



# Colorado River Basin System Status Update

CRWUA 2020 Annual Meeting  
December 18, 2020

# Colorado River Basin Storage

*as of December 16, 2020*

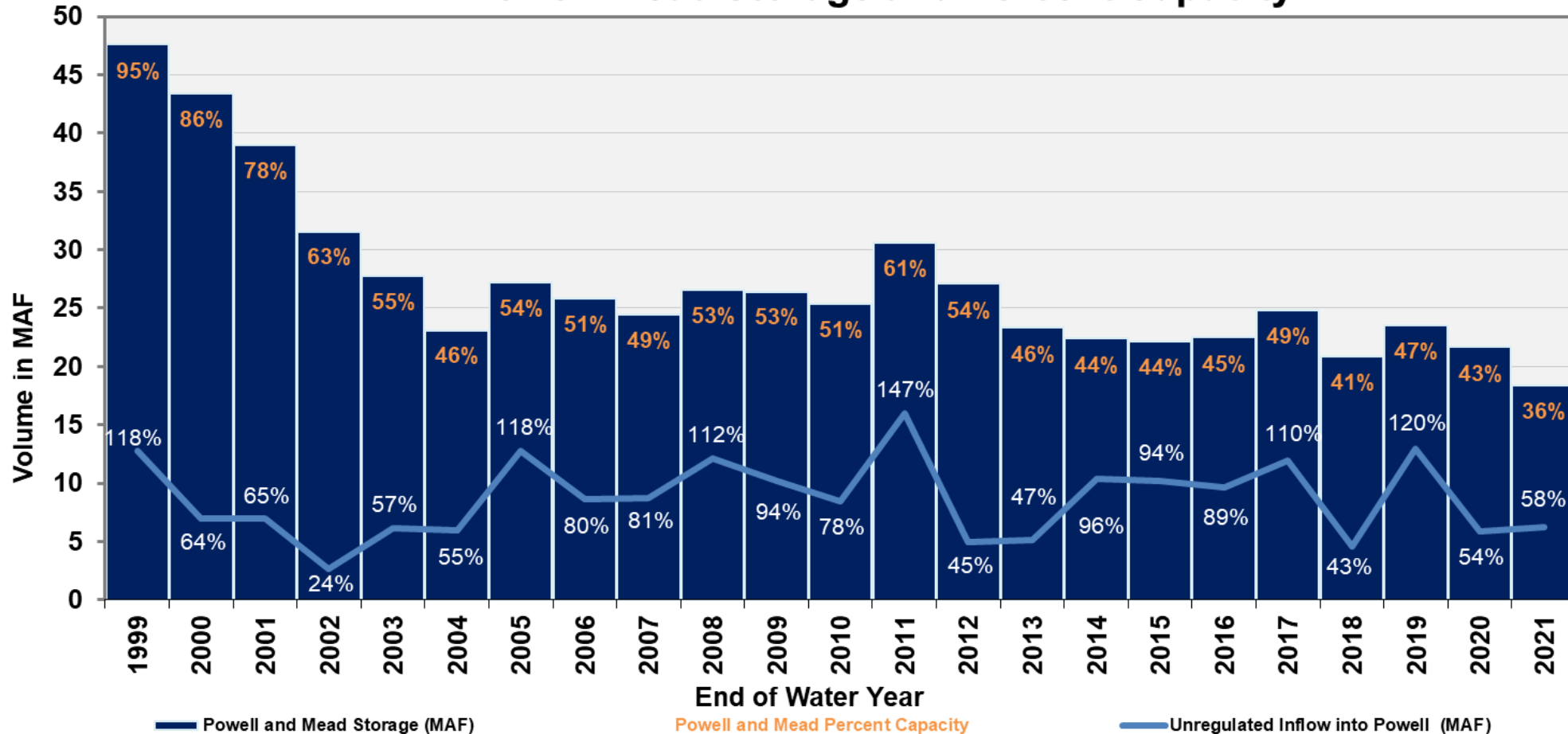
Reservoir	Percent Full	Storage (maf)	Elevation (feet)
Lake Powell	43%	10.4	3,585
Lake Mead	39%	10.2	1,083
Total System Storage*	46%	27.7	NA

Total system storage was 31.3 maf, or 52% of capacity, this time last year



# State of the System (Water Years 1999-2021)<sup>1,2</sup>

## Unregulated Inflow into Lake Powell Powell-Mead Storage and Percent Capacity



<sup>1</sup> Values for Water Year 2021 are projected. Unregulated inflow is based on the latest CBRFC forecast dated December 16, 2020. Storage and percent capacity are based on the December 2020 24-Month Study.

<sup>2</sup> Percentages on the light blue line represent percent of average unregulated inflow into Lake Powell for a given water year. The percent of average is based on the period of record from 1981-2010.



# Lake Powell & Lake Mead Operational Table

## Operational Determinations for Water Year/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> <b>Jan 1, 2021 Projection</b>		1,145	Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	15.9
3,575	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	9.5	1,105	<b>1,085.28 ft</b> <b>Jan 1, 2021 Projection</b>	11.9
3,525	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	5.9	1,075	Shortage Condition Deliver 7.167 <sup>4</sup> maf	9.4
3,490		4.0	1,050	Shortage Condition Deliver 7.083 <sup>5</sup> maf	7.5
3,370		0	1,025	Shortage Condition Deliver 7.0 <sup>6</sup> maf Further measures may be undertaken <sup>7</sup>	5.8
			1,000		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> Consistent with the 2007 Interim Guidelines, Lake Powell and Lake Mead operational determinations are based on August 2020 24-Month Study projections of January 1, 2021 reservoir elevations and are documented in the draft 2021 Annual Operating Plan.



**Total Contemplated Volumes (in thousand acre-feet (AF))**  
**2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan &**  
**Binational Water Scarcity Contingency Plan**

Lake Mead Elevation (ft msl)	2007 Interim Guidelines Shortages		Minute 323 Delivery Reductions	Total Combined Reductions	DCP 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 United States will take affirmative actions to create or conserve 100,000 af or more of Colorado River system water on an annual basis 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 federal law, including availability of appropriations.



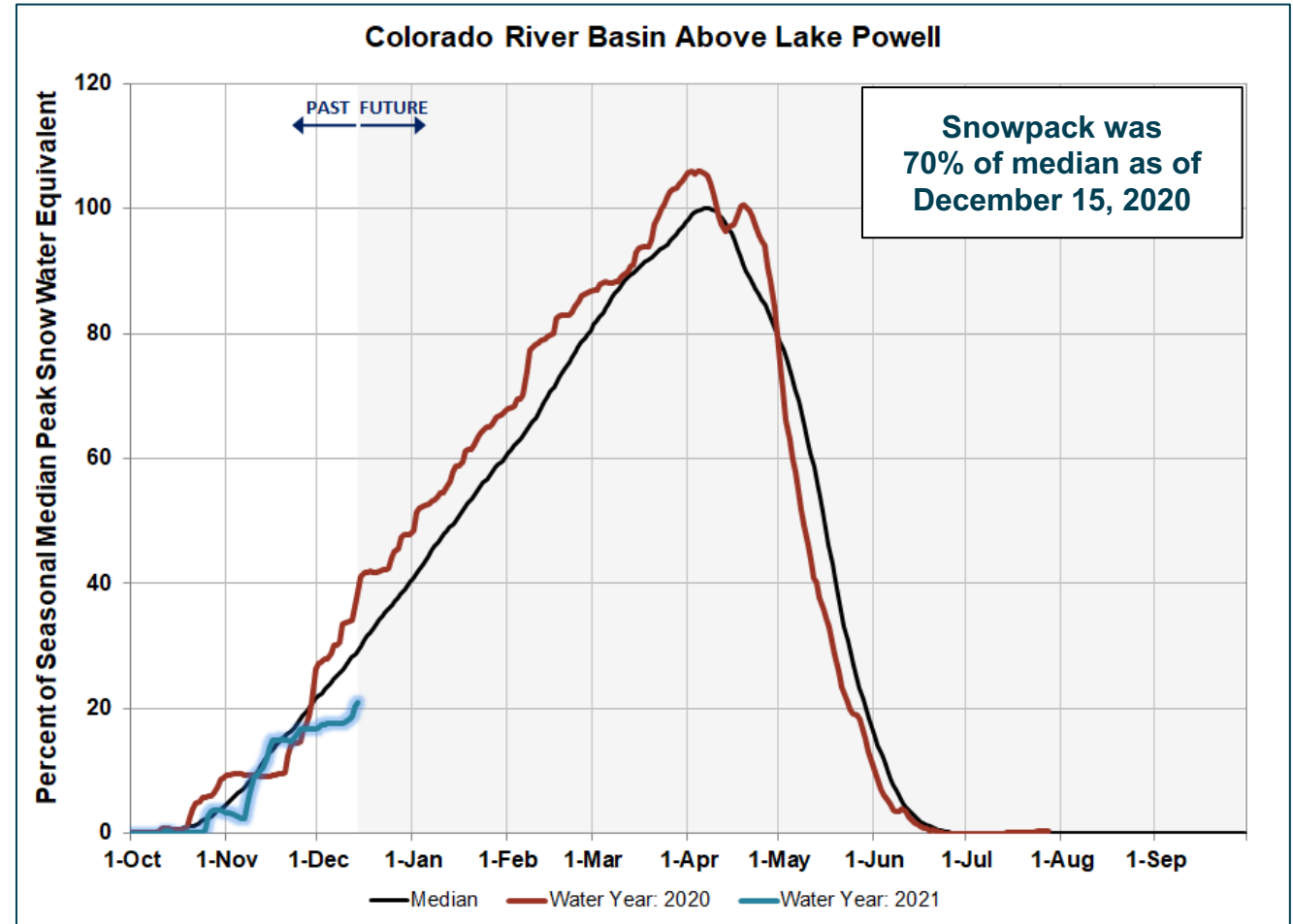
# Upper Colorado River Basin

## Water Year 2021 Snowpack and Forecasted Lake Powell Inflow

Water Year 2021  
Forecasted Inflow  
*(Most Probable Inflow  
as of December 16, 2020)*

6.23 maf

58% of average



# 24-Month Study Projections

## Lake Powell Elevations\*

### End of CY 2021 Projections

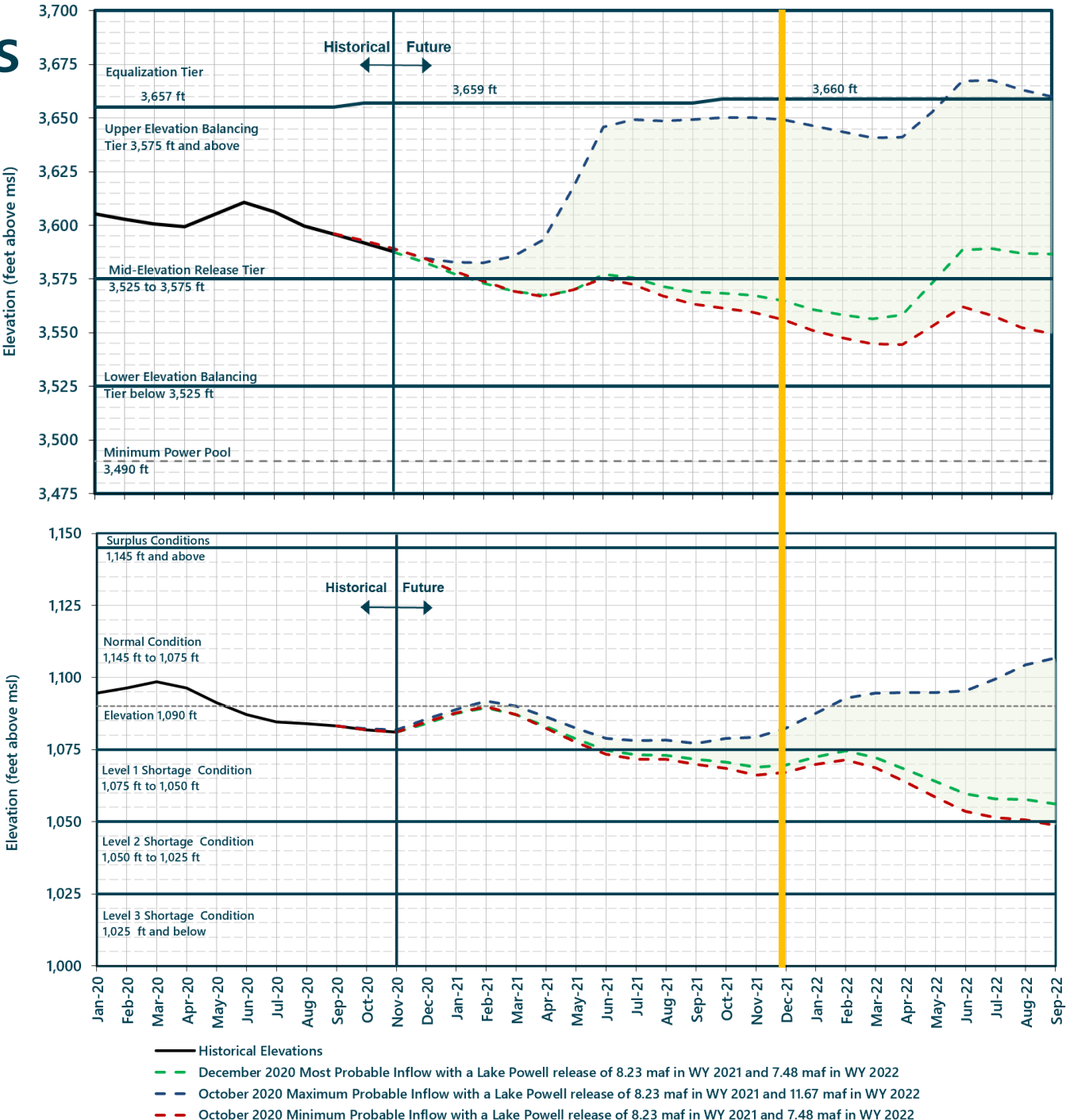
Most Probable: 3,571 feet (38% full)  
Max Probable: 3,649 feet (70% full)  
Min Probable: 3,556 feet (33% full)

## Lake Mead Elevations\*

### End of CY 2021 Projections

Most Probable: 1,070 feet (35% full)  
Max Probable: 1,082 feet (39% full)  
Min Probable: 1,067 feet (34% full)

*\*Projections from the  
December 2020 Most Probable and  
October 2020 Min/Max Probable  
24-Month Study Scenarios*





For additional information:

<https://www.usbr.gov/uc/water/>

<https://www.usbr.gov/lc/riverops.html>

For 5-year projected future conditions:

<https://www.usbr.gov/lc/region/g4000/riverops/coriver-projections.html>



— BUREAU OF —  
RECLAMATION