

Agenda Item No. 4

AWBA Numeric Firming Goals

AWBA Quarterly Meeting

December 2, 2020

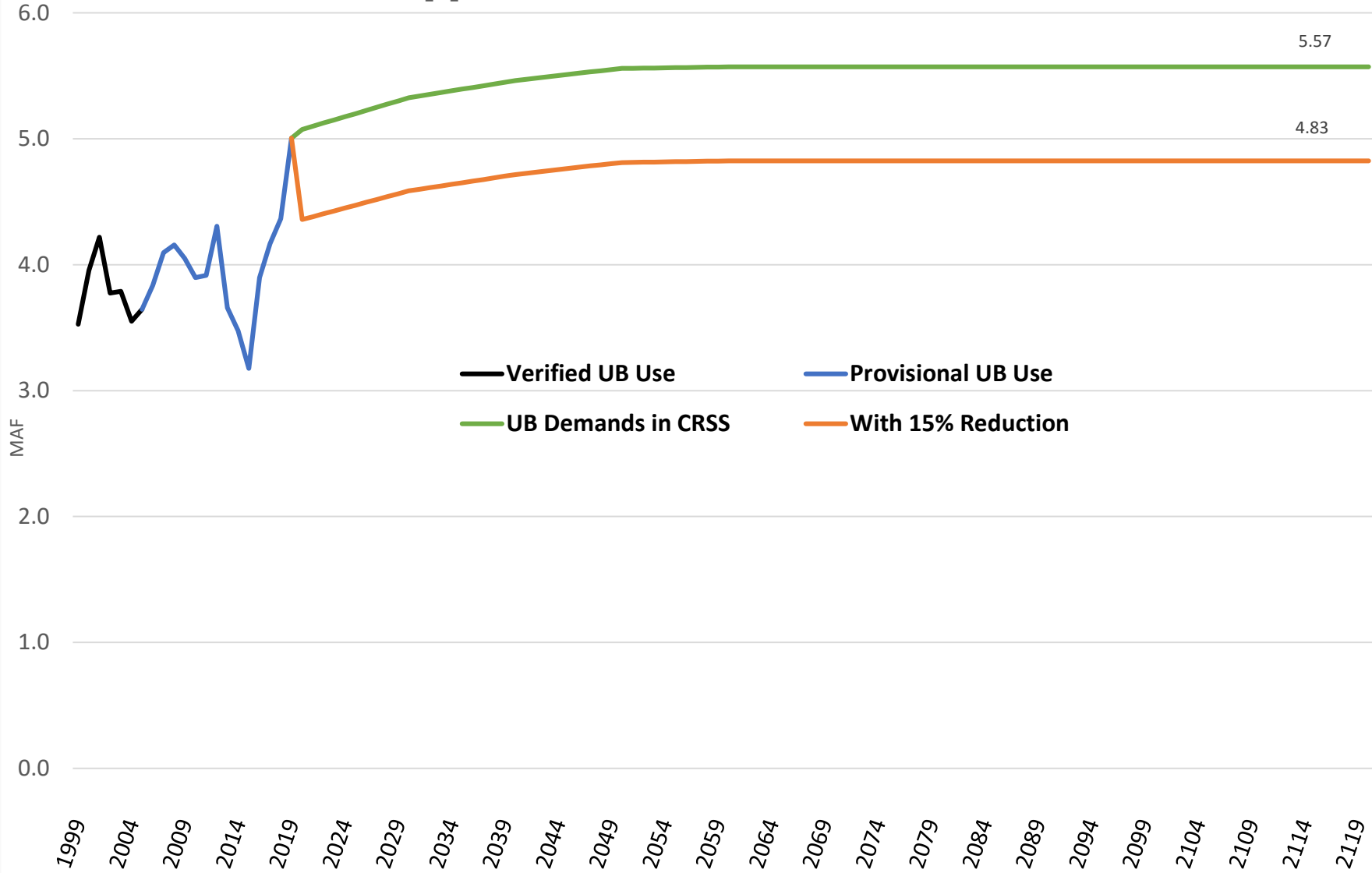
Presented by

Virginia O'Connell

CRSS Model Assumptions

- CRSS Model
 - August 2019 corrected version
- Hydrology - Direct Natural Flows, 112 years (1906 - 2017)
- Operational Rules - 2007 Guidelines & DCP, extended through 2120
- Minute 323 – Binational Water Scarcity Contingency Plan
- Upper Basin Demand – 2 scenarios
 - Projections in CRSS, “As-Is” model
 - 15% reduction to projected future demand

Upper Basin Demand Scenarios

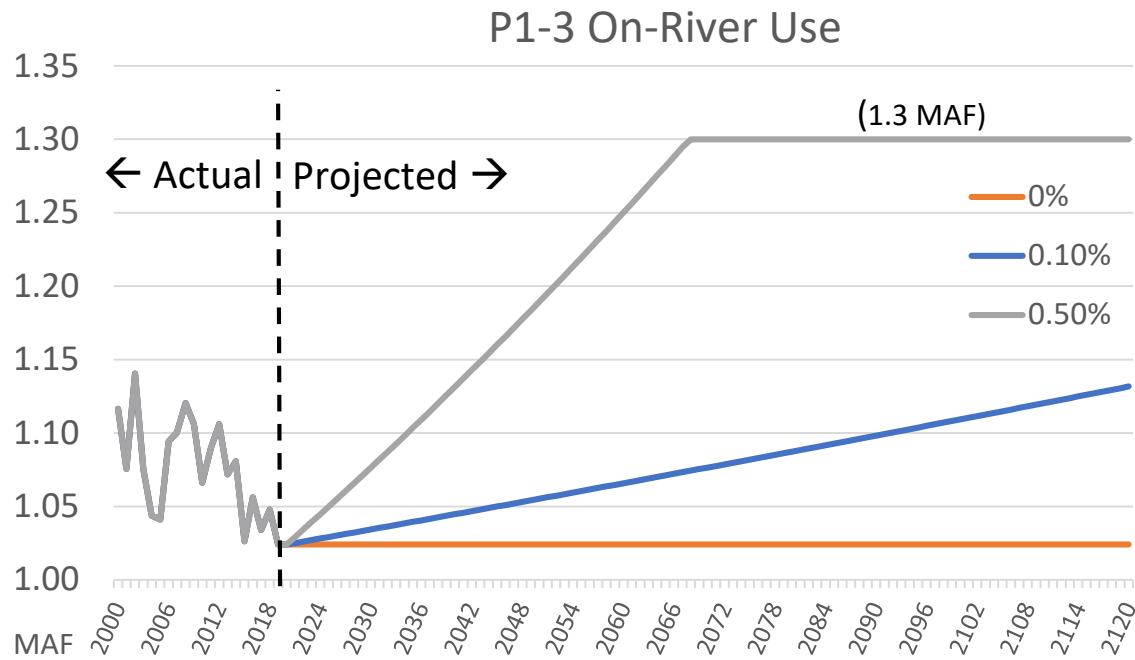


AWBA On-River Demand Assumptions

(Post Processing)

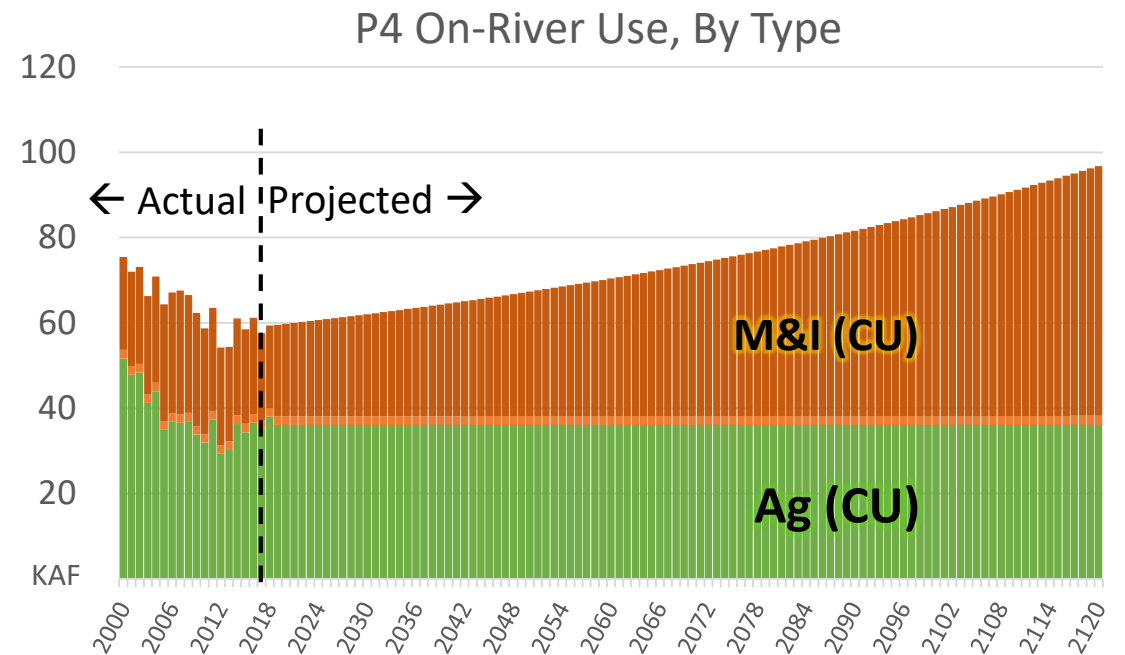
Priority 1-3

- Starting Point – 10-yr avg.(2009-2018)
- Projected growth – 3 scenarios
 - Constant, **0.1%**, 0.5%



Priority 4

- Starting Point – 5-yr avg. (2014-2018)
- Projected domestic use growth – 1%
- Ag held constant



CAP Demand Assumptions

- Director's Shortage Sharing Recommendations
- CAP M&I demand schedule
 - Full build out by 2043
- CAP M&I firming requirements
 - 100% through 2026, 20% thereafter
- NIA demand schedule
 - NIA reallocation 2022, 2025, 2030
- NIA Indian Firming – 23,724 AF/yr
 - GRIC – 15,000 AF (current)
 - WMAT - 3,750 AF (2023)
 - Hualapai - 557.5 AF (2025)
 - Remaining 4,416.5 AF phased in by thirds - 1,472.17 AF (2027, 2031, 2035)

NIA Indian Firming Summary

(Firming Volumes Through 2107 - AF)

UB	Mean	Median	Min	Max
15%	717,000	727,000	323,000	1,194,000
"As-Is"	907,000	887,000	619,000	1,326,000

	2006 IFSC ¹	UB 15% ²	UB "As-Is" ²
GRIC	350,000	456,000	577,000
Future	200,000	261,000	330,000
WMAT	86,000	112,000	142,000
Firming %	23	29	39

¹ Indian Firming Study Commission

² Based on mean results

CAP M&I and On-River Firming Summary

(Firming Volumes Through 2120 – AF)

- CAP M&I

- Established Numeric Firming Goal – 2,673,000 AF

UB	Mean	Median	Min	Max
15%	3,218,000	3,157,000	1,823,000	4,628,000
"As-Is"	5,095,000	5,105,000	3,287,000	6,987,000

- On-River

- Established Numeric Firming Goal – 420,000 AF

UB	Mean	Median	Min	Max
15%	221,000	211,000	96,000	381,000
"As-Is"	359,000	365,000	169,000	526,000

Projected Goals Achieved through 2020

	Established Goals (AF)	Credits Accrued (AF)	Current % Achieved	New Model Projections	
				UB 15% Reduction	UB "As-Is"
M&I Firming (Water Storage Tax)				Based on Mean	
Phoenix AMA	1,566,000	1,565,604	99%	83%	52%
Pinal AMA	243,000	234,731	97%	80%	51%
Tucson AMA	864,000	507,826	59%	49%	31%
On-River M&I Firming	420,000	403,830	96%	183%	112%
Indian Firming - GRIC	350,000	168,974	48%	24%	19%
Withdrawal Fees					
Phoenix AMA		251,411			
Pinal AMA		417,453			