



Agenda Item 3.c

Report from the Central Arizona Water Conservation District

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Arizona Water Banking Authority Quarterly Meeting

June 29, 2022

YOUR WATER. YOUR FUTURE.

Arizona Lake Mead Contribution Volumes DCP Implementation & Related Actions		ICS ¹	2019 ² (ac-ft)	2020 ³ Tier 0 (ac-ft)	2021 Tier 0 (ac-ft)	2022 ^{4,5} Tier 1 (ac-ft)
Arizona LBDCP (Tier 0 and 1: 192k ac-ft)	CAWCD EC ICS Creation	EC ICS	24,283	44,310 ⁶		
	CAWCD Compensated Conservation	EC ICS		3,124 ^{6,7}		
	CAWCD DCP ICS Creation	DCP ICS			48,296	103,165
	CAWCD Reductions ⁸		119,942	133,174	155,096	88,835
	LBDCP Total		144,225	180,608	203,392	192,000
CAWCD Voluntary Conservation	CAWCD EC ICS Creation	EC ICS			6,147	
	CAWCD Sub-Contractor Conservation					35,486
	CAWCD Total				209,539	227,486
Arizona DCP Mitigation Offset (400k ac-ft total)	GRIC - Reclamation	EC ICS	100,000			
	GRIC - AWBA	EC ICS	17,000	33,000		
	GRIC	EC ICS		50,000	40,000	
	CRIT System Conservation			50,000	50,000	50,000
	Offset Total		117,000	133,000	90,000	50,000
Reclamation DCP	FMYN System Conservation			10,000	13,933	13,933
	MVIDD System Conservation			6,137	6,925	
	GRIC System Conservation				40,000	50,937
	CRIT System Conservation				4,685	4,685
	242 Wellfield Expansion				8,813	25,000
	Reclamation Total		0	16,137	74,356	94,555
Additional Arizona ICS and System Conservation Creation	CRIT	EC ICS	6,274	3,736		
	GRIC ⁹	EC ICS				78,565
	MVIDD System Conservation					9,592
	Additional ICS Total		6,274	3,736	0	88,157
Pilot System Conservation Program (PSCP)	Bullhead City		306	349	369	500
	CRIT		26,805			
	FMYN		13,683			
	PSCP Total		40,794	349	369	500
Total Arizona Lake Mead Contributions			308,293	333,830	374,264	460,698

Programs that are part of the 500+ Plan

Notes:

¹ ICS Volumes reflect creation volumes contributed to Lake Mead and do not reflect account balances after losses and assessments.

² 2019 reflects proactive actions prior to DCP execution and full implementation in 2020.

³ 2020 reflects the first full year of DCP implementation of Lake Mead contributions and related actions.

⁴ Values reflect estimated volumes, subject to final accounting.

⁵ Includes pending and projected projects and subject to creation and accumulation limits.

⁶ Actual Jan. 1 Lake Mead elevation was above 1,090'; therefore this ICS will remain as EC ICS (LBOps III.E.3).

⁷ 3,500 AF was conserved per the agreement between CAWCD and MDWID; per history of use provisions in ICS Exhibit R, 3,124 AF counts as ICS creation.

⁸ Volume will vary based on available Colorado River water, on-river use forecast, and CAP operations.

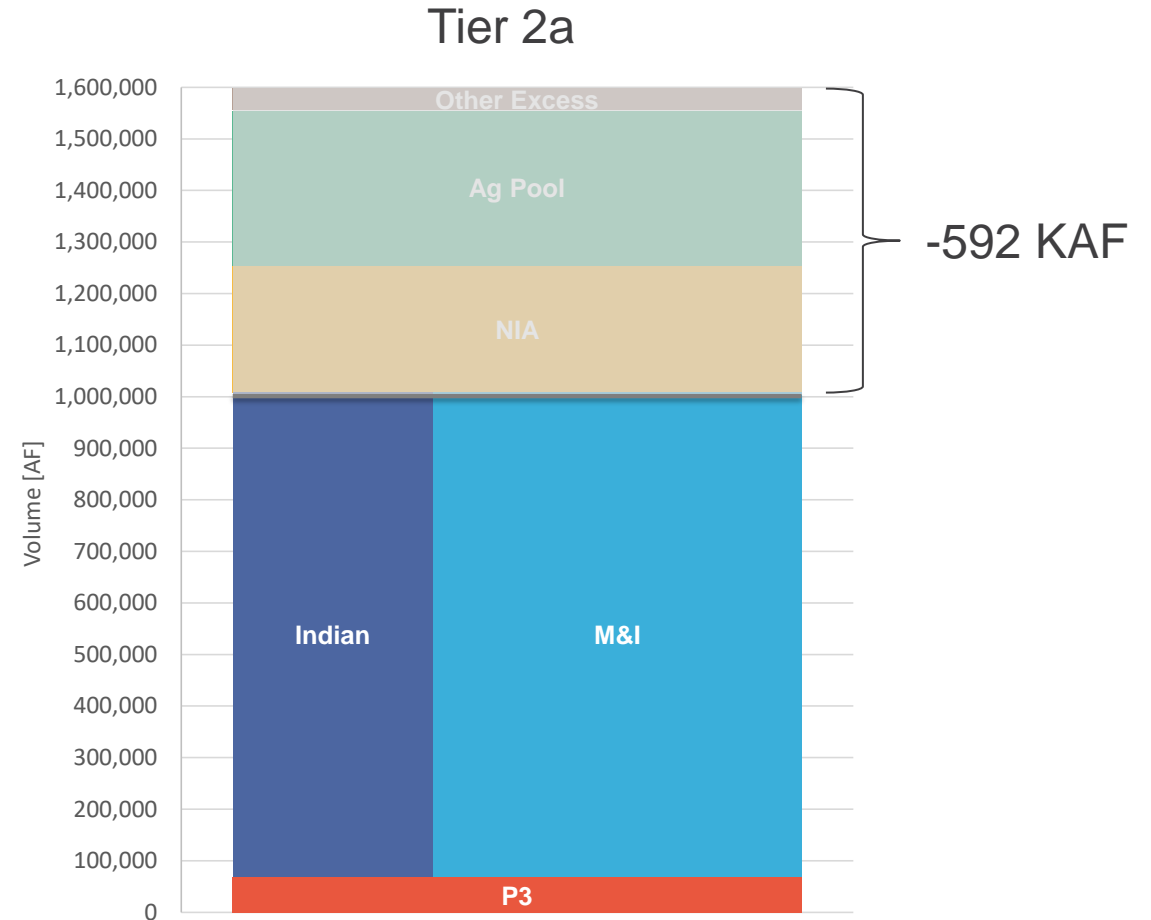
⁹ GRIC to fully utilize the Arizona ICS Accumulation Capacity in 2022.



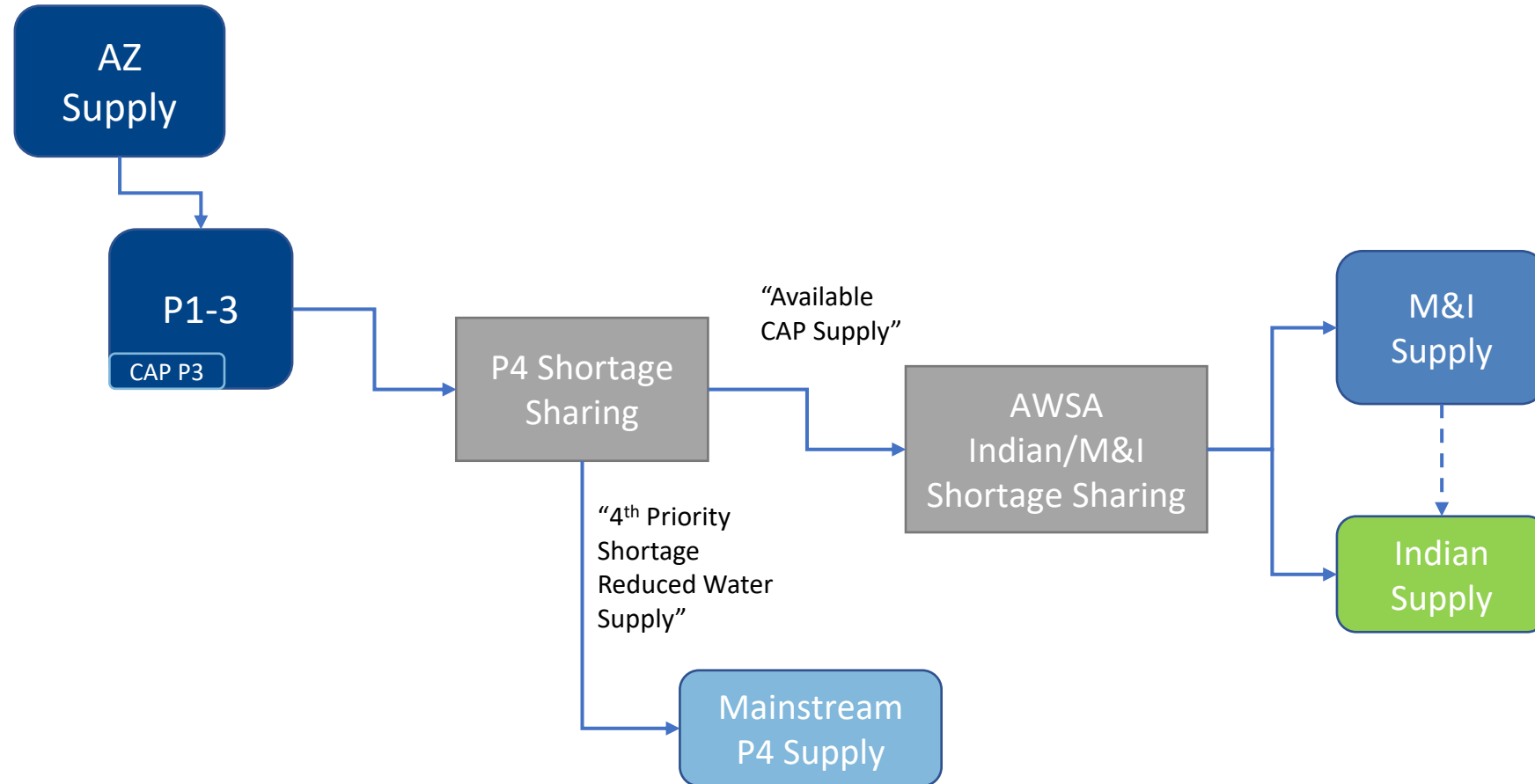
Estimated 2023 Shortage Impacts

2007 Guideline Reductions and LBDCP Mandatory Contributions

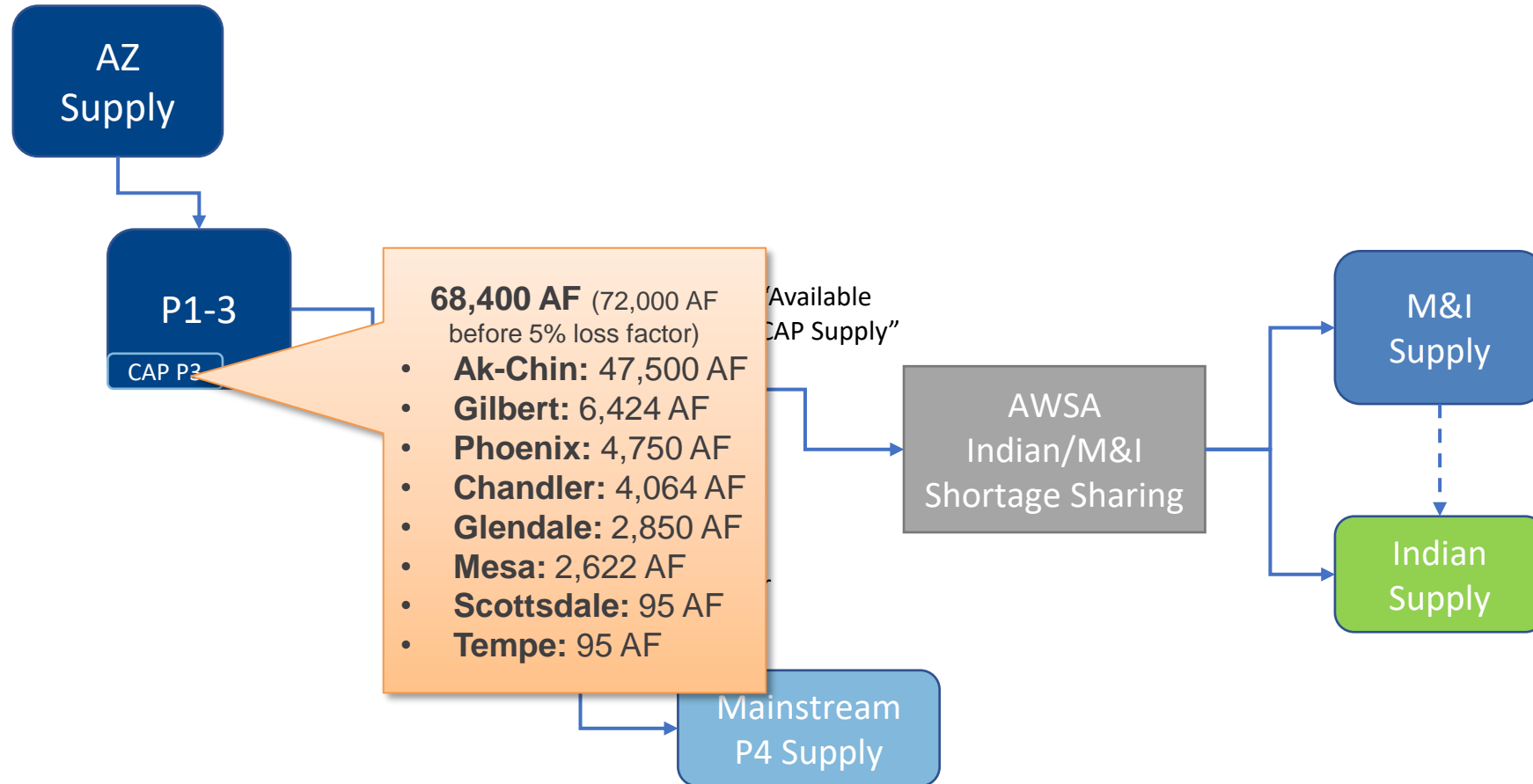
- Current official projections still indicate the likelihood of Tier 2a determination in 2023
 - 1050' <= Tier 2a > 1045'



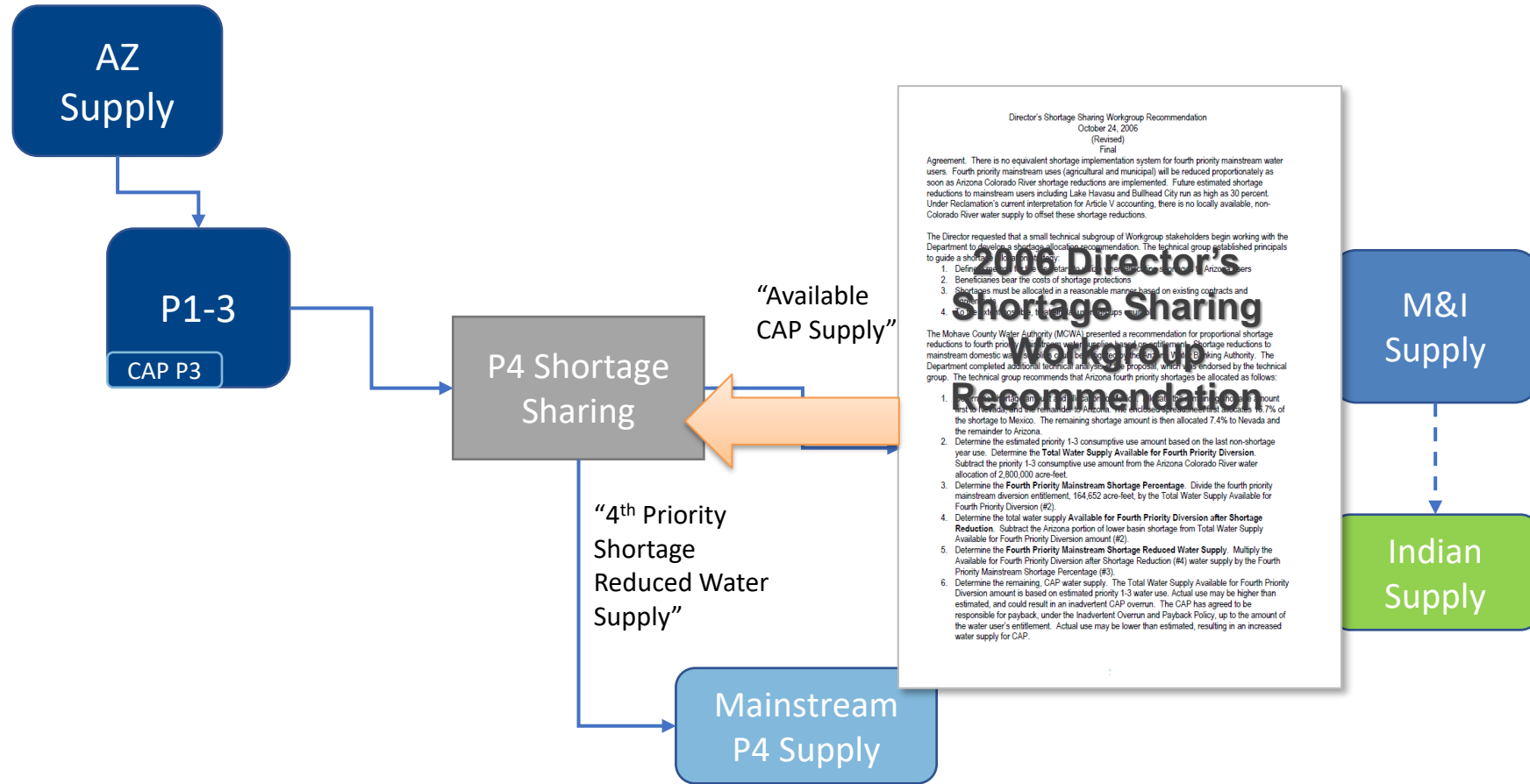
Shortage Sharing Within Arizona



Shortage Sharing Within Arizona



Shortage Sharing Within Arizona



Director's Shortage Sharing Workgroup Recommendation
 October 24, 2006
 (Revised)
 Final

Agreement. There is no equivalent shortage implementation system for fourth priority mainstream water users. Fourth priority mainstream uses (agricultural and municipal) will be reduced proportionately as soon as Arizona Colorado River shortage reductions are implemented. Future estimated shortage reductions to mainstream users including Lake Havasu and Bullhead City run as high as 30 percent. Under Reclamation's current interpretation for Article V accounting, there is no locally available, non-Colorado River water supply to offset these shortage reductions.

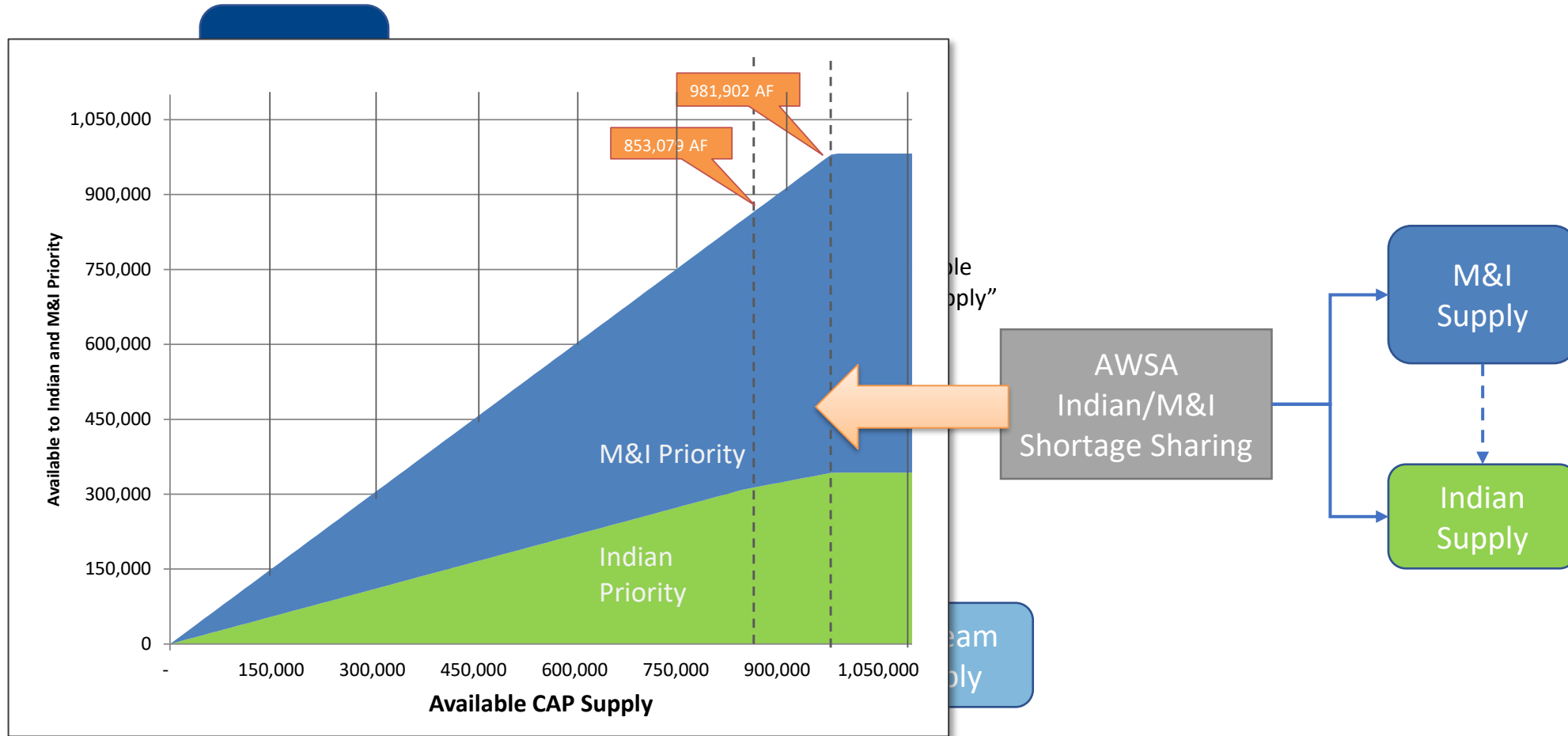
The Director requested that a small technical subgroup of Workgroup stakeholders begin working with the Department to develop a shortage allocation recommendation. The technical group established principals to guide a shortage allocation system:

1. Define the total water supply available for fourth priority mainstream users
2. Beneficiaries bear the costs of shortage protections
3. Shortages must be allocated in a reasonable manner based on existing contracts and
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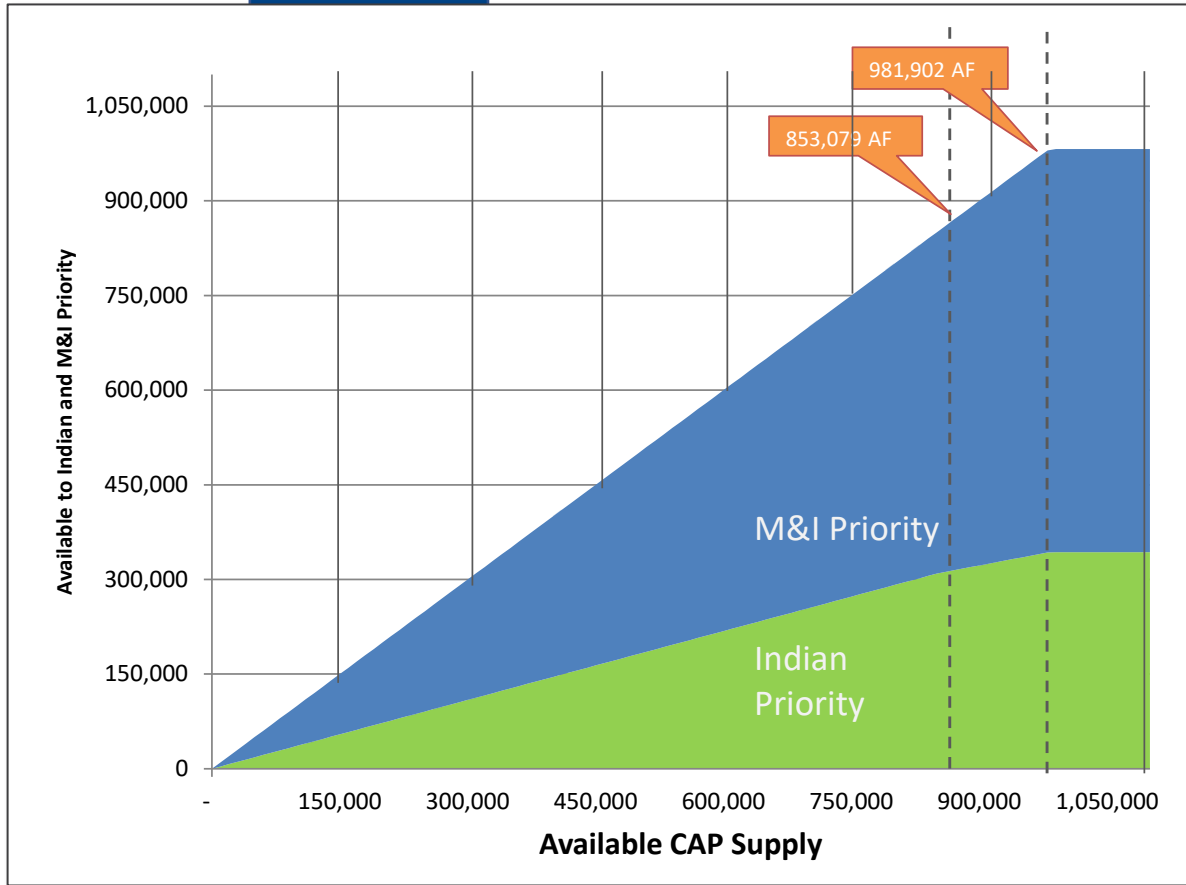
The Mohave County Water Authority (MCWA) presented a recommendation for proportional shortage reductions to fourth priority mainstream users. The technical group recommended that shortage reductions to mainstream domestic water users be based on the proportion of water use by the user. The Department completed additional technical analysis of the proposal, which was endorsed by the technical group. The technical group recommends that Arizona fourth priority shortages be allocated as follows:

1. Determine the total water supply available for fourth priority mainstream users. The total water supply available for fourth priority mainstream users is the total water supply available for fourth priority mainstream users less the amount first to Nevada and the remainder to Arizona. The amount of water available to Arizona is 7% of the shortage to Mexico. The remaining shortage amount is then allocated 7.4% to Nevada and the remainder to Arizona.
2. Determine the estimated priority 1-3 consumptive use amount based on the last non-shortage year use. Determine the **Total Water Supply Available for Fourth Priority Diversion**. Subtract the priority 1-3 consumptive use amount from the Arizona Colorado River water allocation of 2,800,000 acre-feet.
3. Determine the **Fourth Priority Mainstream Shortage Percentage**. Divide the fourth priority mainstream diversion entitlement, 164,652 acre-feet, by the Total Water Supply Available for Fourth Priority Diversion (#2).
4. Determine the total water supply Available for Fourth Priority Diversion after **Shortage Reduction**. Subtract the Arizona portion of lower basin shortage from Total Water Supply Available for Fourth Priority Diversion amount (#2).
5. Determine the **Fourth Priority Mainstream Shortage Reduced Water Supply**. Multiply the Available for Fourth Priority Diversion after Shortage Reduction (#4) water supply by the Fourth Priority Mainstream Shortage Percentage (#3).
6. Determine the remaining CAP water supply. The Total Water Supply Available for Fourth Priority Diversion amount is based on estimated priority 1-3 water use. Actual use may be higher than estimated, and could result in an inadvertent CAP overrun. The CAP has agreed to be responsible for payback, under the Inadvertent Overrun and Payback Policy, up to the amount of the water user's entitlement. Actual use may be lower than estimated, resulting in an increased water supply for CAP.

Shortage Sharing Within Arizona



Shortage Sharing Within Arizona



Distribution of 4th Priority CAP Delivery Supply Based on AWSA Formula and Estimated 2023 Water Orders*

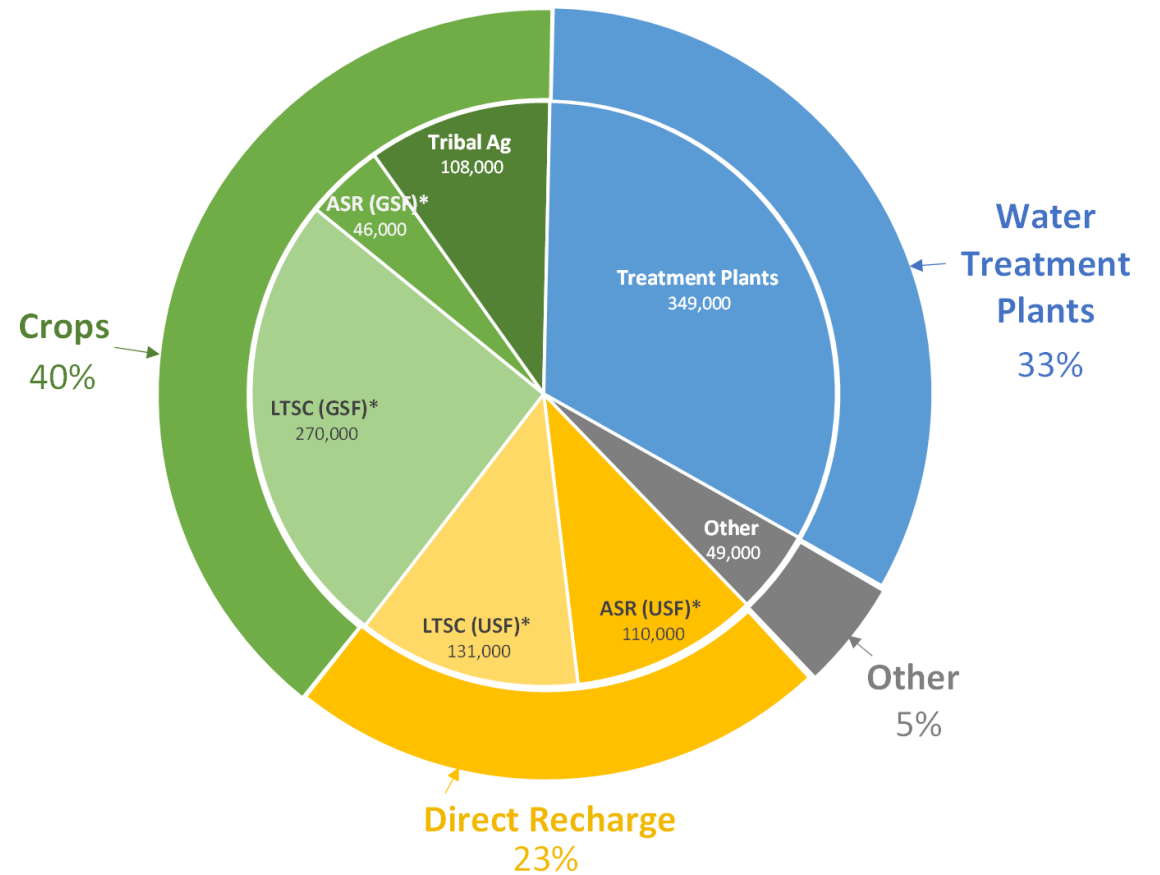
Delivery Supply [AF]	Indian Priority		M&I Priority	
	Pool Availability	Pool Size [AF]	Pool Availability	Pool Size [AF]
500,000	47%	157,000	45%	274,600
400,000	36%	120,600	35%	211,000
300,000	25%	84,200	24%	147,400
200,000	14%	47,900	14%	83,700
100,000	4%	11,500	3%	20,100

* For illustration purposes only.

CAP Water 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

Questions