

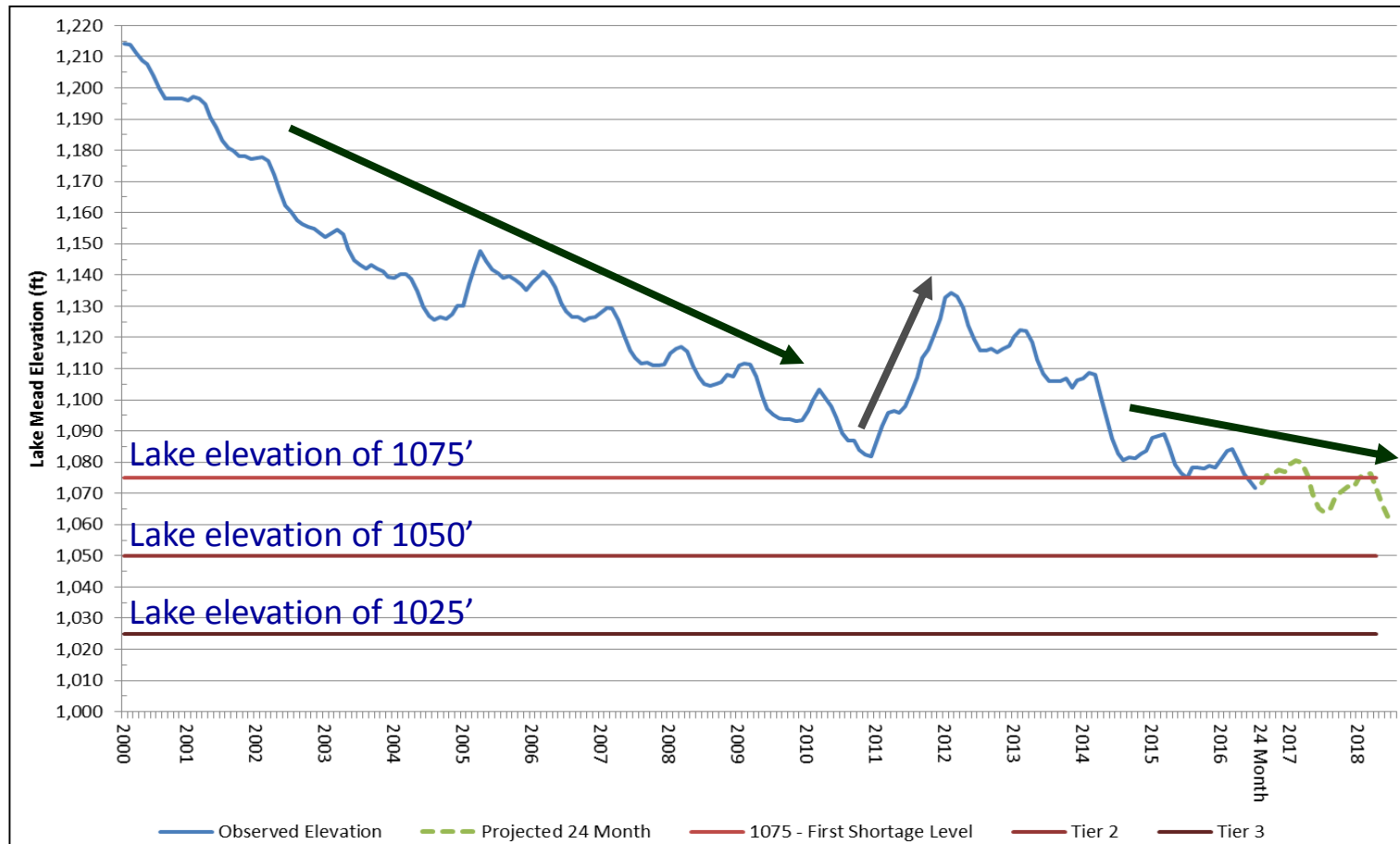
Drought Contingency Plan Plus

City Council Workshop
February 21, 2017



Structural Deficit

More Water Leaving Lake Mead Than Going In



Shortage Impacts to Colorado River System & Arizona

- **1,075'** – 320 KAF Reduction
- **1,050'** – 400 KAF Reduction; Hydropower Reductions
- **1,025'** – 480 KAF, Secretary Takes Action; Significant Hydropower Cavitation Risk



2007 Guidelines / Shortage Sharing

- Arizona, Nevada, and Mexico share Lower Basin shortages under the 2007 Guidelines.

	Lake Mead Elevation	Arizona Reduction	Nevada Reduction	Mexico Reduction	Totals Acre-feet
Tier 1	1075'	320,000 AF	13,000 AF	50,000 AF	383,000
Tier 2	1050'	400,000 AF	17,000 AF	70,000 AF	487,000
Tier 3	1025'	480,000 AF	20,000 AF	125,000 AF	625,000

- No reductions to California under 2007 Guidelines.

Below Elevation 1,025

Modeling Shows Increased Risk of Reaching Elevation 1,025'

The Secretary of Interior Can:

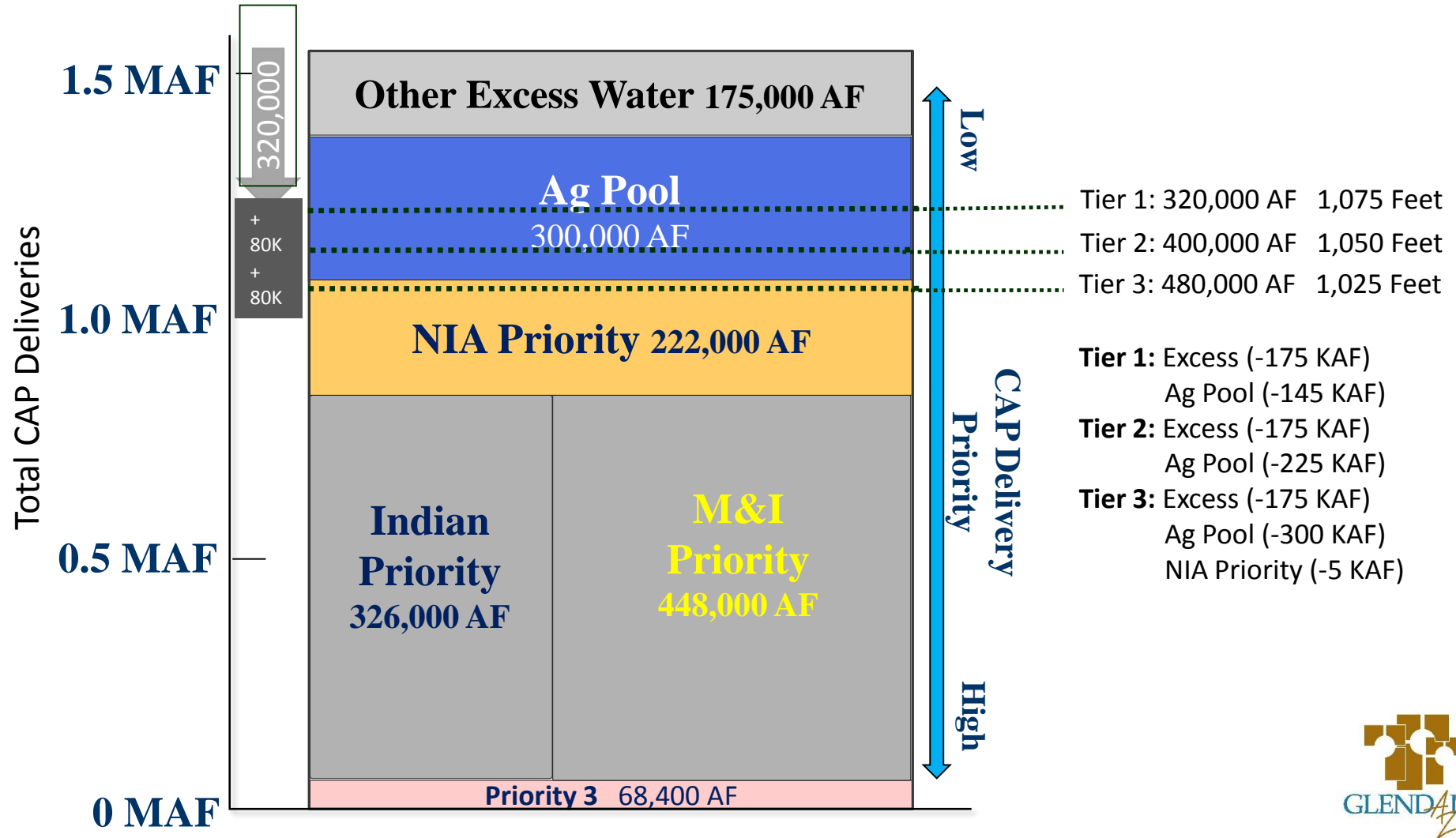
- (1) Follow the Law of the River. CAP Reduced First.
- (2) Exercise New Authority. Creates Uncertainty.

At 1,000' – Active Storage Equals California's Allocation; “Run of River” Operations

At 895' – Dead Pool



2017 CAP Priorities and Shortage Tiers



Proposed Drought Contingency Plan (DCP)

- Predictions indicate that more is needed to be done for Lake Mead beyond the 2007 Guidelines to prevent catastrophic declines.
- The Drought Contingency Plan (DCP) was developed to delay lake Mead going into the shortage tiers.
- Immediate cut to Arizona's Colorado River supplies with deeper cuts to both AZ and NV during each shortage tier.
- The Bureau of Reclamation and Mexico also give up water.
- California agrees to give up water.

Summary

Drought Contingency Plan Reductions

	Lake Mead Elevation	AZ DCP (Total)	NV DCP (Total)	CA 2007 (Without DCP)	CA DCP (Total)	USBR	Mexico	TOTAL (with DCP)
New Tier	1,090-1,075	192K	8K	0	0	100K	0	300K
1st Tier	1,075-1,050	512K	21K	0	0	100K	50K	683K
2nd Tier	1,050-1,045	592K	25K	0	0	100K	70K	787K
New Tier	1,045-1,040	640K	27K	0	200K	100K	70K	1,037K
	1,040-1,035	640K	27K	0	250K	100K	70K	1,087K
	1,035-1,030	640K	27K	0	300K	100K	70K	1,137K
	1,030-1,025	640K	27K	0	350K	100K	70K	1,187K
3rd Tier	<1,025	720K	30K	0	350K	100K	125K	1,325K



DCP - “Plus”

Keeping More Water in Lake Mead

- DCP Plus is an Arizona program.
- The Arizona Municipal Water Users Association (AMWUA) is the main communication link between ADWR and the municipal providers.
- DCP Plus seeks to keep Lake Mead above 1,075 ft.
 - DCP Plus conserves 1.2 MAF in Lake Mead over three years.
 - Helps assure that all AZ water sectors agree to DCP.
 - No DCP without DCP Plus.
- Voluntary conservation of 1.2 million acre-feet reduces likelihood of cuts to agricultural pool & NIA water.



Funding for DCP- Plus

Funding sought from state, federal government, private entities, and municipalities.

- Bulk from the federal government.
- \$3 to \$6 million from City of Phoenix.
- \$3 million from AMWUA cities.

ADWR seeking commitment in early 2017.

Timing of contribution is expected later in 2017.



Glendale's Contributions for DCP- Plus

- Total of \$3 million between nine AMWUA cities (Phoenix is separate).
- Glendale's contribution is estimated to be \$100,000/year for three years.
- Initially take Capital Improvement Funds (CIP) that Water Services has set aside for recharge / storage and use for payment of DCP Plus.
- The \$100,000 per year for three years needed for the Drought Contingency- Plus program is proposed to be taken from a portion of CIP funds currently set aside for recharge.



Raw Water Cost Increase for Cities

Likely Impact of DCP Plus on M&I Rates Cost per acre-foot

	2017	2018	2019	2020	2021	2022
Current Published CAP Rates	\$195	\$220	\$223	\$248	\$266	\$272
CAP Rates with DCP Plus	\$208	\$237	\$240	\$248	\$296	\$304

Next Steps for DCP- Plus

- Intra-state agreement by ADWR-lead framework group
- Approval by relevant government bodies and organizations (including CAP Board)
- State legislative approval
- Federal legislation
- Implementation of plan



Summary

- Glendale staff is supportive of the DCP-Plus efforts.
- California voluntarily shares in the shortage.
- Glendale's support of the DCP-Plus continues our leadership role in AZ water management.
- Efforts to protect Lake Mead will continue to be planned and implemented after DCP Plus.



Questions?