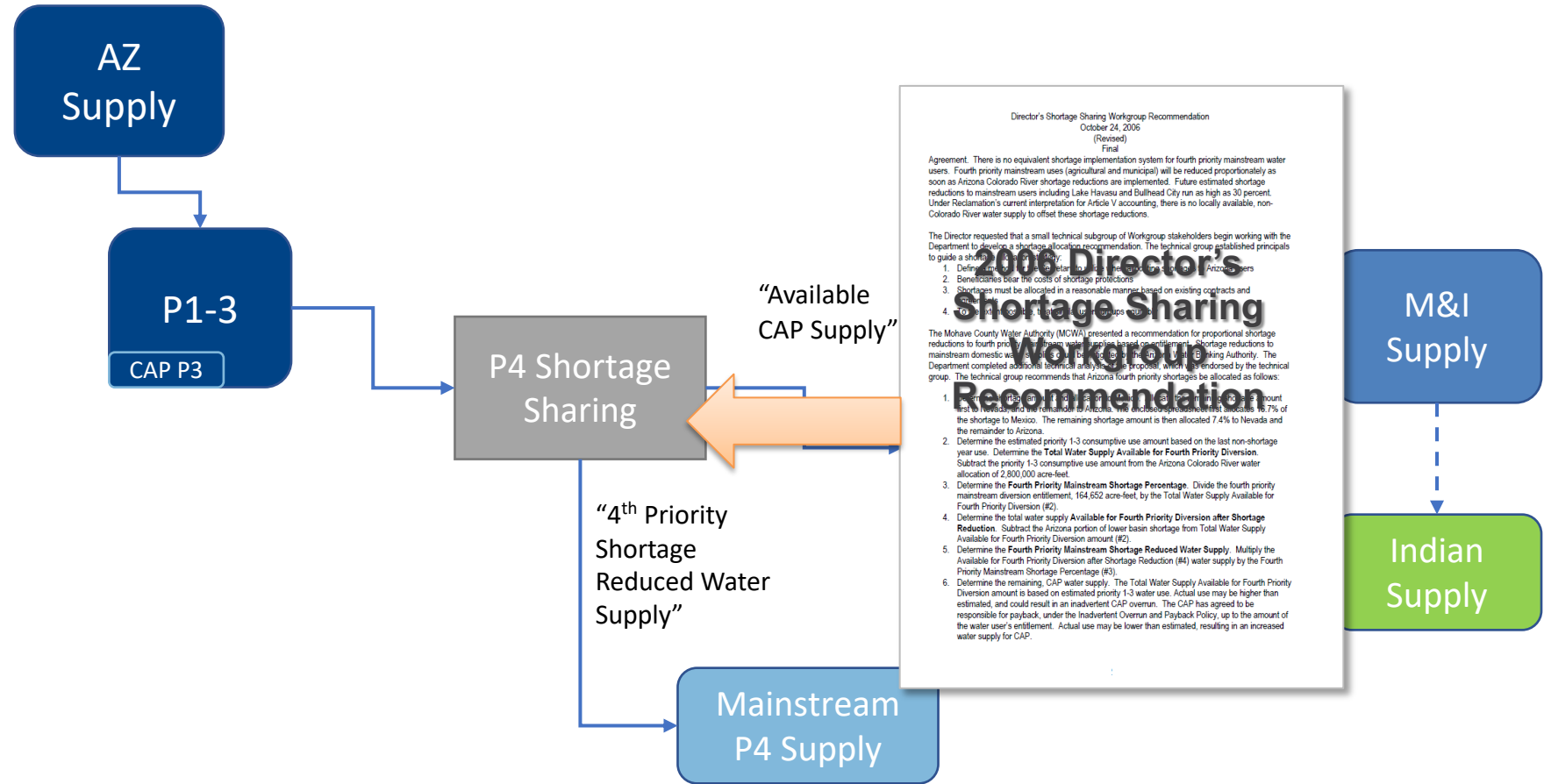
Shortage Sharing Within Arizona



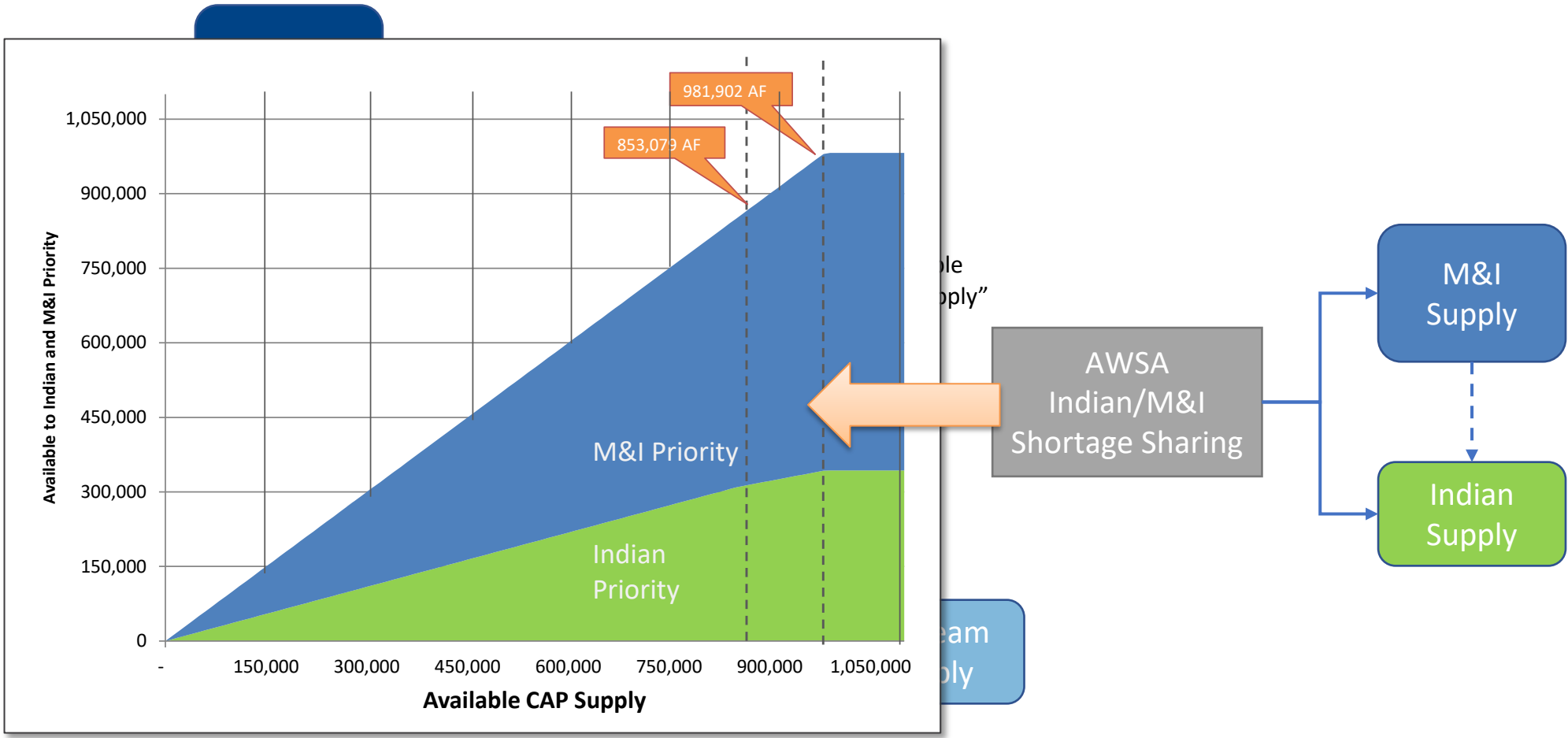
Shortage Sharing Within Arizona



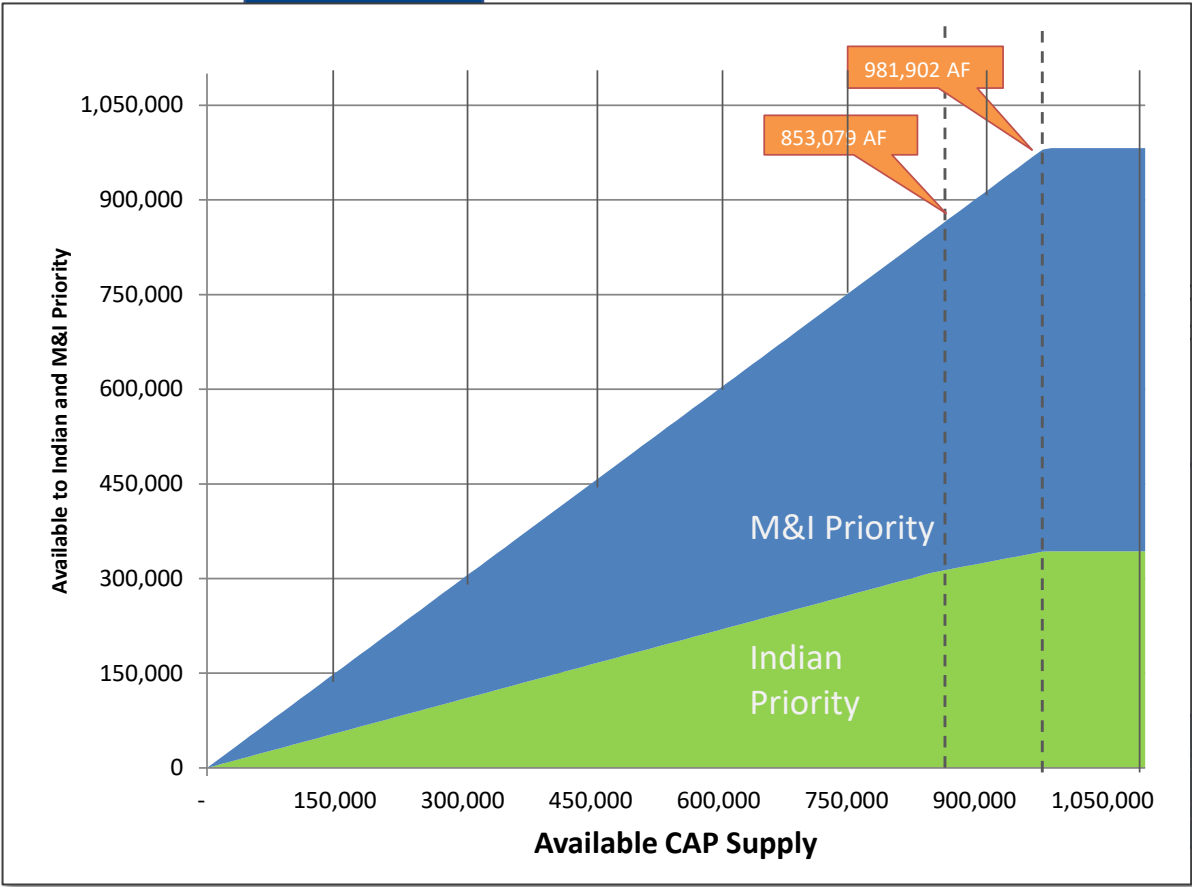
Shortage Sharing Within Arizona



Shortage Sharing Within Arizona



Shortage Sharing Within Arizona



Distribution of 4 th Priority CAP Delivery Supply Based on AWSA Formula and Estimated 2023 Water Orders*				
Delivery Supply [AF]	Indian Priority		M&I Priority	
	Pool Availability	Pool Size [AF]	Pool Availability	Pool Size [AF]
500,000	47%	157,000	45%	274,600
400,000	36%	120,600	35%	211,000
300,000	25%	84,200	24%	147,400
200,000	14%	47,900	14%	83,700
100,000	4%	11,500	3%	20,100

* For illustration purposes only.

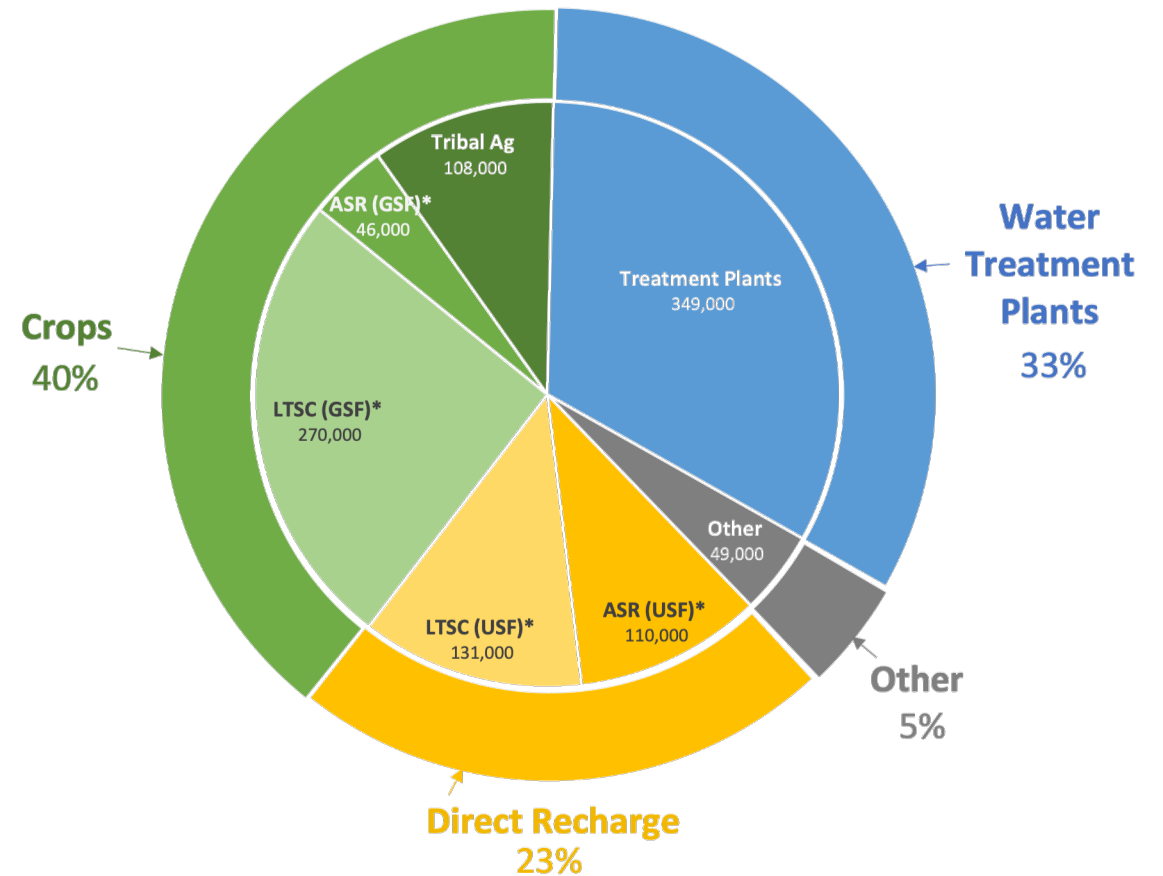
CAP Water Uses

- 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

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 Deliveries,
by End Use and Type



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

2023 CAP Shortage Impacts and Preparation: Water and Power Operations

Darrin Francom

Assistant General Manager, Operations, Maintenance, Engineering

Water and Power Operations

- Diversion Pumping / Energy Shaping
 - Continue – Focus Diversion Pumping On Low-Cost Months and Hours
 - 2023 Energy Acquisition Based on 1 MAF
 - Reduced Diversions Will Reduce Pumping Energy Rate
 - Reduce Energy Needs – Sell off Surplus (expect above purchase price)
 - Increased % of Energy Use in Low Cost “Duck Curve” Hours
- Lake Pleasant Operations
 - Fill Lake Pleasant in Spring, Release in Summer – Assume Same Seasonal Shape
 - Evaluate Operational Storage Reserve (2 month supply) – Could Lower Operating Band
 - Lower = Less Evaporative Losses

Water and Power Operations

- Water Quality
 - Strive to Maintain Water Consistency (Co. River vs. Lake Pleasant Blends)
 - Active Communication with WTP Operators
 - AquaPortal Real-Time Data Sharing
- Asset Management / Maintenance
 - Not Highly Impacted
 - Need to Manage Physical Assets Remains

2023 CAP Shortage Impacts and Preparation: Finances

Douglas Dunlap
Manager, Finance and Accounting

Finances

- 2023 shortage impacts are still being evaluated and will most likely evolve over the next several months
- Water Delivery Rates
 - Fixed OM&R will increase proportionately with water reductions
 - Energy may decrease
 - CAWCD Board will determine what, if any, relief to address rate increases
 - 2023 Monthly billing will be at the currently posted Tier 1 rates and then reconciled/settled in April 2024.

Finances

- CAWCD maintains reserves for unexpected events and extraordinary needs
 - Board Established Reserves - Projection for 2022 Year End
 - Strategic Reserves: \$161 million
 - Should be maintained for unanticipated needs
 - Extraordinary Cost Reserve: \$188 million
 - Though established for specific projects, could be temporarily redirected for current needs
- 2023/2024 Tax Revenues
 - Levied rates and usage to be determined by the CAWCD Board
 - General ad valorem taxes is estimated at \$69M at 10-cents per Assessed Value
 - Water storage tax is estimated at \$28M at 4-cents per Assessed Value

2023 CAP Shortage Impacts and Preparation: Communications and Outreach

Bridget Schwartz-Manock
Director, Public Affairs

Stakeholder Outreach and Communications

- CAP is committed to meeting regularly with water users and stakeholders to share information, solicit feedback and to provide timely information
 - Board Member Outreach
 - Water Users Briefings
 - Roundtables
 - Individualized meetings with CAP staff
 - Community presentations
 - CAP University
 - KnowYourWaterNews.com

Stakeholder & Community Relations Team

- Tony Staffaroni – Stakeholder & Community Relations Manager
 - astaffaroni@cap-az.com 623.869.2397
- Mitch Basefsky – Outreach Coordinator
 - Pima and Pinal counties
- Martin Stiles – Outreach Coordinator
 - West Valley cities and towns
- Tammi Watson – Outreach Coordinator
 - East Valley cities and towns
- Thomas Throssell – Outreach Coordinator
 - Tribal outreach

Points of Contact

- Jeff Gray – Legislative Affairs Manager
 - State and Federal Officials
 - jgray@cap-az.com
 - 623.869.2425
- DeEtte Person - PIO
 - Media Inquiries
 - dperson@cap-az.com
 - 623.869.2597

Questions?

Next Steps & Closing Remarks