



**ARIZONA  
RECONSULTATION  
COMMITTEE**

# **Arizona Reconsultation Committee Meeting 2**

September 17, 2020

# Meeting Logistics Summary

- Roll Call
  - Members will unmute and acknowledge their attendance when their name is called.
- ARC Delegates
  - Use the WebEx “raise hand” feature to request to speak or ask questions.
  - Wait to be recognized before speaking to ensure clear communication and remain muted when not speaking.
- Livestream Attendees
  - Electronic public comment forms are available at [cap-az.com/ARC](http://cap-az.com/ARC) for anyone wishing to submit a comment or question during the meeting.
  - All submissions will be addressed during the Call to the Public at the end of the meeting, unless relevant to a specific topic in the presentation.
- ARC Information
  - Meeting materials have been posted on the ADWR and CAP ARC pages: [cap-az.com/ARC](http://cap-az.com/ARC) or [new.azwater.gov/ARC](http://new.azwater.gov/ARC).



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# Meeting Agenda

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- Welcome and Introductions
- Colorado River Update
- Projected DCP Operations: 2021 and 2022
- Feedback on ARC Process and Initial Guiding Principles
- Report on the Modeling and Analysis Work Group Meeting and MAWG Process Update
- Report on Development of Arizona Strategy Team
- Next Steps
- Call to the Public



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# Colorado River Basin System Status Update

Arizona Reconsultation Committee Meeting  
September 17, 2020

# Colorado River Basin Storage

*as of September 16, 2020*

Reservoir	Percent Full	Storage (maf)	Elevation (feet)
Lake Powell	47%	11.5	3,598
Lake Mead	40%	10.3	1,084
Total System Storage*	49%	29.4	NA

Total system storage was 32.0 maf, or 53% of capacity, this time last year



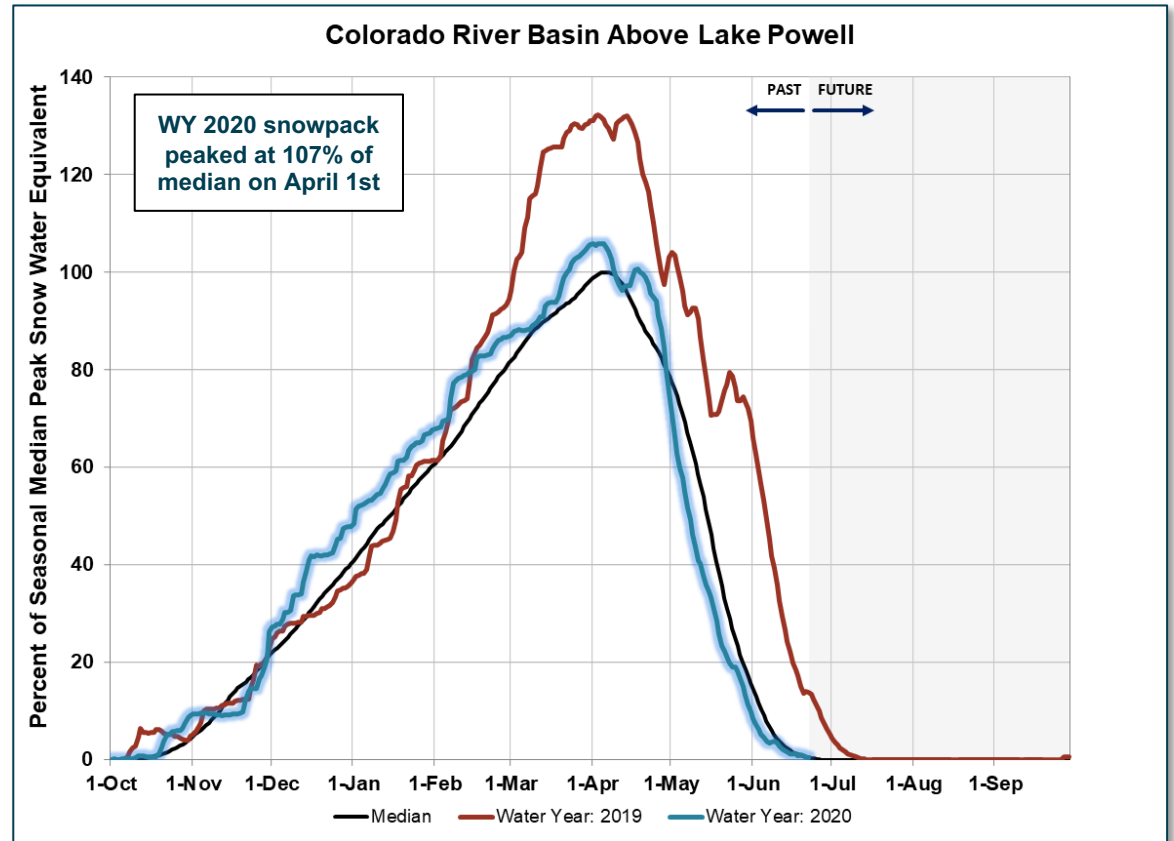
# Upper Colorado River Basin

## Water Year 2020 Snowpack and Inflow into Lake Powell

Water Year 2020  
Forecasted Inflow  
(as of 9/1/2020)

6.01 maf

55% of average



# Lake Powell & Lake Mead Operational Table

## Operational Tiers for Water/Calendar Year 2021<sup>1</sup>

Lake Powell			Lake Mead		
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) <sup>1</sup>	Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) <sup>1</sup>
3,700	Equalization Tier Equalize, avoid spills or release 8.23 maf	24.3	1,220	Flood Control Surplus or Quantified Surplus Condition Deliver > 7.5 maf	25.9
3,636 - 3,666 (2008-2026)	Upper Elevation Balancing Tier <sup>3</sup> Release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	15.5 - 19.3 (2008-2026)	1,200 (approx.) <sup>2</sup>	Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf	22.9 (approx.) <sup>2</sup>
	<b>3,591.60 ft</b>		1,145	Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	15.9
	<b>Jan 1, 2021 projection</b>		1,105	<b>1,085.28 ft</b>	11.9
3,575	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	9.5	1,075	<b>Jan 1, 2021 projection</b>	9.4
3,525	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	5.9	1,050	Shortage Condition Deliver 7.167 <sup>4</sup> maf	7.5
3,490		4.0	1,025	Shortage Condition Deliver 7.083 <sup>5</sup> maf	5.8
3,370		0	1,000	Shortage Condition Deliver 7.0 <sup>6</sup> maf Further measures may be undertaken <sup>7</sup>	4.3
			895		0

Diagram not to scale

<sup>1</sup> Acronym for million acre-feet

<sup>2</sup> This elevation is shown as approximate as it is determined each year by considering several factors including Lake Powell and Lake Mead storage, projected Upper Basin and Lower Basin demands, and an assumed inflow.

<sup>3</sup> Subject to April adjustments which may result in a release according to the Equalization Tier

<sup>4</sup> Of which 2.48 maf is apportioned to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

<sup>5</sup> Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

<sup>6</sup> Of which 2.32 maf is apportioned to Arizona, 4.4 maf to California, and 0.280 maf to Nevada

<sup>7</sup> Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

<sup>1</sup> Lake Powell and Lake Mead operational tier determinations are based on August 2020 24-Month Study projections and are documented in the draft 2021 AOP.





# 2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan, and Binational Water Scarcity Contingency Plan

## Total Volumes (kaf)

Lake Mead Elevation (feet msl)	2007 Interim Guidelines Shortages		Minute 323 Delivery Reductions	Total Combined Reductions	DCP Water Savings Contributions			Binational Water Scarcity Contingency Plan Savings	Combined Volumes by Country <i>US: (2007 Interim Guidelines Shortages + DCP Contributions)</i> <i>Mexico: (Minute 323 Delivery Reductions + Binational Water Scarcity Contingency Plan Savings)</i>					Total Combined Volumes
	AZ	NV	Mexico	<b>Lower Basin States + Mexico</b>	AZ	NV	CA	Mexico	AZ Total	NV Total	CA Total	Lower Basin States Total	Mexico Total	<b>Lower Basin States + Mexico</b>
1,090 - 1,075	0	0	0	<b>0</b>	192	8	0	41	192	8	0	200	41	<b>241</b>
1,075 - 1050	320	13	50	<b>383</b>	192	8	0	30	512	21	0	533	80	<b>613</b>
1,050 - 1,045	400	17	70	<b>487</b>	192	8	0	34	592	25	0	617	104	<b>721</b>
1,045 - 1,040	400	17	70	<b>487</b>	240	10	200	76	640	27	200	867	146	<b>1,013</b>
1,040 - 1,035	400	17	70	<b>487</b>	240	10	250	84	640	27	250	917	154	<b>1,071</b>
1,035 - 1,030	400	17	70	<b>487</b>	240	10	300	92	640	27	300	967	162	<b>1,129</b>
1,030 - 1,025	400	17	70	<b>487</b>	240	10	350	101	640	27	350	1,017	171	<b>1,188</b>
<1,025	480	20	125	<b>625</b>	240	10	350	150	720	30	350	1,100	275	<b>1,375</b>

The Secretary of the Interior will take affirmative actions to implement programs designed to create or conserve 100,000 acre-ft per annum or more of Colorado River System water to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the lower basin. All actions taken by the United States shall be subject to applicable law, including availability of appropriations.

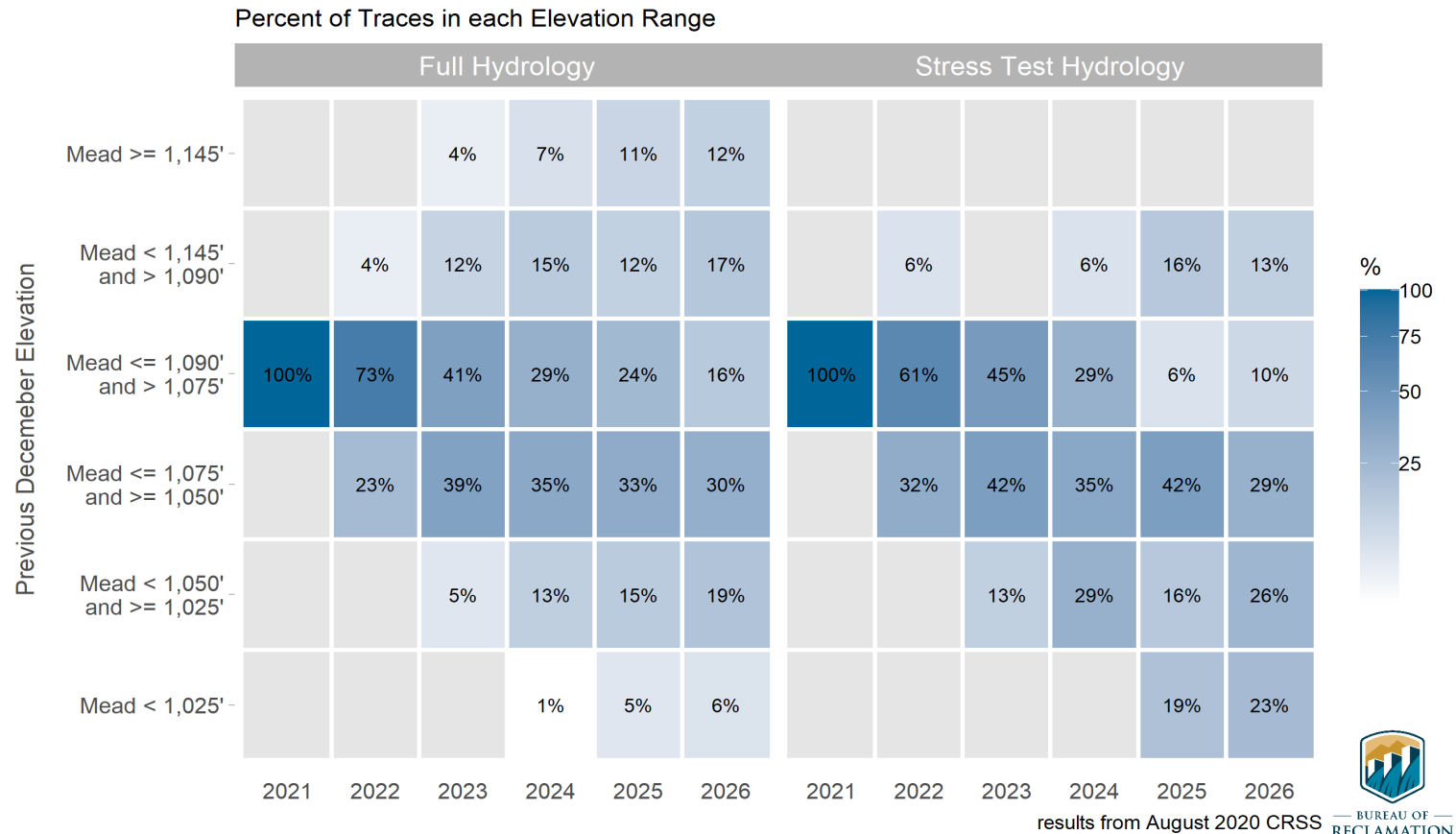




# Lower Basin – Lake Mead

## Percent of Traces with Event or System Condition

### Results from August 2020 CRSS (values in percent)



#### Notes:

- <sup>1</sup> Modeled operations include the 2007 Interim Guidelines, Upper Basin Drought Response Operations, Lower Basin Drought Contingency Plan, and Minute 323, including the Binational Water Scarcity Contingency Plan.
- <sup>2</sup> Reservoir initial conditions on December 31, 2020 were simulated using the August 2020 Most Probable 24-Month Study.
- <sup>3</sup> Full Hydrology uses 113 hydrologic inflow sequences that resamples the observed natural flow record from 1906-2018 for a total of 113 traces analyzed. Stress Test Hydrology uses 31 hydrologic inflow sequences that resamples the observed natural flow record from 1988-2018 for a total of 31 traces analyzed.
- <sup>4</sup> Percentages shown in this table may not be representative of the full range of future possibilities that could occur with different modeling assumptions.
- <sup>5</sup> Percentages shown may not sum to 100% due to rounding to the nearest percent.





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# Colorado River Basin Review of the 2007 Interim Guidelines (7.D. Review)

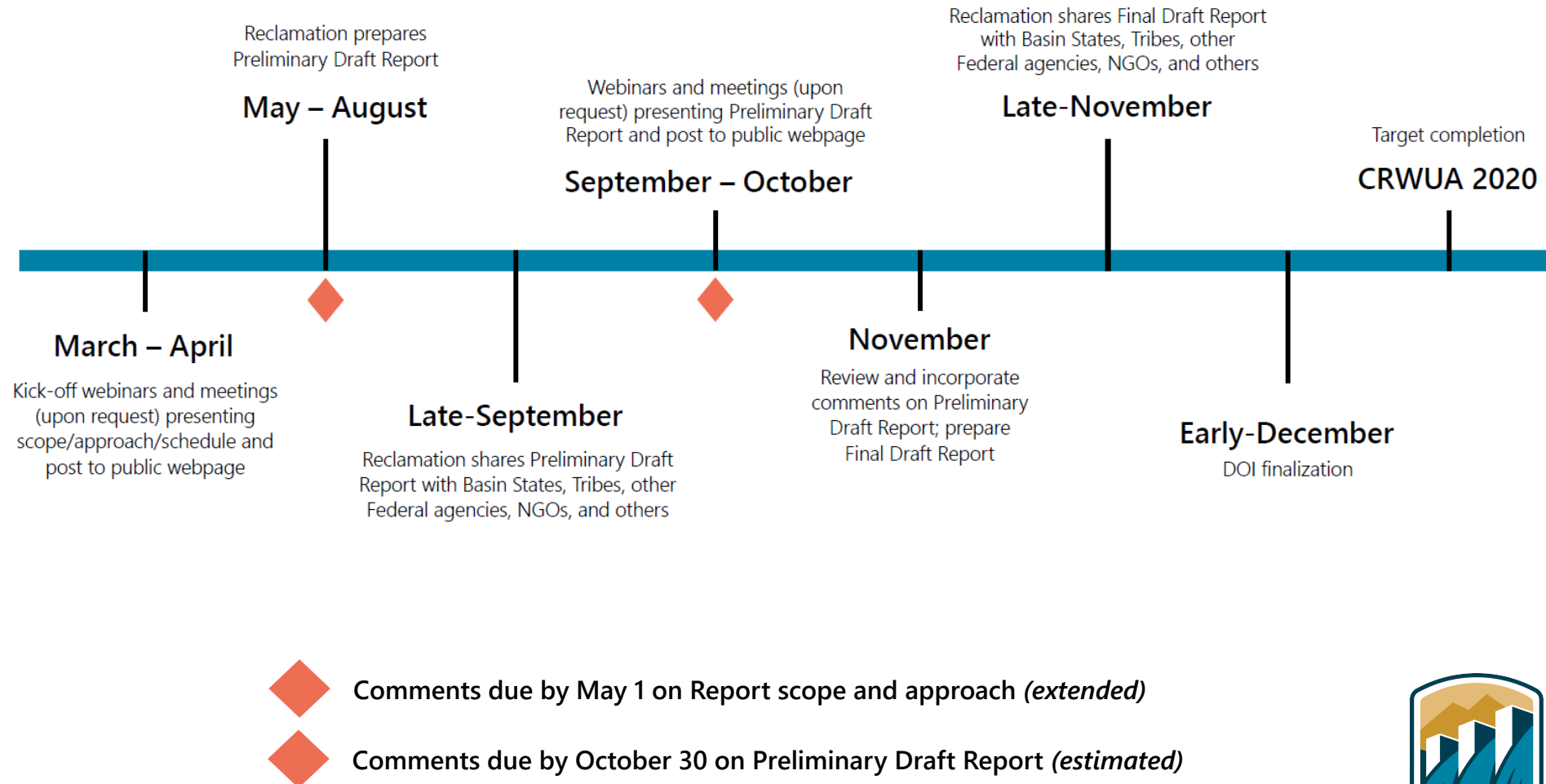
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# Review of the 2007 Interim Guidelines (7.D. Review)

- Section XI.G.7.D. of the 2007 Interim Guidelines Record of Decision requires a review of the effectiveness to start by no later than December 31, 2020.
- Secretary Bernhardt directed Reclamation to initiate this review earlier than required.
- Goals of the Review
  - Evaluate the effectiveness of the 2007 Interim Guidelines
  - Document our operational experience
- Retrospective review of past operations and actions under the 2007 Interim Guidelines, *not* a consideration of future activities.
- More info: <https://www.usbr.gov/lc/region/programs/strategies.html#IGReview>



# 7.D. Review: Schedule



# 2020/21 Arizona DCP Implementation

Arizona Lake Mead Contribution Volumes DCP Implementation & Related Actions		ICS <sup>1</sup>	2019 <sup>2</sup> (ac-ft)	2020 <sup>3, 4</sup> Tier 0 (ac-ft)	2021 <sup>4</sup> Tier 0 (ac-ft)
Arizona LBDCP (Tier 0: 192k ac-ft)	Ag Forbearance 3 Program	EC-ICS	24,283	56,968	57,000
	CAWCD Compensated Conservation	EC-ICS		3,500	3,500
	CAWCD Excess Water <sup>5</sup>		119,942	131,532	131,500
	Total		144,225	192,000	192,000
Arizona DCP Mitigation Offset (400k ac-ft total)	GRIC - Reclamation	EC-ICS	100,000		
	GRIC - AWBA	EC-ICS	17,000	33,000	
	GRIC <sup>6</sup>	EC-ICS		50,000	45,000
	CRIT System Conservation			50,000	50,000
	Total		117,000	133,000	95,000
Reclamation DCP	FMYN System Conservation			10,000	13,933
	Total		0	10,000	13,933
Additional Arizona ICS Creation	CRIT	EC-ICS	6,274	3,736	4,685
	MVIDD	EC-ICS		6,137	6,778
	Total		6,274	9,873	11,463
Pilot System Conservation Program (PSCP)	Bullhead City		306	400	400
	CRIT		26,805		
	FMYN		13,683		
	Total		40,794	400	400
Total Arizona Lake Mead Contributions			308,293	345,273	312,796

# Water order/delivery summary

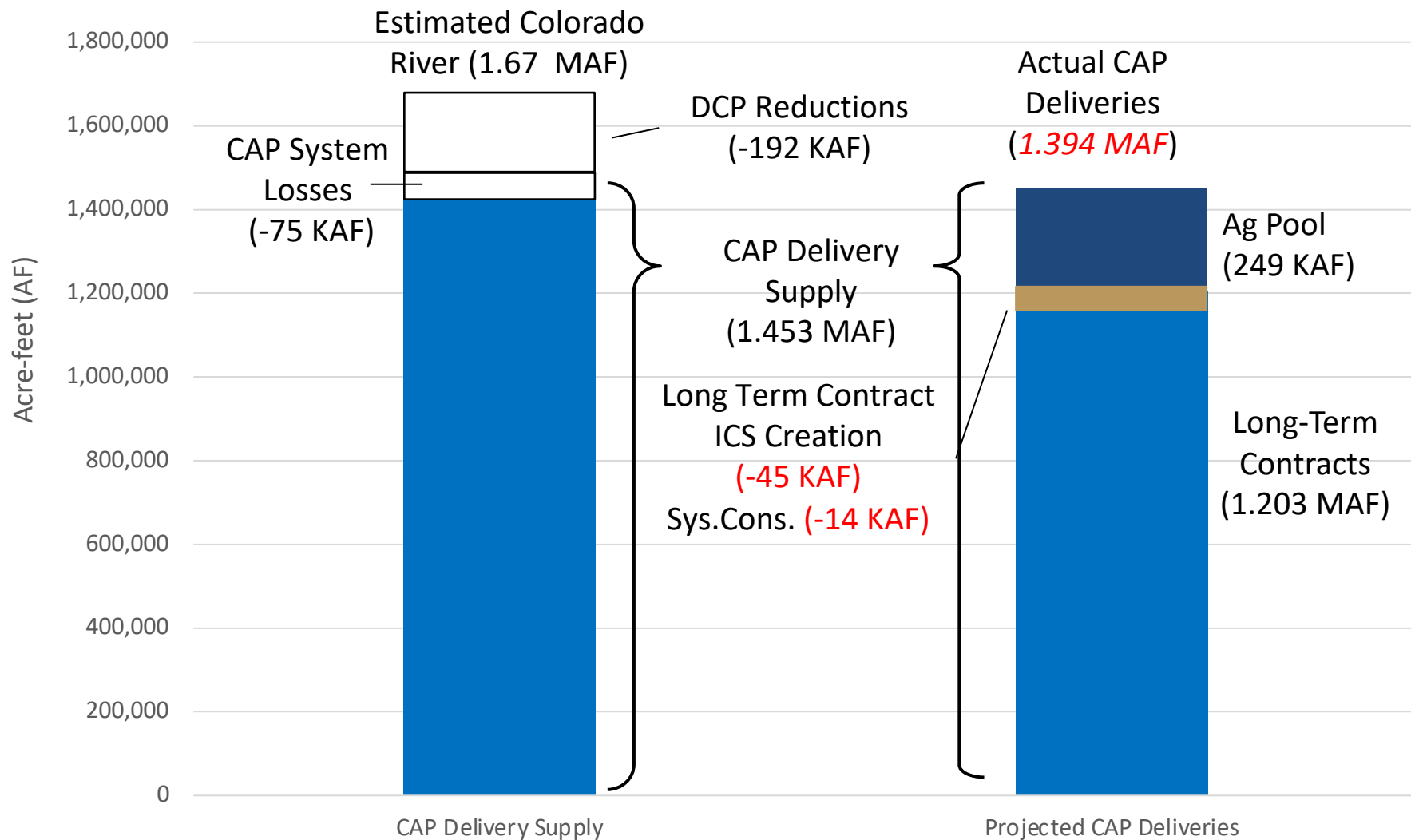
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- On-River Process:
  - Colorado River entitlement holders submit orders to Reclamation
  - Orders compiled in October
- CAP System
  - CAP users submit orders compiled by CAWCD and submitted to Reclamation in October/November
- Mexico provides its water order pursuant to 1944 Water Treaty
- Secretary Approvals by January 1, 2021
  - CAP orders include an estimate of allowable diversion based on Arizona Senior Priority uses
  - CAP available supply fluctuates during the course of the year based on use behaviors of Arizona Senior Priority uses



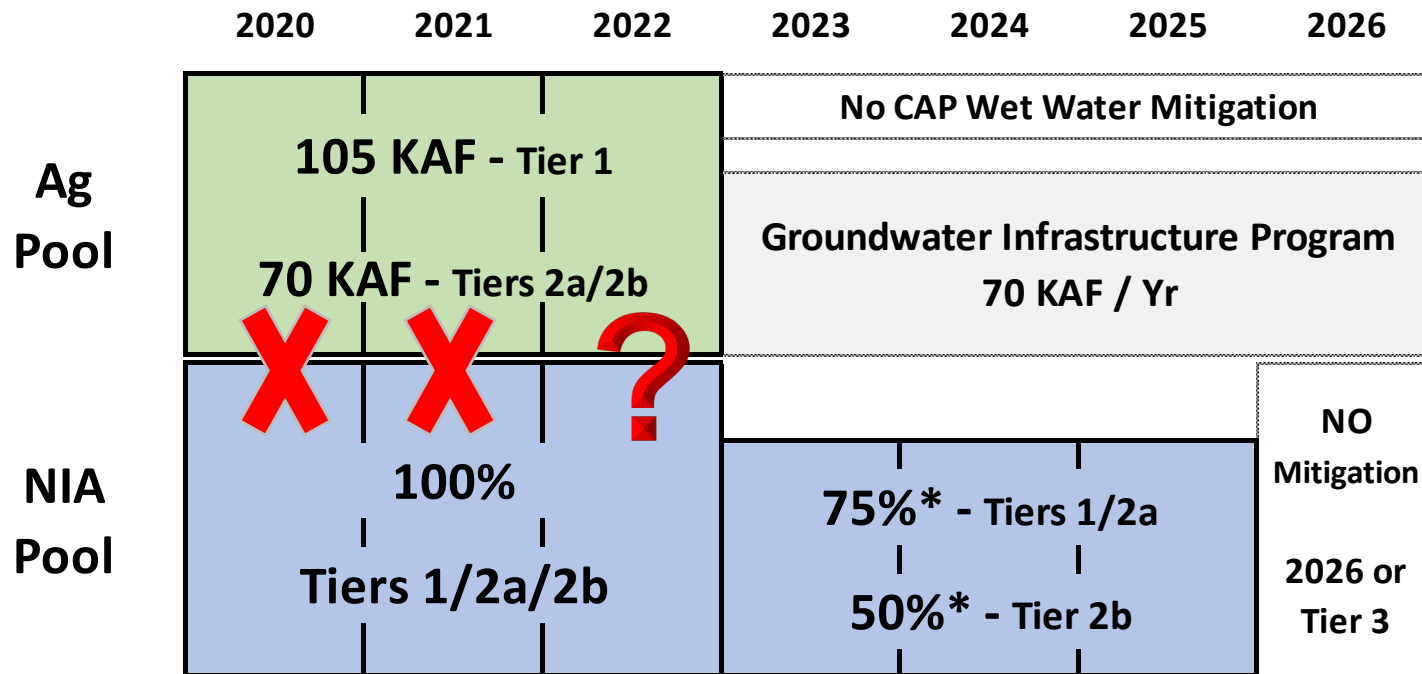
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# CAP 2021 Tier Zero Estimated Operations





# DCP Mitigation Implementation



- Potential Tier One 2022 conditions would trigger Arizona's Mitigation Plan
  - CAWCD Lake Pleasant 50 kaf release and CAWCD ICS releases to NIA Pool
  - CAWCD Compensated mitigation to NIA Pool
  - M&I GSF to AG Pool plus AWBA LTSC Exchange



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# Interstate DCP/323 Operations:

	2020	2021 estimates
<b>DCP Contributions</b>		
Arizona	192 kaf	192 kaf
Nevada	8 kaf	8 kaf
Reclamation (System Conservation)	10 kaf	14 kaf
<b>BWSCP Contributions</b>		
Mexico	41 kaf	41 kaf
<b>Additional Contributions</b>		
Arizona, California, Nevada and Mexico	290 kaf	250 kaf
<b>Total Reductions</b>	<b>684 kaf</b>	<b>612 kaf</b>



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# BREAK



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# ARC Process Review

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ARC in relation to :

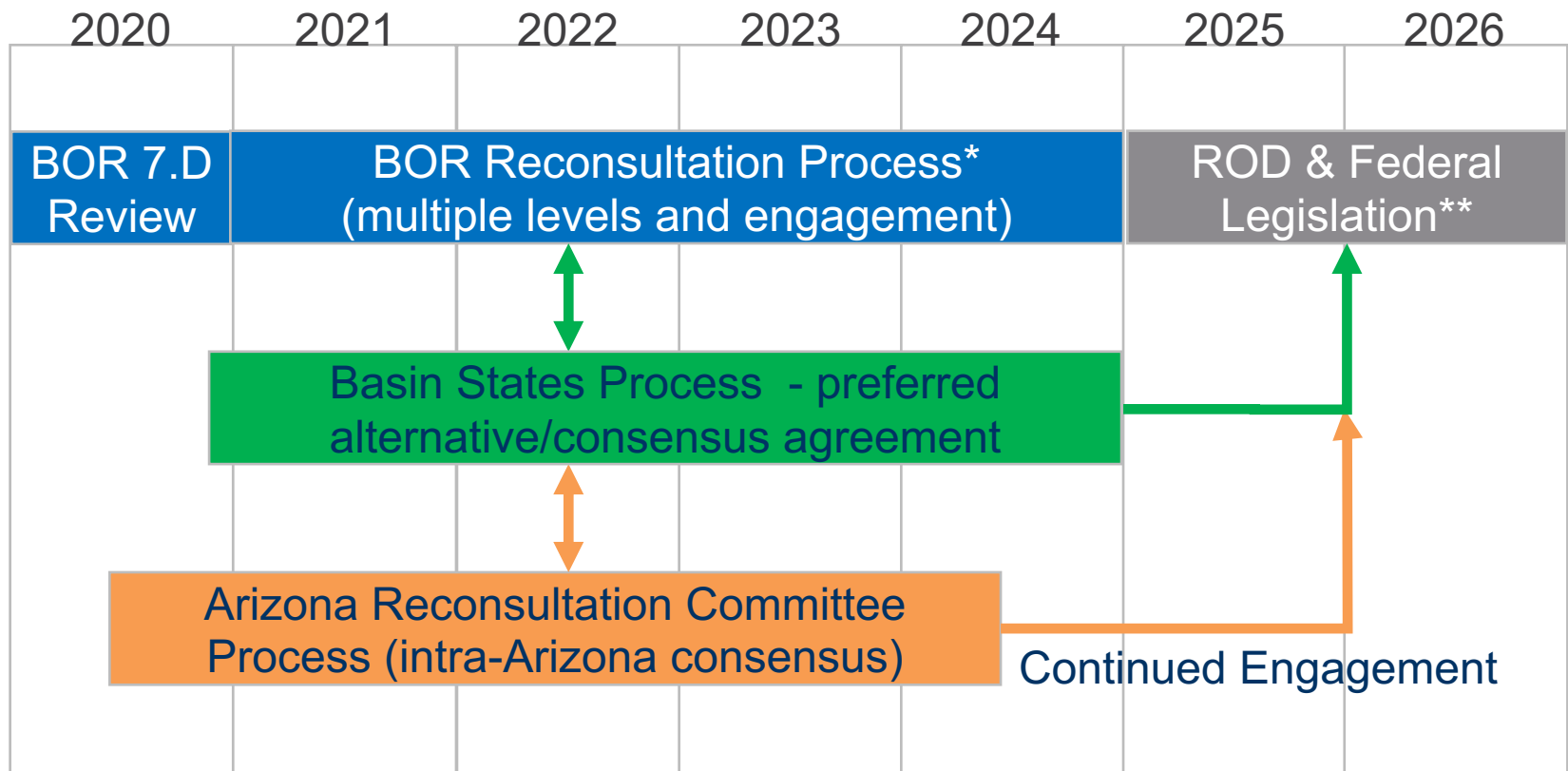
- Basin States and Reclamation Process
- Goals
- Roles and Responsibilities
- Sideboards

Refer to the ADWR and CAWCD websites for June 25<sup>th</sup> ARC presentation, recording, comments and materials



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# Arizona's Estimate of Reconsultation Processes and Timeline



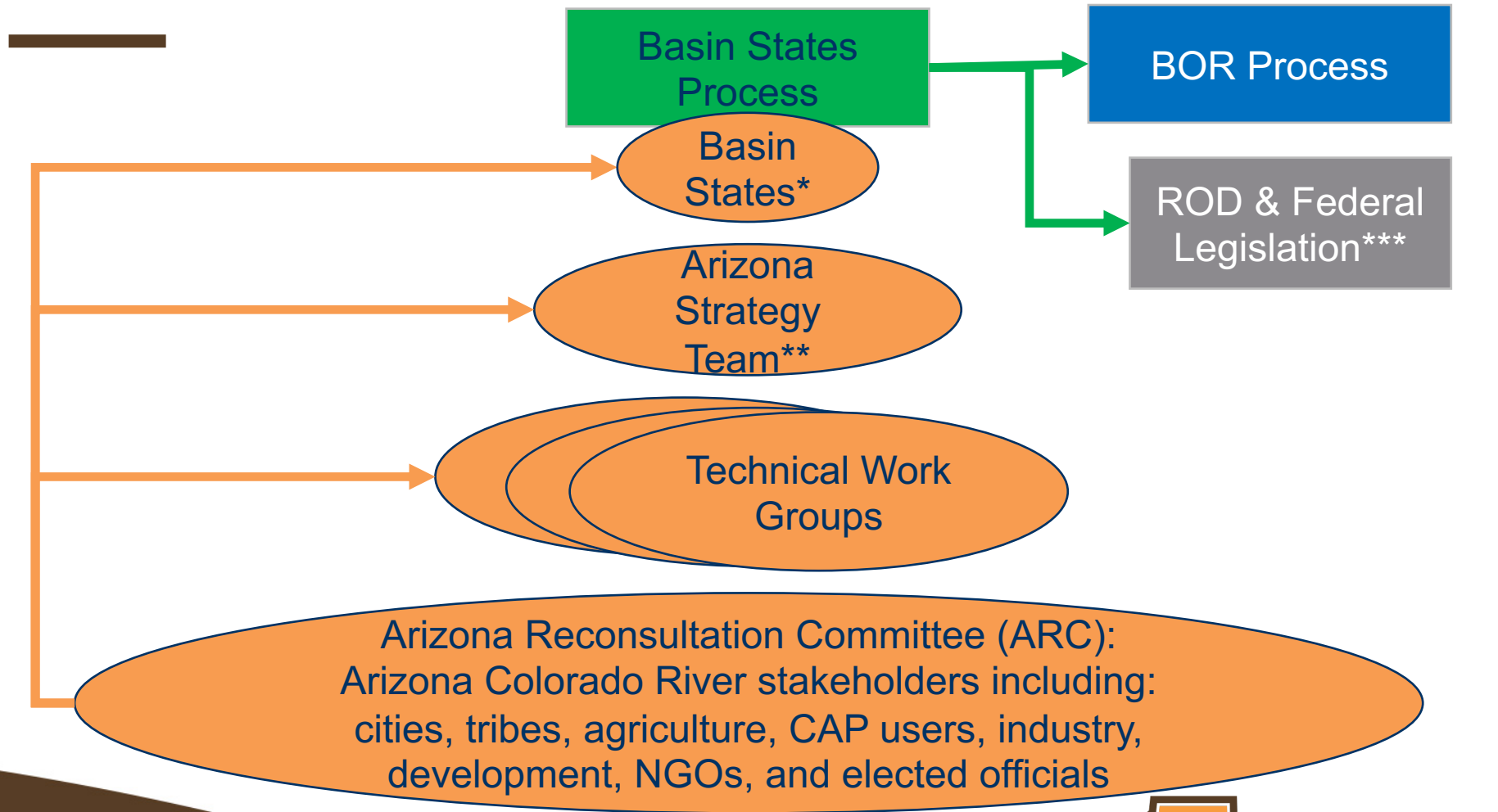
\*Exact timing of BOR Reconsultation Process yet to be determined

\*\* Federal legislation if necessary



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# Arizona Reconsultation Process



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# ARC Initial DRAFT Guiding Principles

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- Respect existing “Law of the River” framework including existing rights, contracts and priorities
- Seek Basin-wide solutions with burdens shared across the Basin, not just by Arizona
- Focus on long-term sustainability including addressing the structural deficit, recognizing that conservation and supply augmentation are part of the long-term solution
- Arizona tribes are a vital component within the Arizona discussion
- Continue to collaborate with Mexico as part of the process
- No marketing of unused water
- No marketing of Arizona water out of state
- Arizona legislative leaders need to continue to be part of the discussion



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# ARC Initial Key Issues

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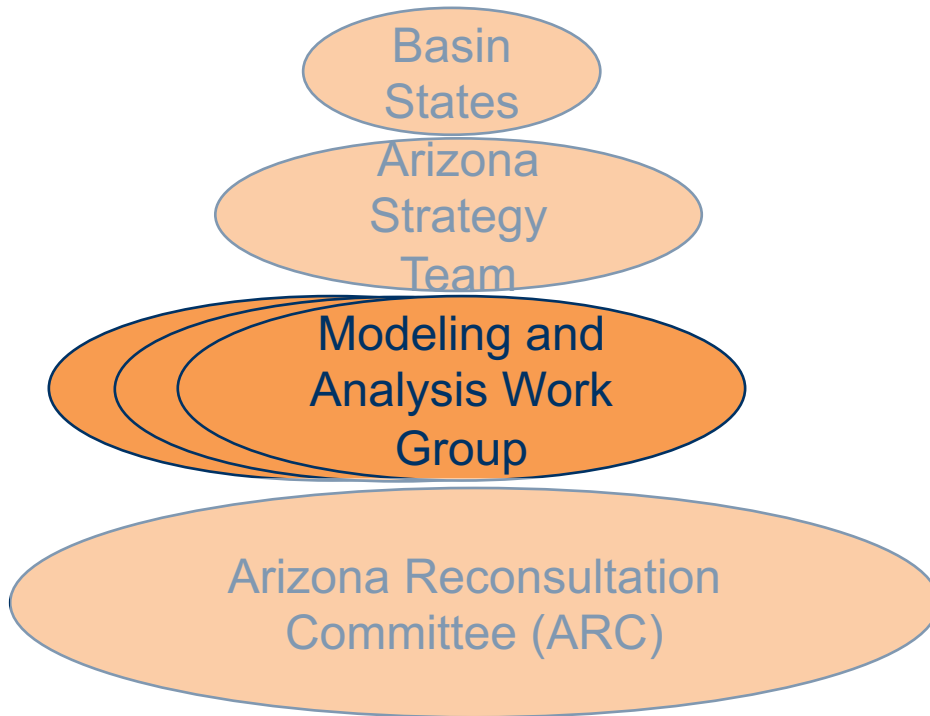
- Balance the need for certainty with the need for flexibility to address changing conditions and circumstances
- Differing perspectives on mitigation post-2026
- Consider balancing perspectives on ICS storage and releases to avoid interstate impacts to priorities and users
- Desire to discuss the role and opportunities for senior priority users to offer water to junior priority users



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# Report from Modeling and Analysis Work Group

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- Addresses questions and examinations from the ARC groups
- Provide a fact-basis to inform ARC discussions
- Examine risks, vulnerabilities and impacts to:
  - Arizona's overall Colorado River supply
  - On-River priorities and users
  - CAP priorities and users
- Consider a broad range of future conditions
- All ARC members and alternates are invited to attend and participate (not recorded) – non-delegates may observe and provide input



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# MAWG Purpose and Goals

- Purpose

Support ARC decision making by providing fact-based analysis of risks, vulnerabilities and impacts to Arizona's overall Colorado River supply including On-River and CAP users.

- Goals

- Analyze issues and answer technical questions posed by the ARC
- Consider a range of future hydrologic conditions
- Analysis of different operating scenarios including those provided by Reclamation
- Consider a range of future demand conditions including analysis of different growth scenarios
- Evaluate and validate technical enhancements to AZ specific modeling tools



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# Initial Modeling and Analyses Framework

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- Work Group to develop multiple modeling scenarios
- Consider a range of future hydrologic conditions:
  - Potential consideration of observed conditions, climate change projected conditions, surrogate records (“tree ring” data), and statistical methods
- Consider a range of future Colorado River uses and depletions, including Upper Basin, Lower Basin, Arizona On-River and CAP uses for impact analysis
- Consider a range of future Colorado River system operating conditions



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# MAWG Next Steps

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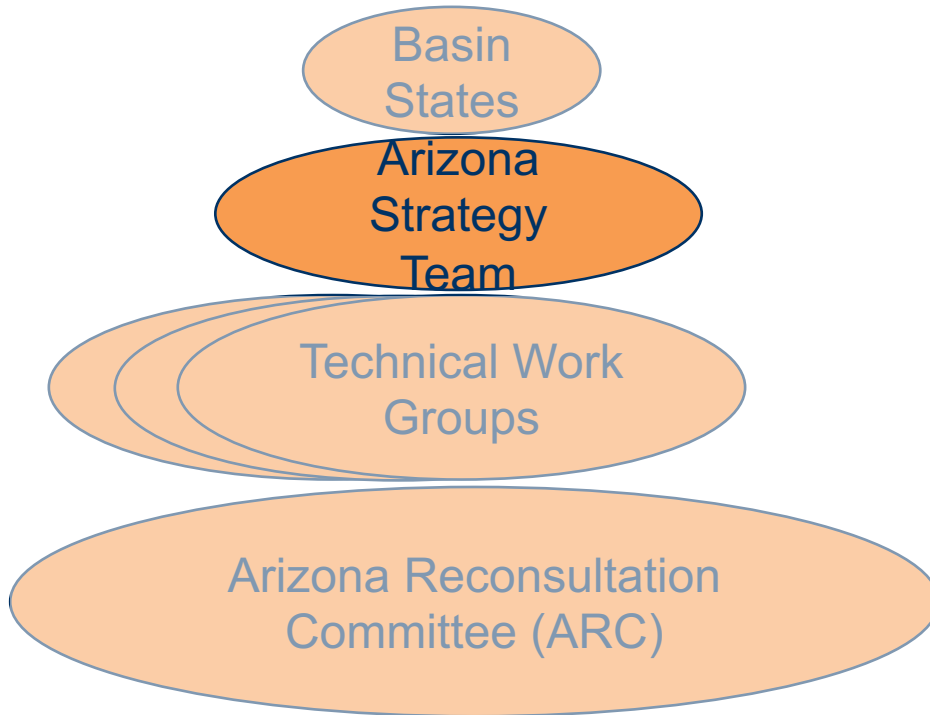
- November 10<sup>th</sup> MAWG #2 – Basin scale models: Hydrology
- Dec/Jan MAWG #3 – Basin scale models: Demands/depletions, Use behaviors, Operations and initial model visualizations
- February '21 MAWG #4 – Arizona and CAP scale models: Demands, Use behaviors, priorities and visualizations
- April '21 MAWG #5 – Initial Scenario Development



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# ARC Arizona Strategy Team Overview

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- Strategy Team to examine:
  - Negotiating strategies to approach the Basin States and Federal processes, and
  - Legal implications of new operating rules and related proposals
- Participation by invitation and requires a confidentiality agreement
- Will meet as necessary



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# Development of Arizona Strategy Team

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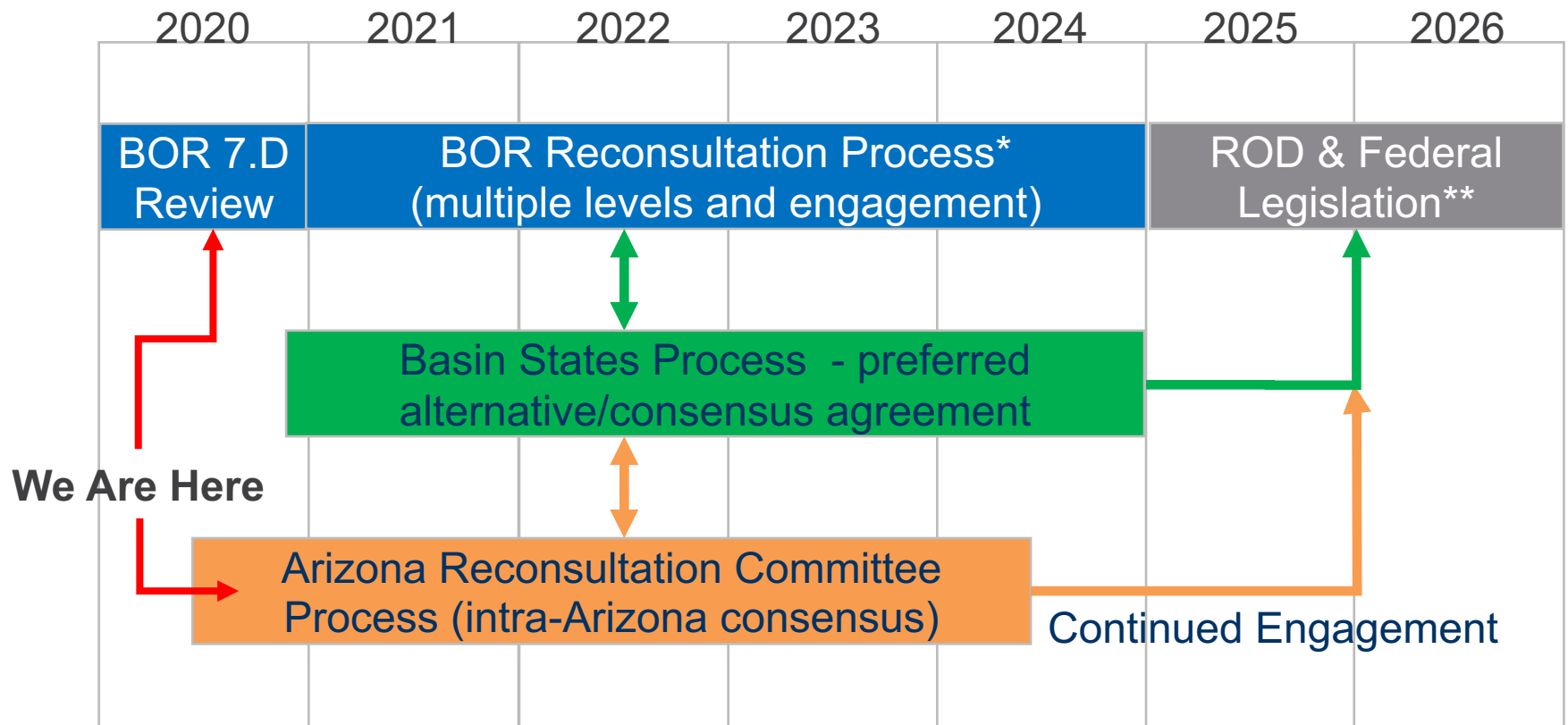
- Prospective members are delegates or designees of delegates
- Prospective members have been contacted to discuss participation
- Common Interest/Confidentiality Agreement (aka non-disclosure agreement) is being developed
- Strategy Team will conduct an initial meeting after the group is organized



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# Update on Basin States and Reclamation Processes



\*Exact timing of BOR Reconsultation Process yet to be determined

\*\* Federal legislation if necessary



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# ARC Next Steps

- MAWG Meetings:
  - November 10<sup>th</sup>
- Arizona Strategy Team:
  - Conduct initial meeting
- ARC Meeting early 2021
  - Draft Agenda includes:
    - Colorado River update
    - Report on 2021 DCP implementation and 2022 plans
    - 7.D Review update
    - Report from MAWG and initial modeling scenarios
    - Report from Arizona Strategy Team
    - Update on Basin States process and Reclamation's process
    - Schedule next ARC meeting



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# Call to the Public

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Submit questions or comments using the electronic public comment form at [cap-az.com/ARC](http://cap-az.com/ARC).



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[cap-az.com/ARC](http://cap-az.com/ARC)