Colorado River Commission of Nevada

Hydrology and Water Use Update

Warren Turkett

March 16, 2021



Summary

Lake Powell

- Drought conditions are causing below average inflow forecasts.
- Unregulated inflow for water year¹ 2021 is forecasted at 47% of average.
- Upper Basin snowpack is currently 82% of the seasonal average.

Lake Mead

- Lake Mead is forecasted to decrease about 18 feet in elevation by the end of calendar year 2021.
- Lower Basin conservation programs have conserved roughly 3.5 million af or about 40 addition feet in Lake Mead.

Nevada Water Supply

- Southern Nevada has 8 years of water supply banked. ²
- In 2020, Southern Nevada used 15% less than its annual allocation.

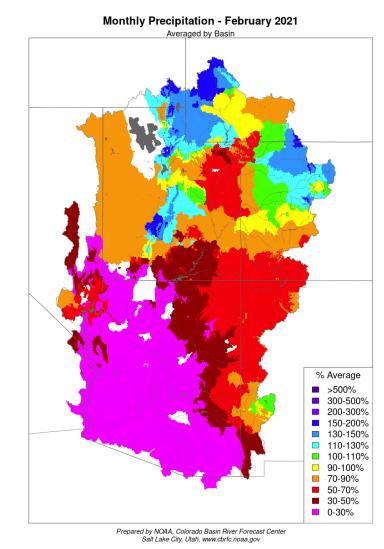
Storage	Elevation (f)	% Capacity	Change since last year
Lake Mead	1,086.2	40%	-10.2 ft
Lake Powell	3,569.2	37%	-32.4 ft

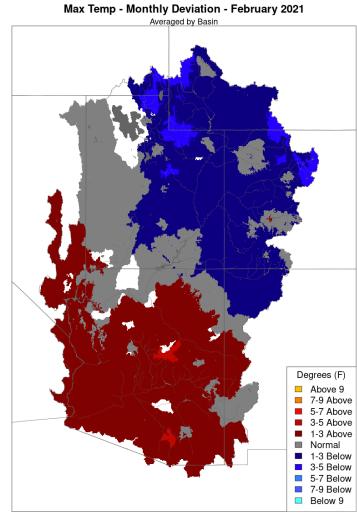
Data retrieved March 16, 2021

¹ Water year is defined as October through September.

² Based on 2020 consumptive use and storage volumes through 2019.

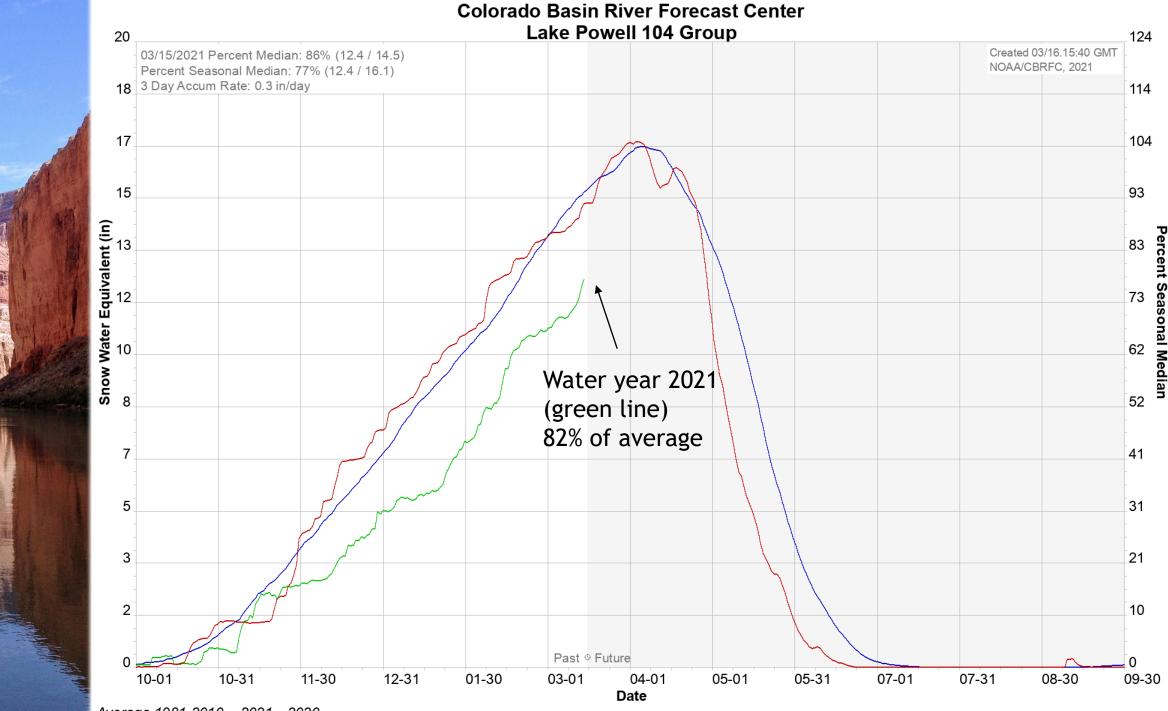
Precipitation and Temperature





Prepared by NOAA, Colorado Basin River Forecast Center Salt Lake City, Utah, www.cbrfc.noaa.gov

Above Lake Powell February precipitation: 105% Above Lake Powell water year 2021 cumulative precipitation: 74%



Average 1981-2010 _ 2021 _ 2020 _



Unregulated Inflow, Current and Projected Reservoir Status

Projected unregulated inflow to Lake Pow	ell Acre-Feet	% Average
Water Year 2021	5,130,000	47%
April thru July 2021	3,400,000	47%

Reservoir	Current Elevation	Current Storage Acre-Feet	Current % Capacity	Projected Elevation on 1/1/2022 ¹
Lake Mead	1,086.2	10,530,000	40%	1,068.5
Lake Powell	3,569.2	9,041,000	37%	3,550.9

Data retrieved March 16, 2021

¹ Based on Reclamation's March 2020 24 Month Study Most Probable Inflow.



Water Use In Southern Nevada

Southern Nevada Water Use	2020 Actual Use in Acre-Feet
Nevada Annual Allocation	300,000
Diversion	479,146
Return Flows	223,420
Consumptive Use	255,726
Unused Allocation Available for Banking	44,274 (15%)

Southern Nevada Water Use	Diversions	Return Flows	Consumptive Use
January 2021	29,200	18,326	10,873
Banked Water (through end of 20		Acre-Feet	
Ground Water Recharge in So. New		358,315	
Banked in Lake Mead		785,913	
Banked in California and Arizona		944,071	
Total		2,088,299	