Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update December 12, 2017





Unregulated Inflow & Storage

As of December 11, 2017

Projected unregulated inflow to Lake Powell	MAF*	% Avg**
WY 2018	7.64	70%
April-July 2018	4.6	64%

Storage	Elevation (f)	MAF*	% Capacity	y Δ year
Lake Mead	1,081.4	10.1	39%	1 4.0 ft
Lake Powell	3,624.5	14.3	59%	1 20.6 ft
Total storage***		32.3	54%	1 2.7 maf

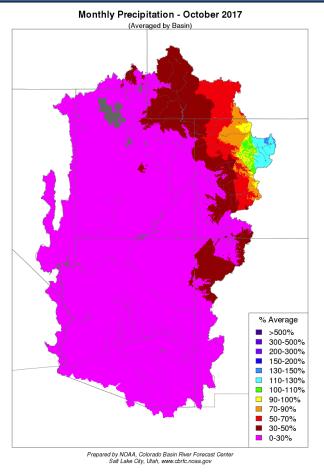
^{*}MAF=Million Acre-Feet

^{**30-}year average, from 1981-2010 (current normal)

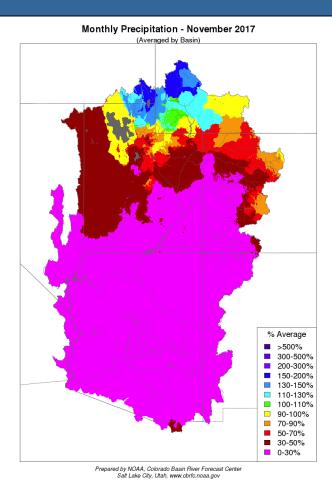
^{***}Total storage includes additional Upper and Lower Basin reservoirs

Precipitation

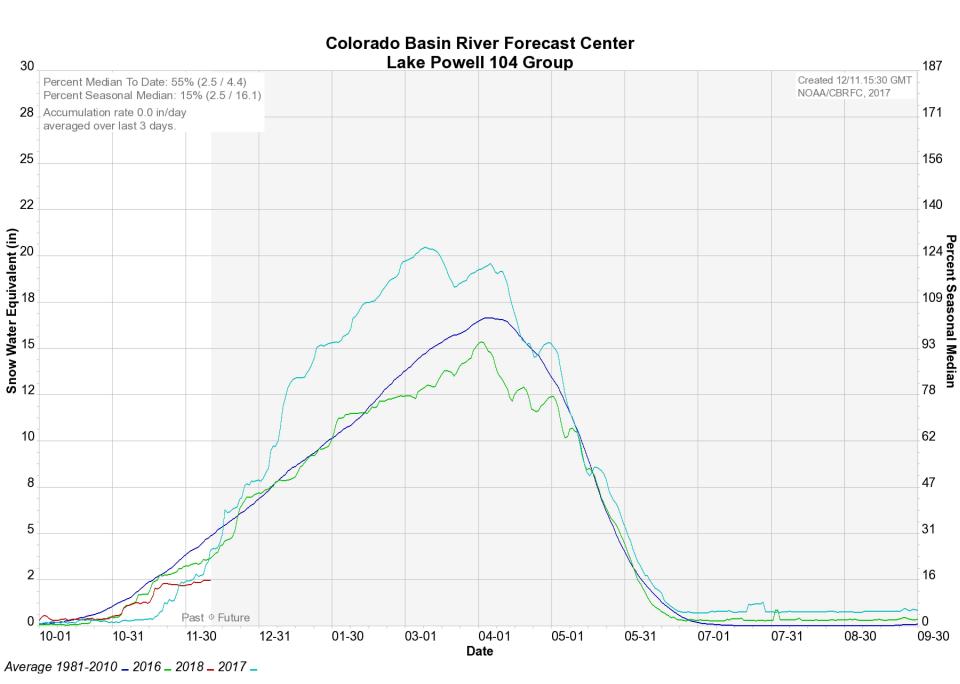
- Slow start to snowpack accumulation.
- Water year precipitation average: 58%.



October precipitation above Lake Powell: 57%

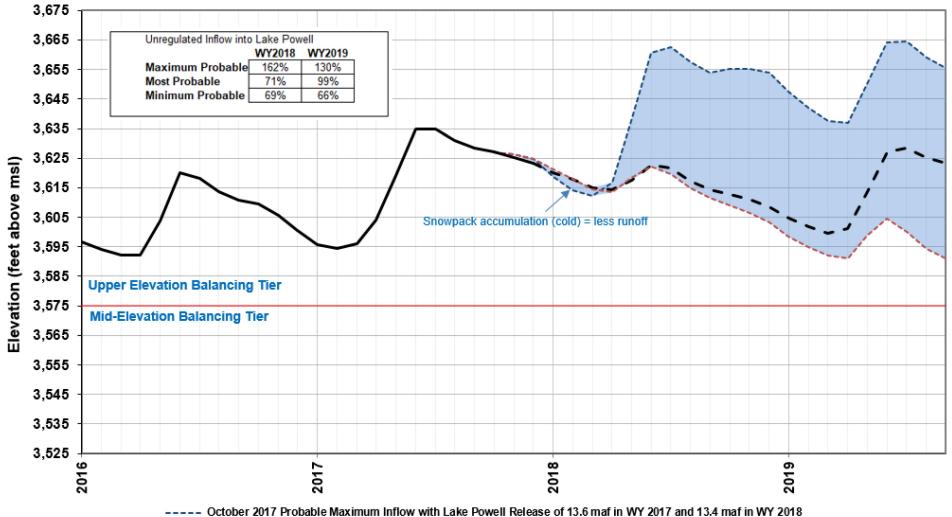


November precipitation above Lake Powell: 59%



Lake Powell Projections

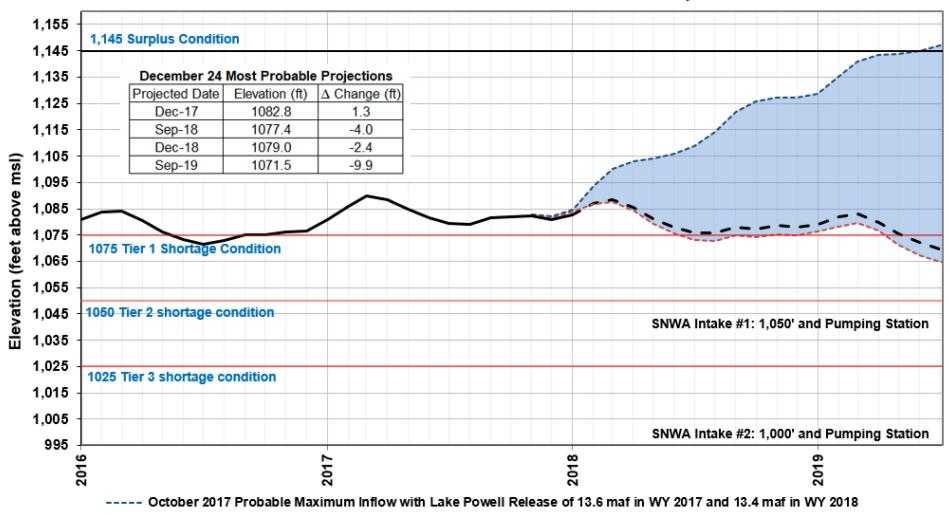
Reclamation's December 2017 24-Month Study



- December 2017 Most Probable Inflow with Lake Powell Release of 9.0 maf in WY 2018 and WY 2019
- October 2017 Probable Minimum Inflow with Lake Powell Release of 9.0 maf in WY 2018 and WY 2019
- Historical Elevations

Lake Mead Projections

Reclamation's December 2017 24-Month Study



- December 2017 Most Probable Inflow with Lake Powell Release of 9.0 maf in WY 2018 and WY 2019
- ---- October 2017 Probable Minimum Inflow with Lake Powell Release of 9.0 maf in WY 2018 and WY 2019
- ----- Historical Elevations

Water Use in Southern Nevada

January- October 2017

2017: Consumptive Use = $214,966^*$ af

2016: Consumptive Use = 212,199 af

Difference = 2,767 af

*Subject to final accounting.



Decree Accounting Report

- Article V of the Decree of the Supreme Court of the United States in Arizona vs. California, dated March 9, 1964, requires the United States (through the Bureau of Reclamation) prepare, maintain and provide records of water releases, diversions, return flows and consumptive use for the states of Arizona, Nevada and California, and deliveries to Mexico.
- The Colorado River Commission (CRC) has the responsibility of accounting for Colorado River water use for the state of Nevada.
- Water users within Southern Nevada report Colorado River diversions to the CRC monthly. The CRC uses this data, and the gaged flow at the Las Vegas Wash to calculate Return Flow Credits and the consumptive use.
- Report includes off-stream storage/interstate banking and Intentionally Created Surplus water supplies that are created by the Southern Nevada Water Authority.

The "2016 Colorado River Accounting and Use Report: Arizona, California, and Nevada" can be accessed through the following link: https://www.usbr.gov/lc/region/g4000/4200Rpts/DecreeRpt/2016/2016.pdf



December Reservoir Conditions (Summary)

Lake Powell

- Upper Basin snowpack accumulation period (October-March) has started with very little precipitation.
- Increased over 20 feet from this time last year which will benefit Lake Mead.

Lake Mead

- Has increased 4 feet from this time last year.
- Lake Mead is expected to increase one foot by end of December.

Storage	Elevation (f)	% Capacity	▲ year
Lake Mead	1,081.2	39%	1.0 ft
Lake Powell	3,625.1	59%	1 20.6 ft

Data retrieved December 11, 2017



Colorado River Commission of Nevada

Questions?

Warren Turkett, Ph.D. wturkett@crc.nv.gov



