Animas Consolidated Ditch Company

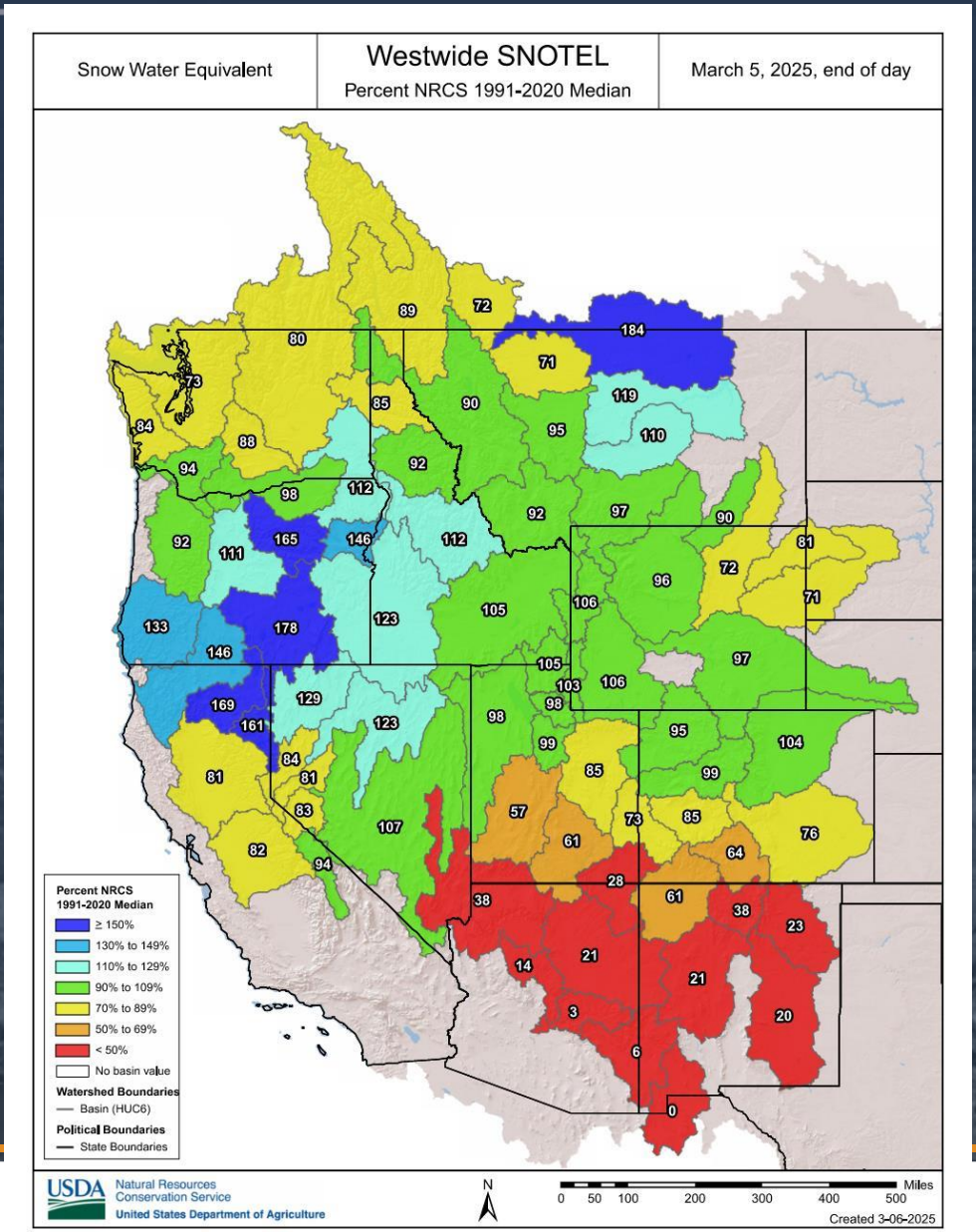
Water Supply Outlook

March 8, 2025

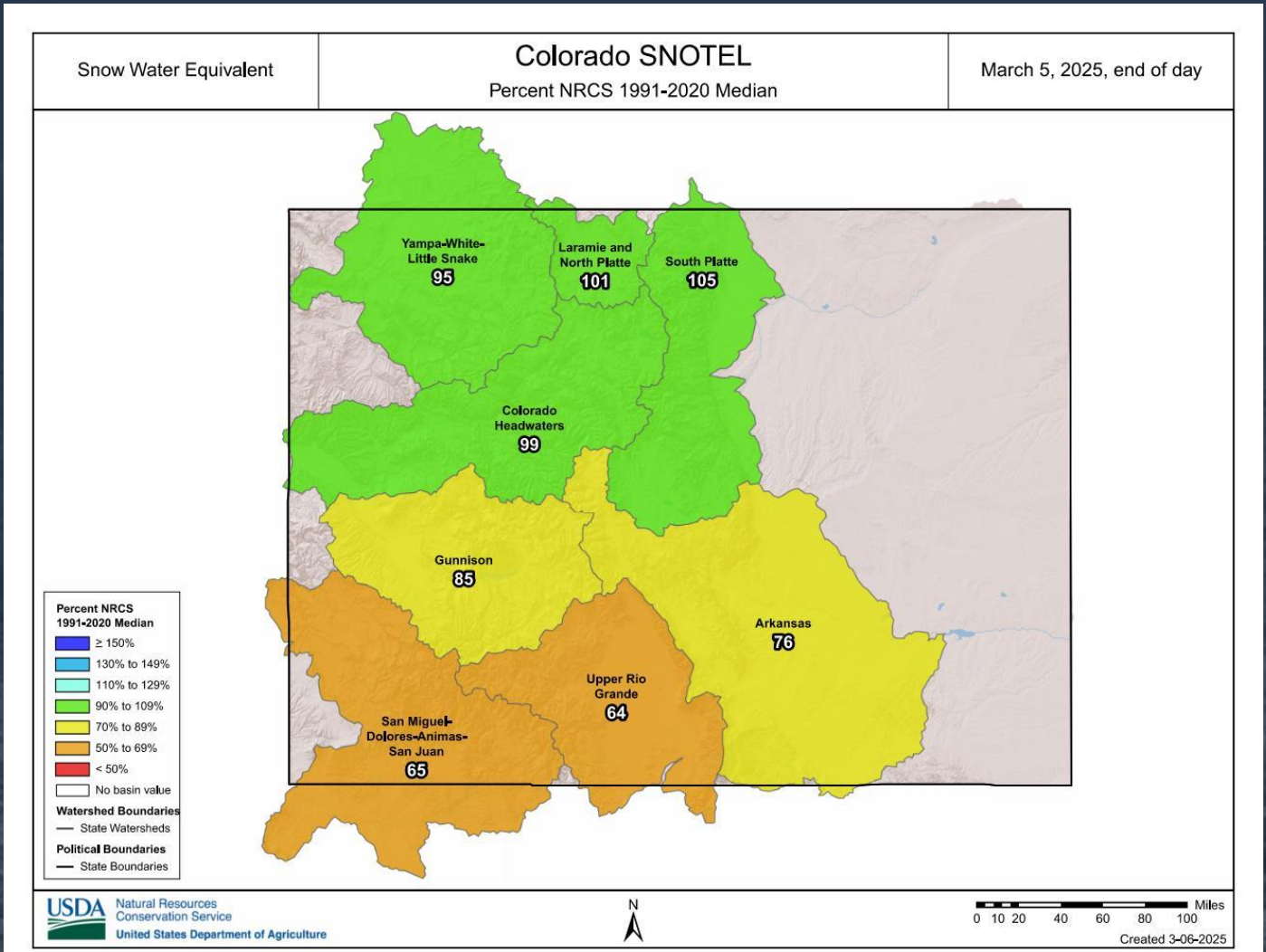
Eric Bikis
Principal Water Resources Consultant

SGM

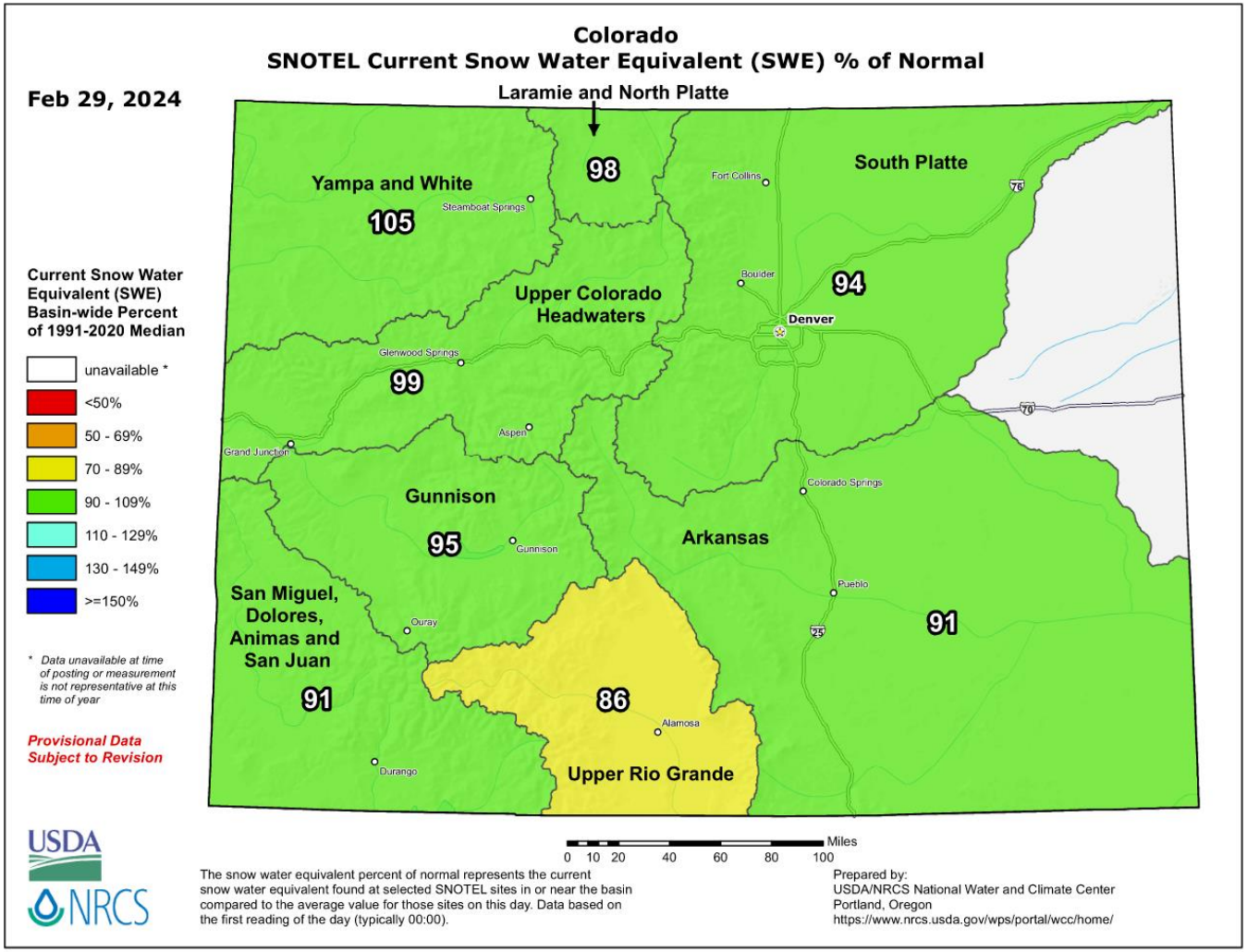
Westwide SNOTEL Current SWE % of Normal



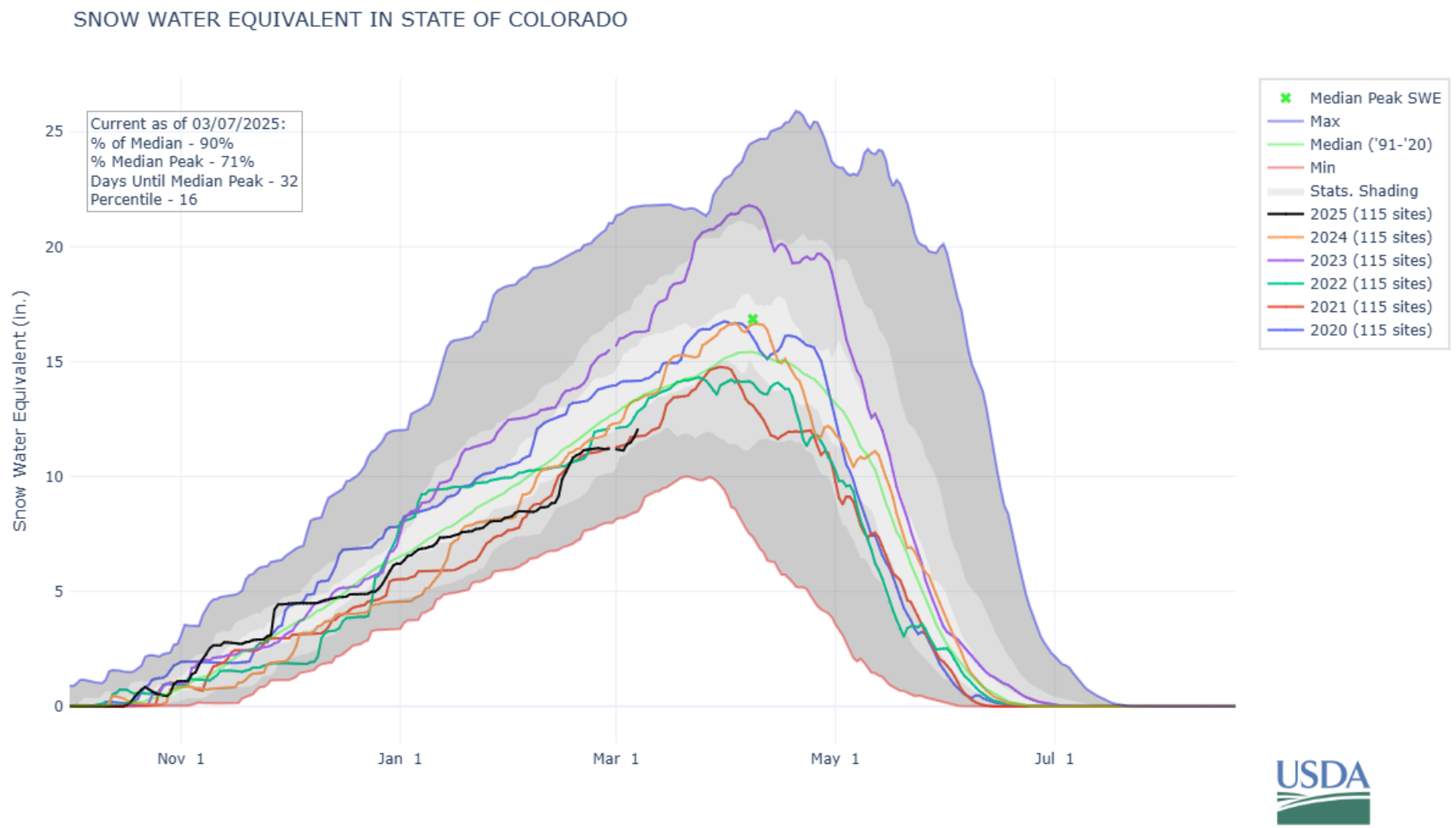
Colorado Current SNOTEL SWE % of Normal



Colorado 2024 SNOTEL SWE % of Normal



Colorado Statewide Time Series Snowpack



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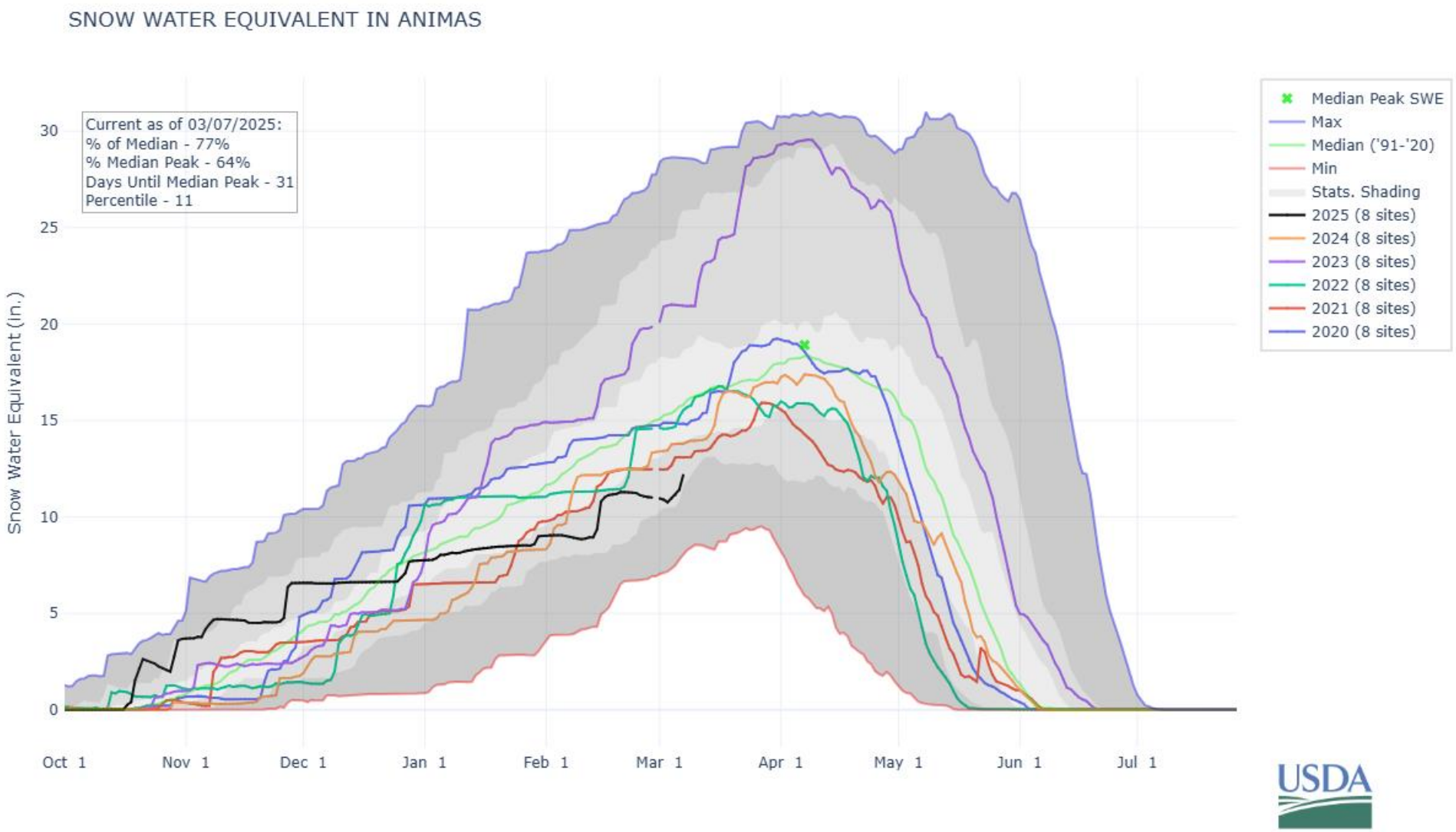
Animas River Time Series Snowpack 2025



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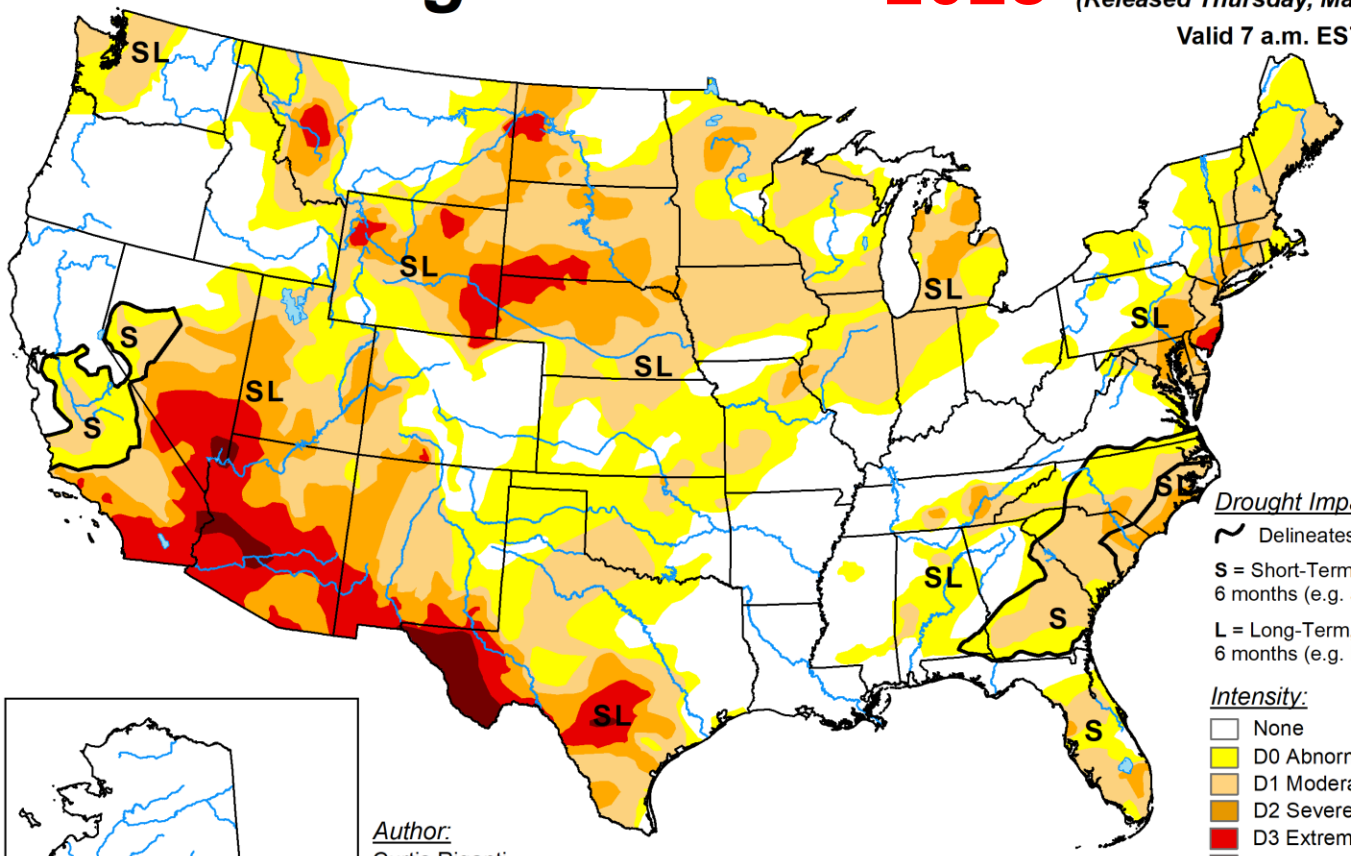
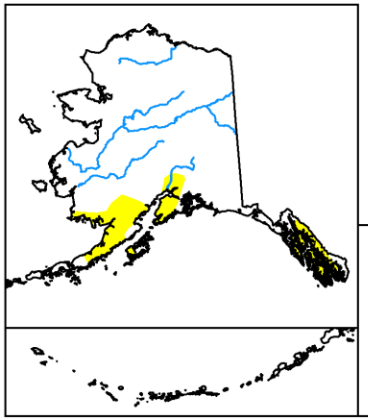
U.S. Drought Monitor 2025

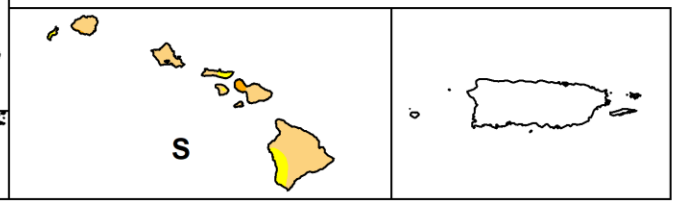
March 4, 2025

(Released Thursday, Mar. 6, 2025)

Valid 7 a.m. EST







Author:
Curtis Riganti
National Drought Mitigation Center

Drought Impact Types:

Delineates dominant impacts

S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

USDA NDMC NOAA

droughtmonitor.unl.edu

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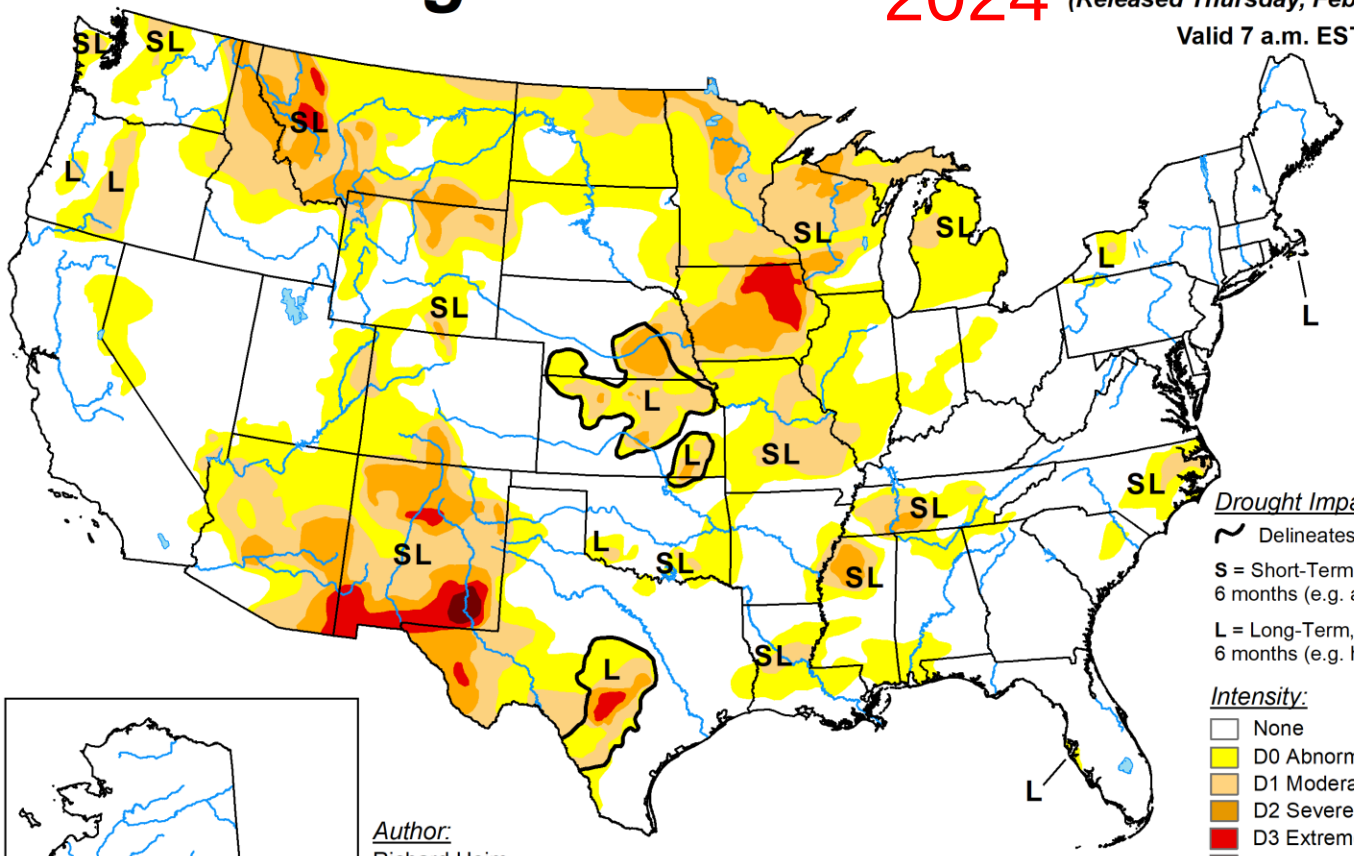
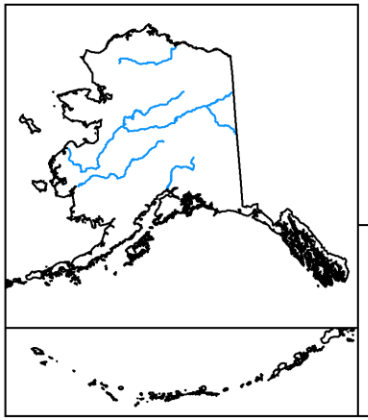
U.S. Drought Monitor 2024

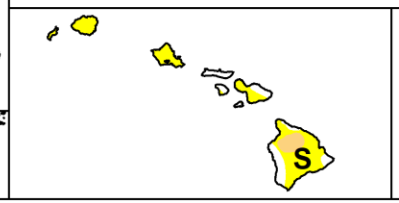
February 27, 2024

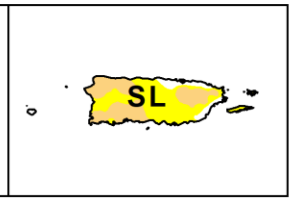
(Released Thursday, Feb. 29, 2024)

Valid 7 a.m. EST









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Author:
Richard Heim
NCEI/NOAA

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USDA NDMC NOAA

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Colorado River Watershed

2025

Figure 1. Map showing the watershed, or hydrologic basin, of the Colorado River and areas beyond the watershed that are served by trans-basin diversions (adapted and revised from U.S. Bureau of Reclamation, 2012).

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Click here to add title

Colorado River Basin

The Colorado River flows for approximately 1,450 miles and provides water to seven states in the Western U.S. that are part of the Colorado River Basin. Divided into two regions; the Upper Basin includes Colorado, New Mexico, Utah, and Wyoming; and the Lower Basin includes Arizona, California, and Nevada. It also provides water to Mexico. Colorado receives 40% of its water supply from the Colorado River. It runs through the Rocky Mountains and into the deserts of the Southwest and provides a critical natural resource for agriculture, municipalities, outdoor recreation, hydropower generation, Tribal Nations, and drinking water for several of the country's largest cities including Denver, Phoenix, and Los Angeles.

As the Southwestern U.S. continues to face compounded severe drought years, leading to less water available to use, Colorado and the other Basin states are working together to create solutions to our water supply and demand challenges proactively. This includes negotiating a post-2026 river operations agreement while working within the existing legal framework, and investigating new tools to better prepare for any future uncertainties.

Annual Economic Value

$1.4 Trillion

Drinking Water for

40 Million

Irrigated Farmland

5.5 Million Acres

Flows through

11 National Parks

Law of the River

Below are some of the laws, agreements, decrees and regulations that govern river operations between the Upper and Lower Basins and Mexico, allow for the development of water supplies and storage to meet Compact obligations, generate hydropower, and coordinate operations of major storage facilities in the Basins:

See Laws, Agreements, Decrees, Regulations

- Colorado River Compact (opens in new window)(1922)

- Boulder Canyon Project Act (1928)

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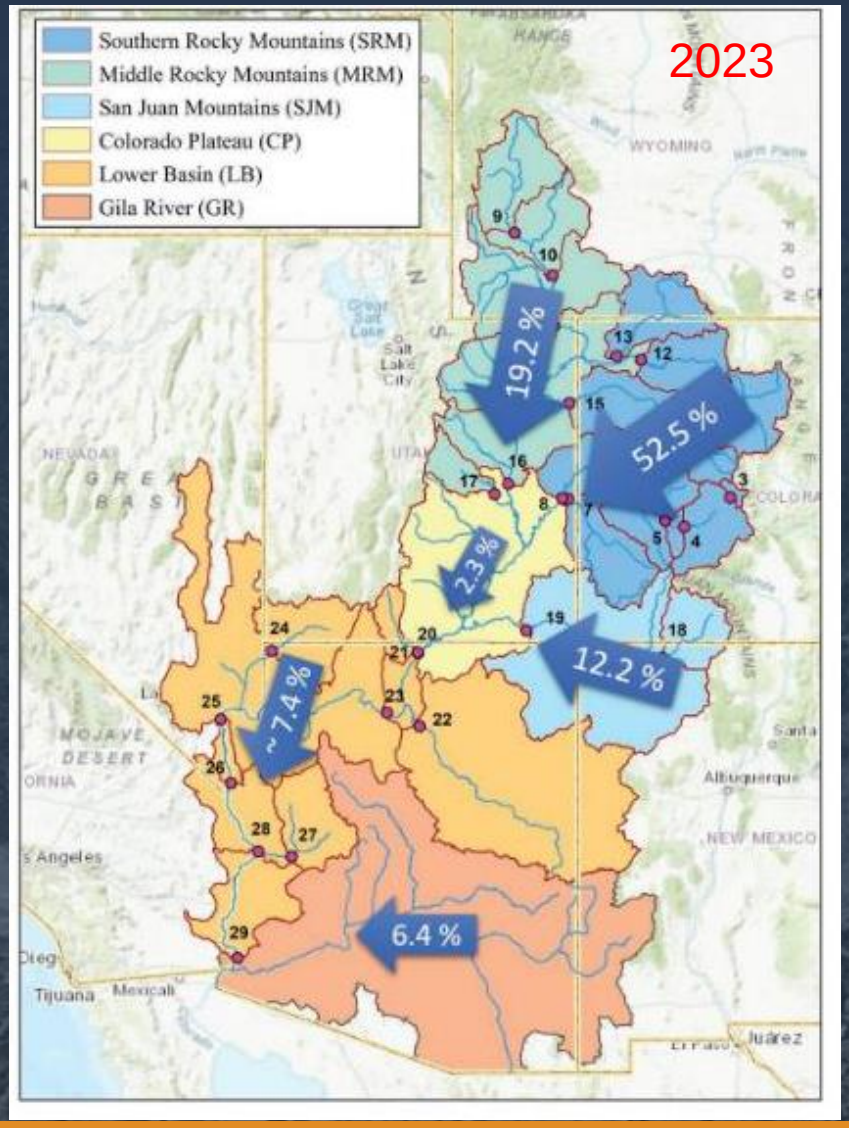
Colorado River Basin Cont.



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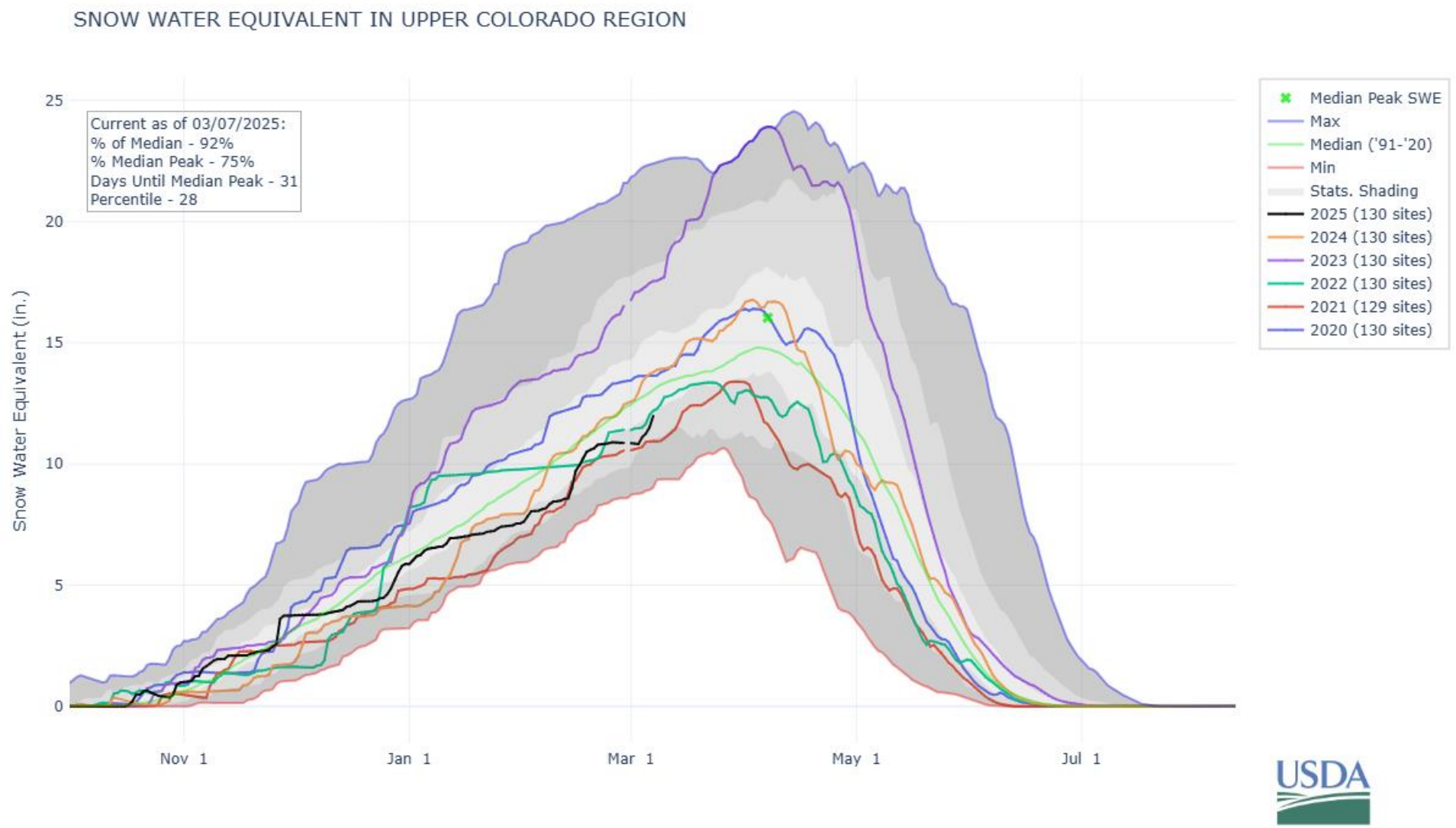
Upper Colorado Above Lake Powell (130 Sites) Time Series Snowpack 2025



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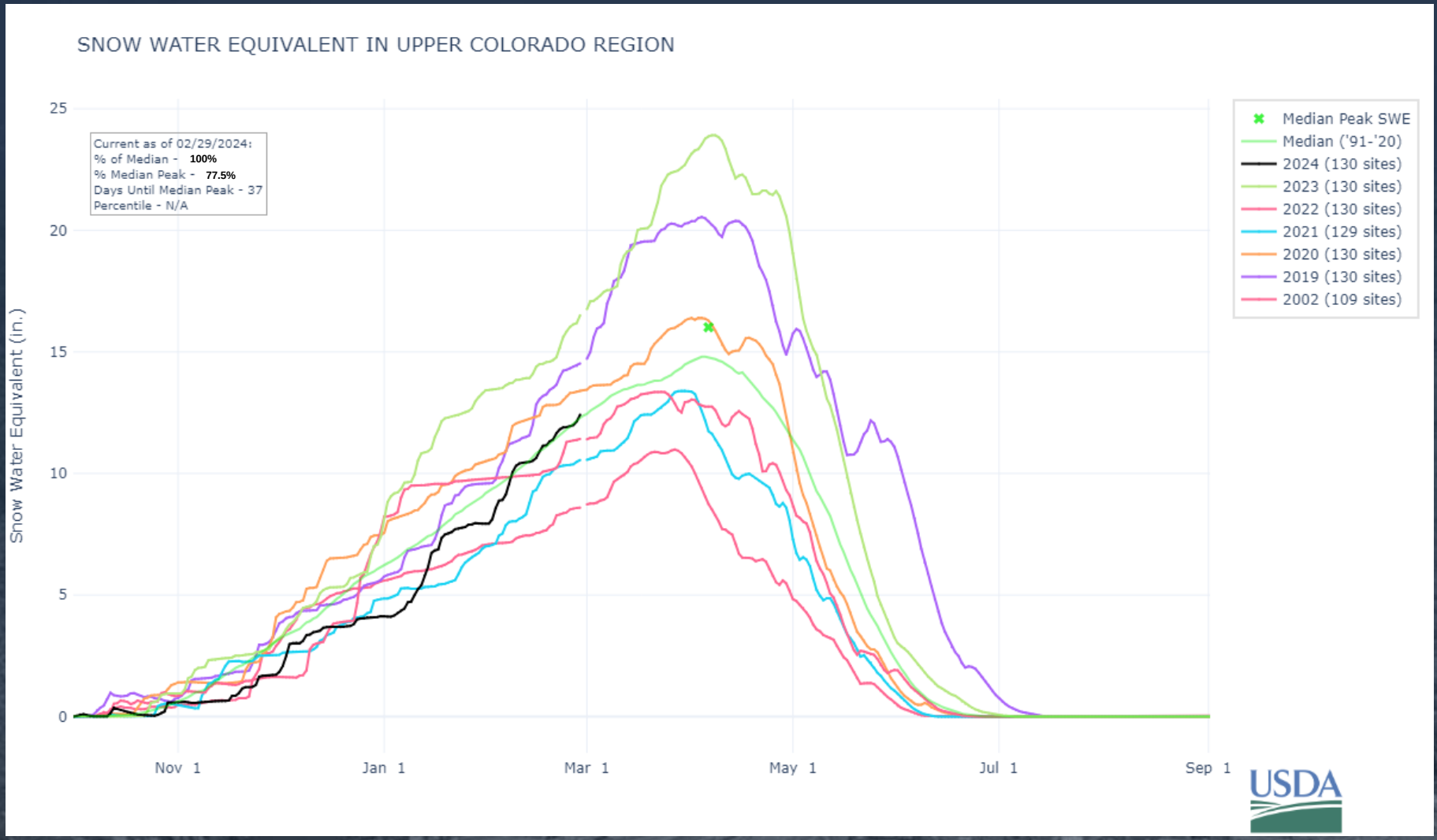
Upper Colorado Above Lake Powell (130 Sites) Time Series Snowpack 2024



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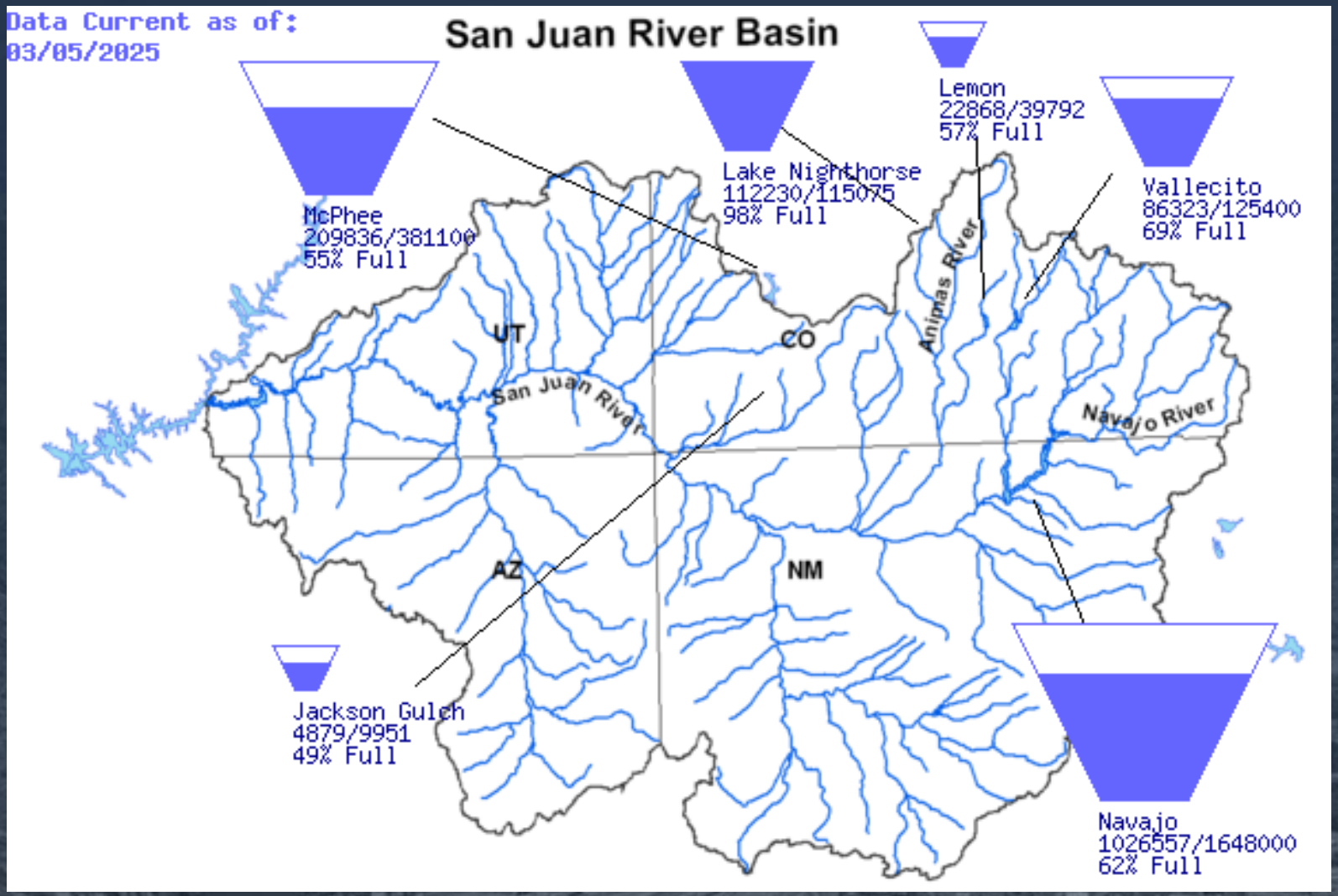
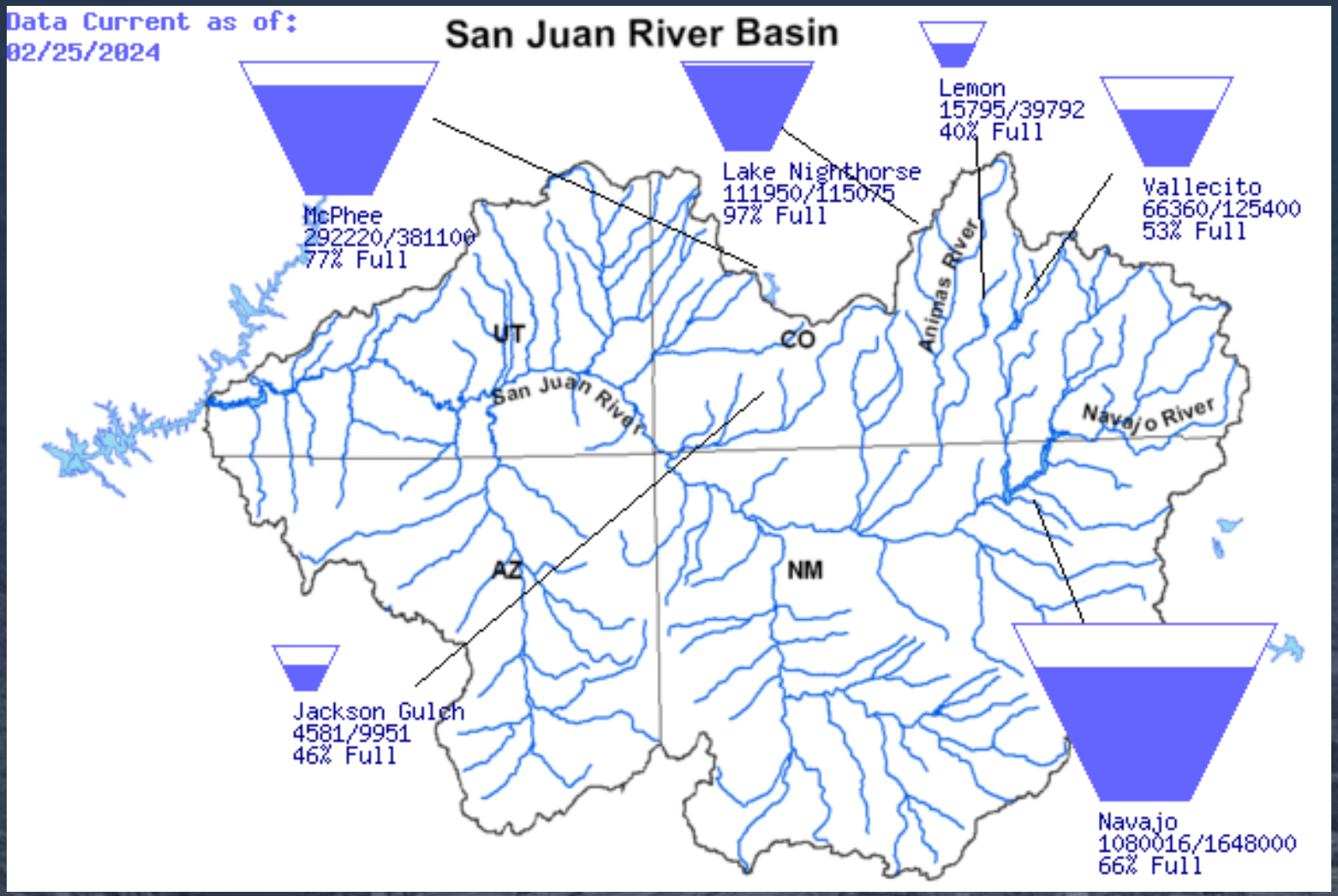
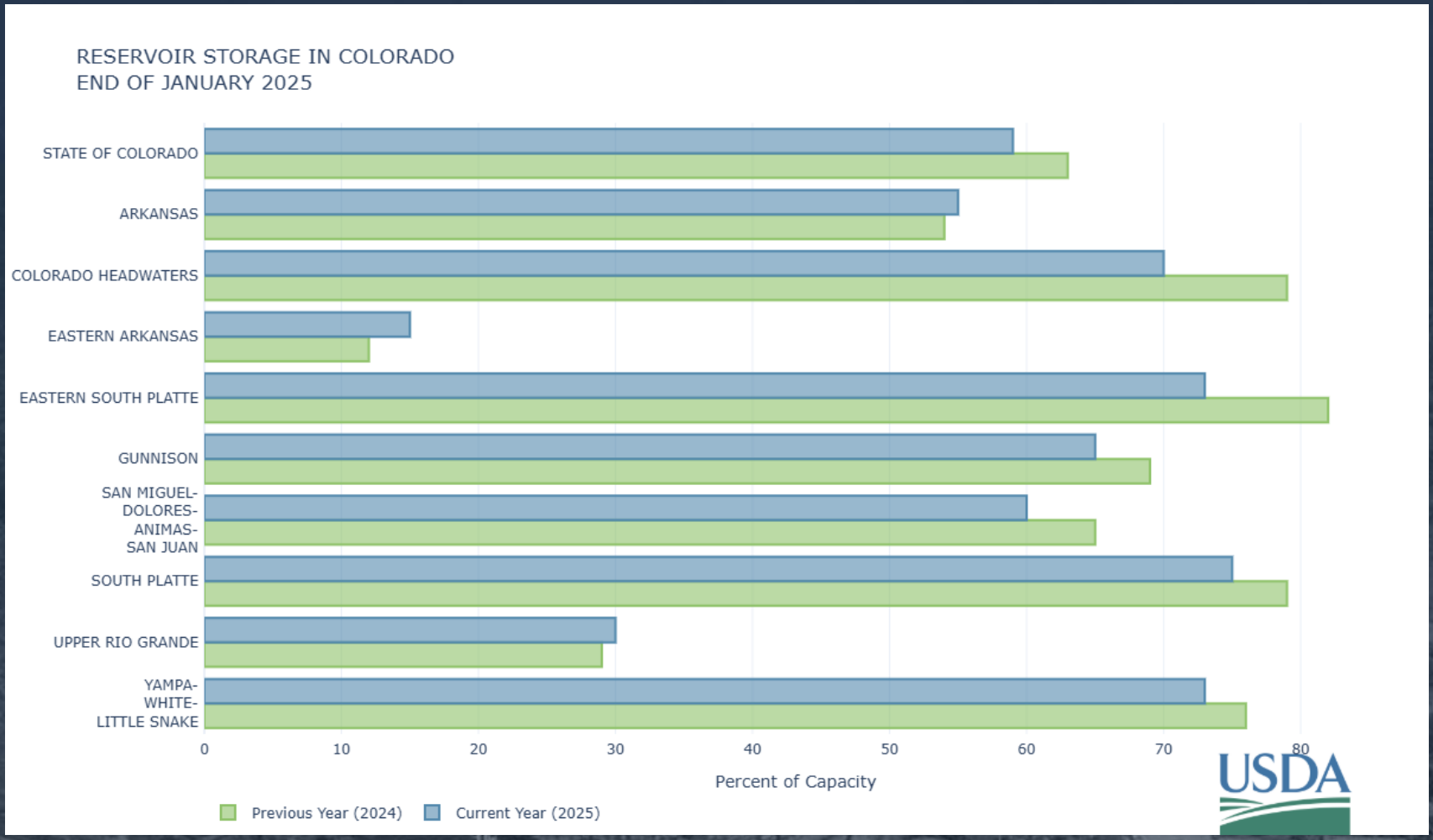
San Juan River Basin Tea Cup Diagram (2025)



San Juan River Basin Tea Cup Diagram (2024)



Reservoir Storage in Colorado



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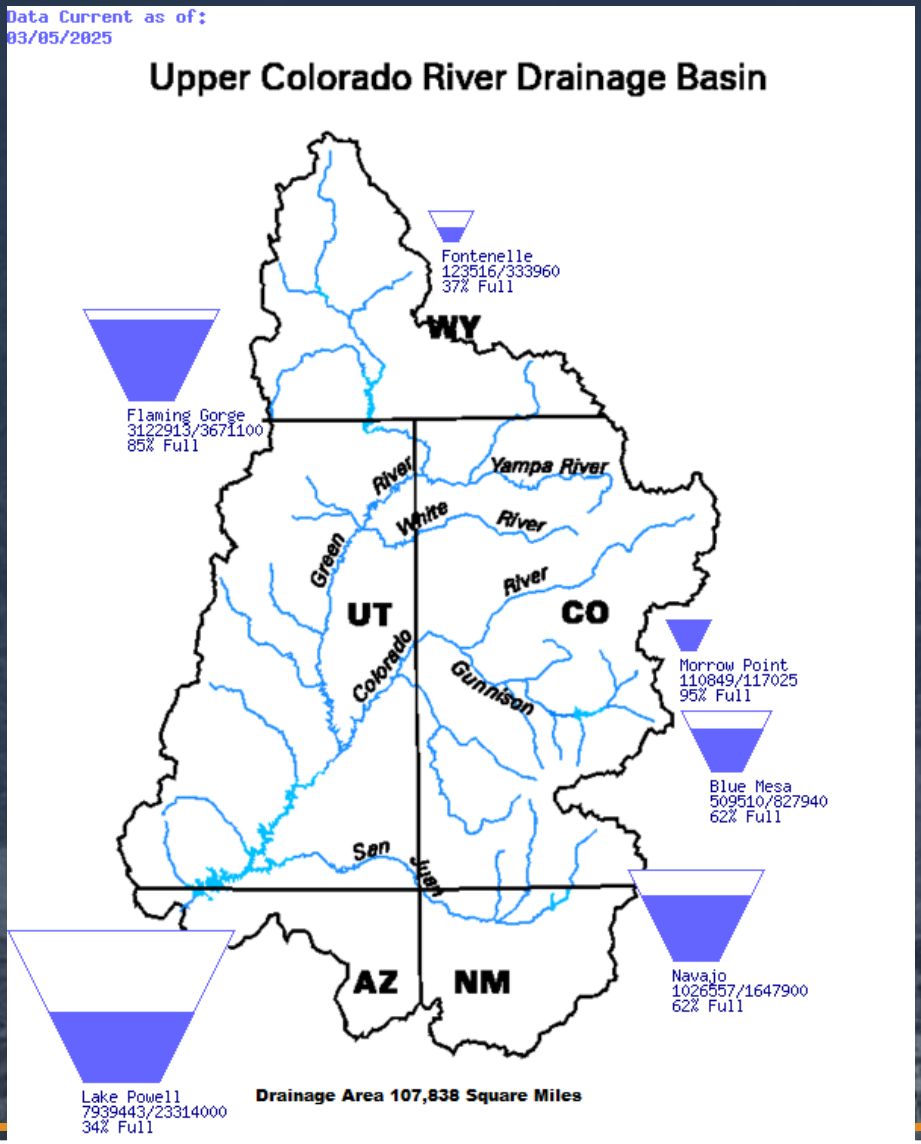
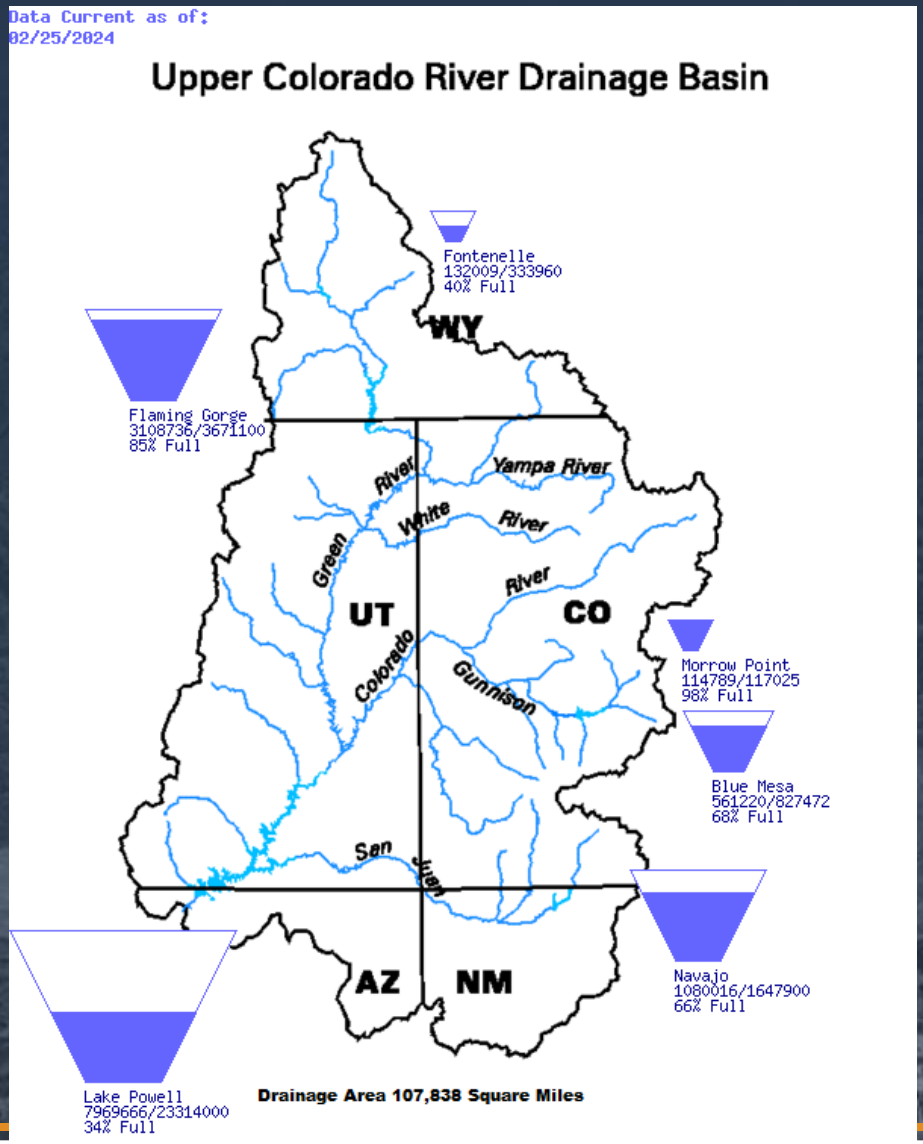
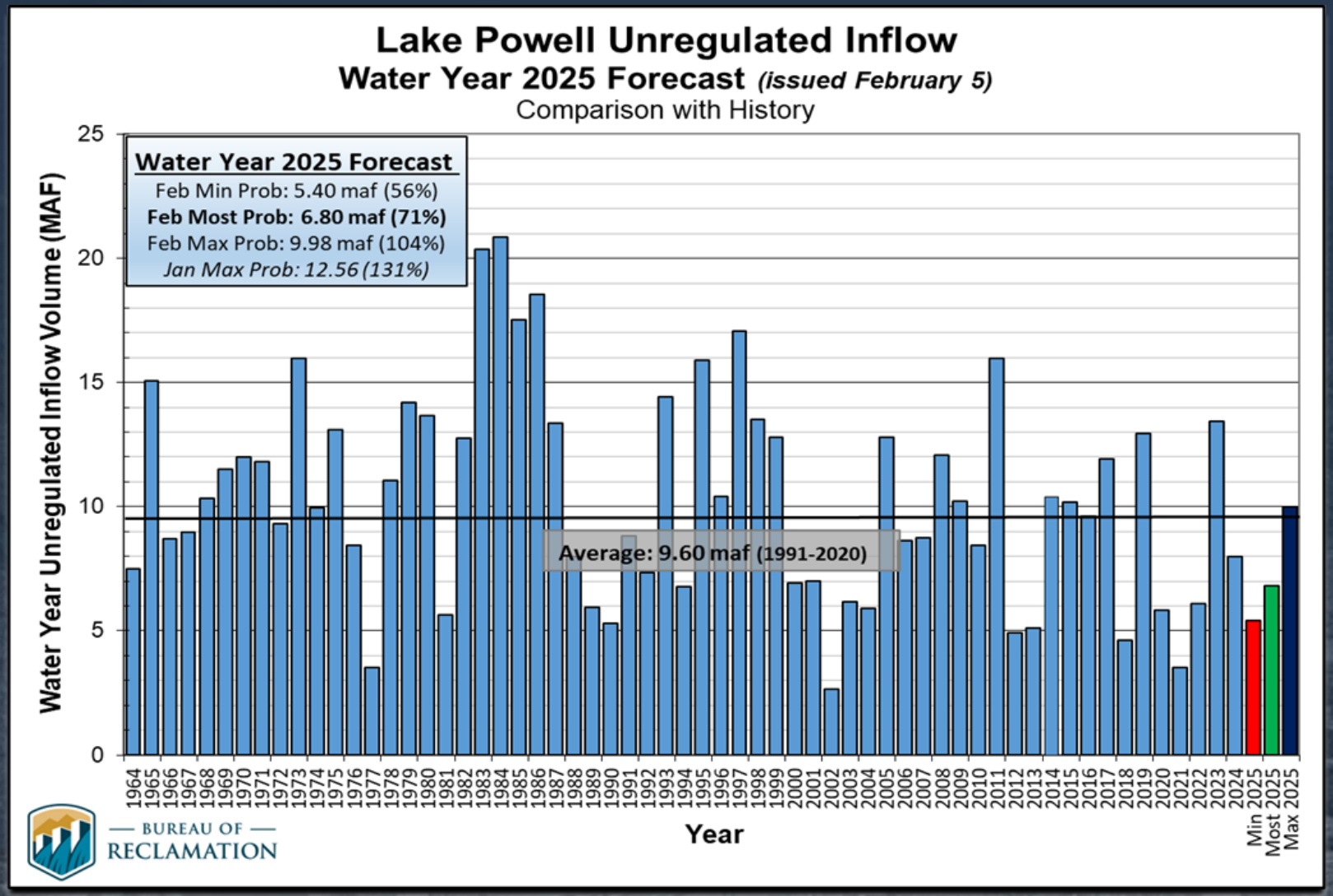
Upper Colorado River Basin Tea Cup Diagram (2025)



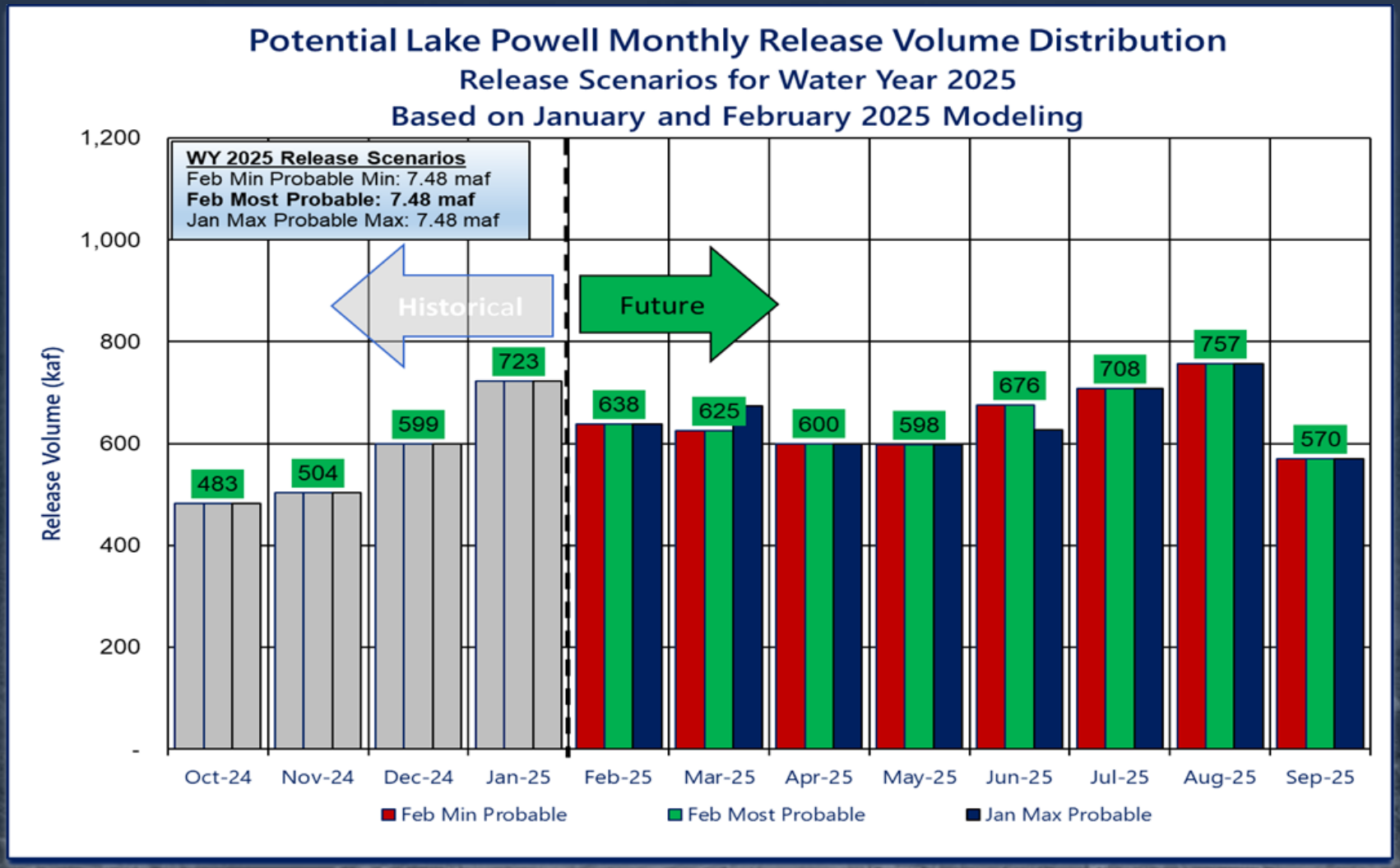
Upper Colorado River Basin Tea Cup Diagram (2024)



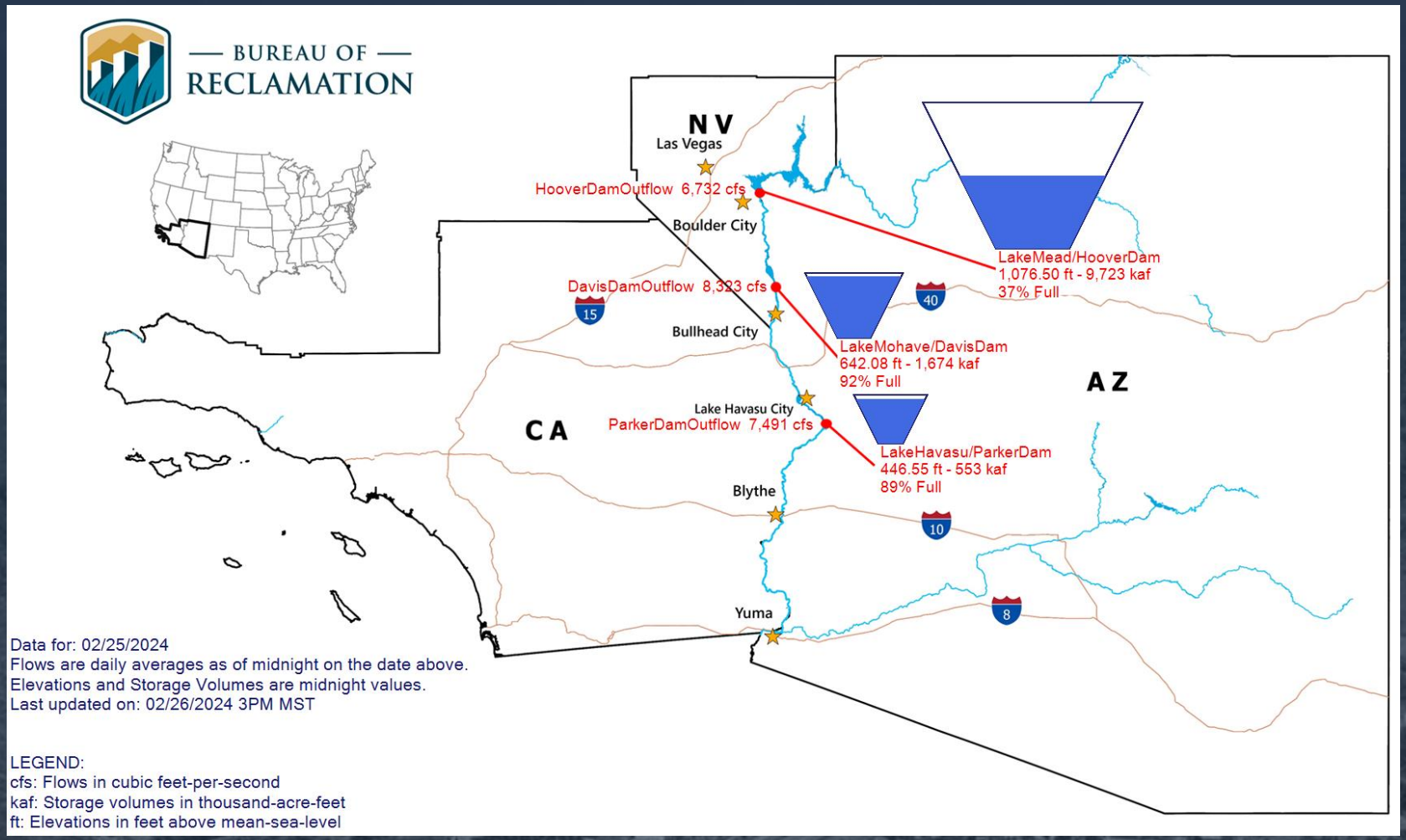
Lake Powell Unregulated Flow



Lake Powell Month Release Volume



Lower Colorado River Basin Tea Cup Diagram (2024)



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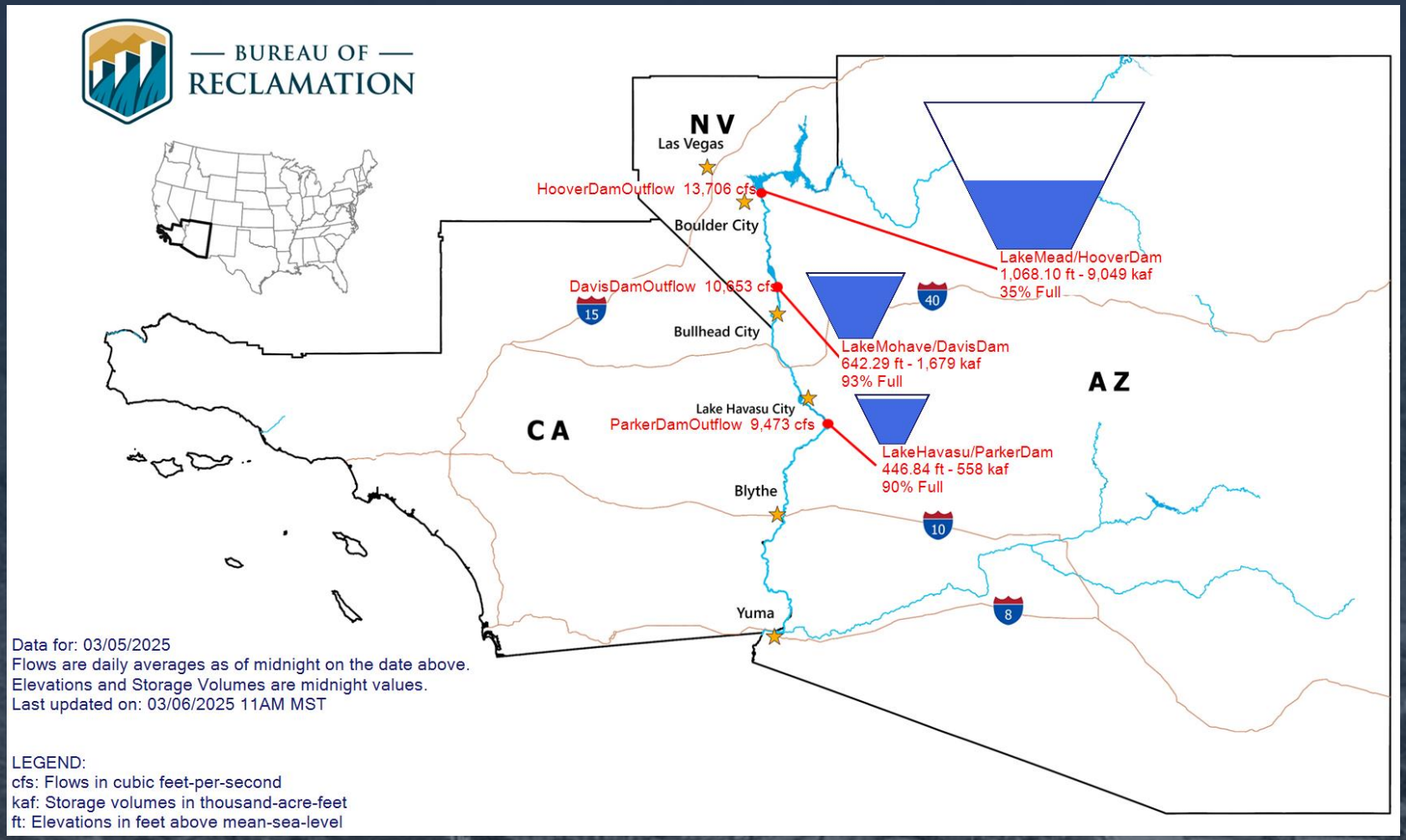
Lower Colorado River Basin Tea Cup Diagram (2025)



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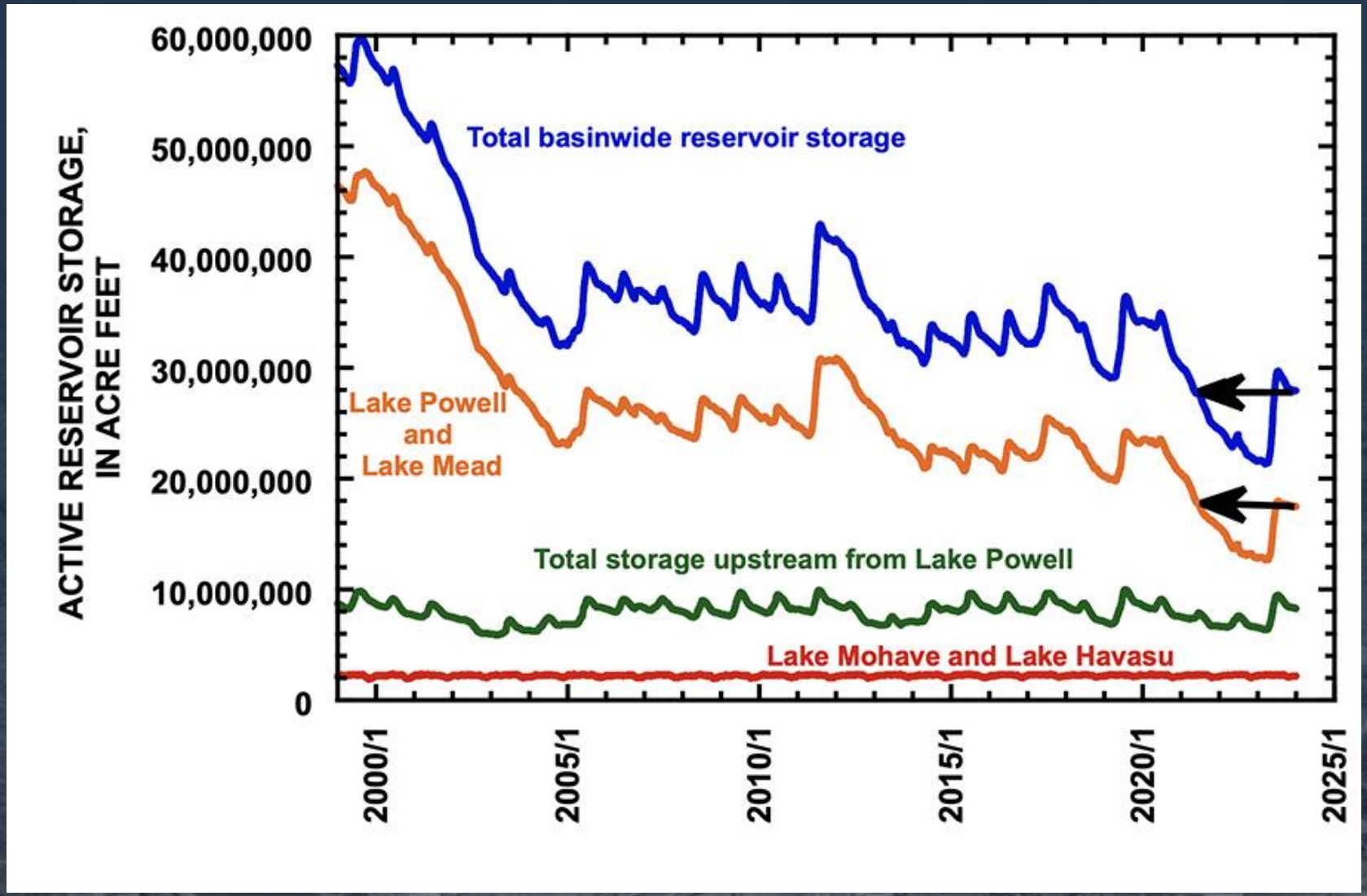
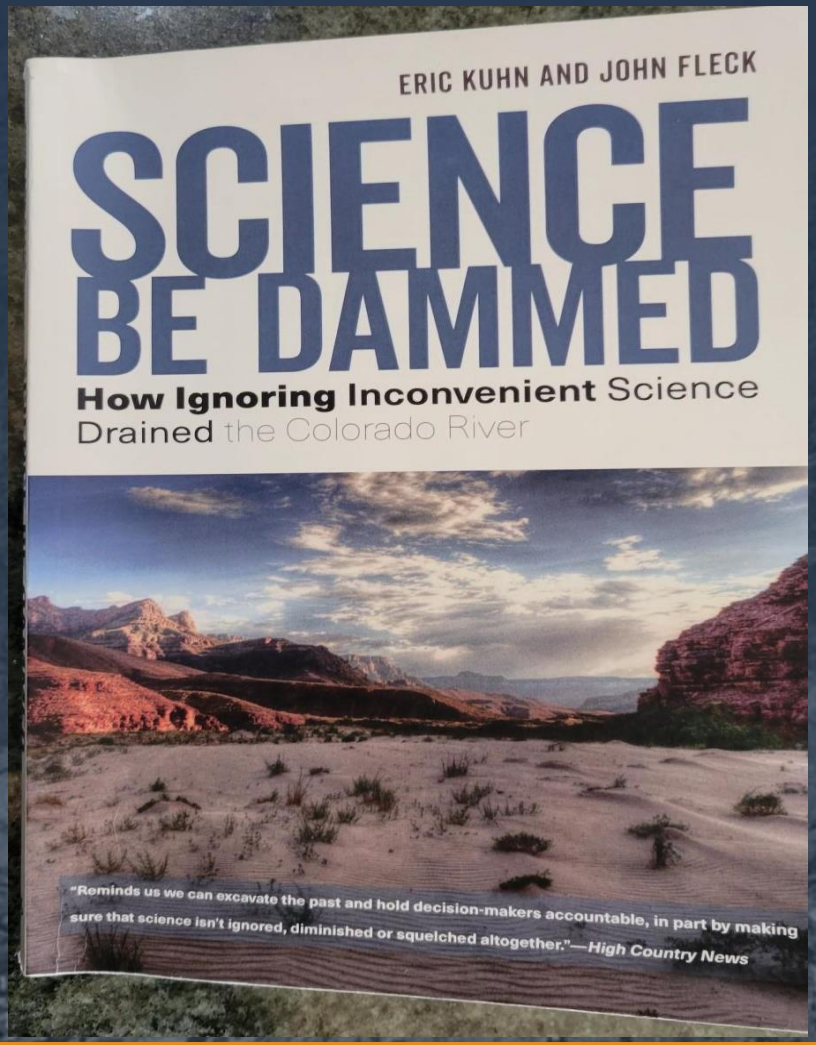
Active Reservoir Storage, 2000-2025



How Did We Get Here?



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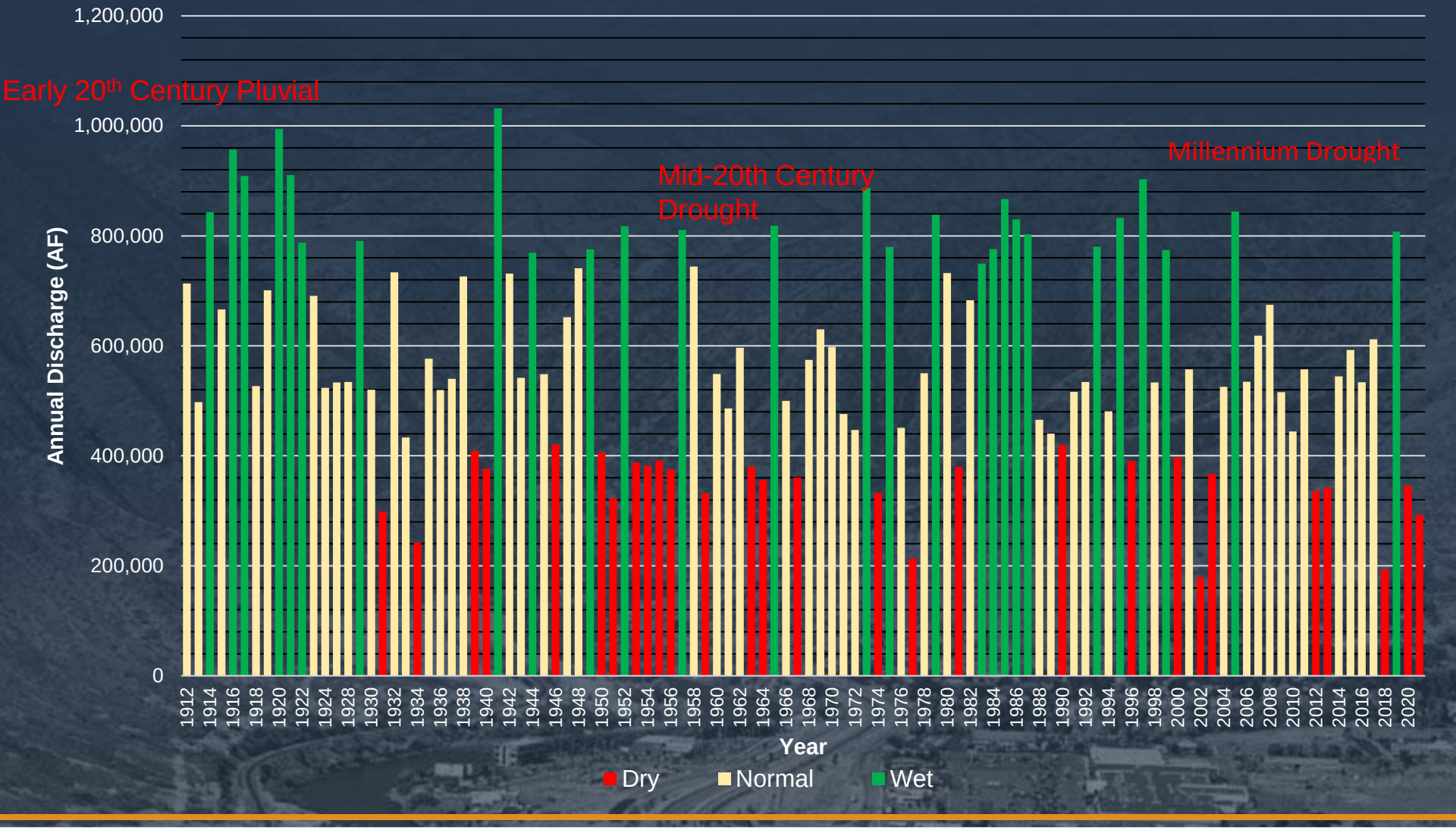
Animas River at Durango, CO (USGS 09361500)



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Key Points

4. Climate and Hydrologic Trends

Key points

- The most precipitation occurs in the southern Rocky Mountain. The southern Rockies, middle Rockies, and San Juan Mountain regions are the three most productive in terms of runoff.
- When streamflow trends are examined from the start of the record of estimated natural flow (1906 to present), there is a statistically significant downward trend.
- When streamflow trends are examined starting in 1930 after the Early 20th century Pluvial, there is no statistically significant downward trend in natural streamflow.
- Thus, trend analysis does not indicate whether the on-going 21st drought that began in 2000 is an extension of a downward trend or may be regarded as the most recent cycle within a persistent climate regime that has existed since 1930.
- Neither perspective challenges the expectation that future runoff in the Colorado River basin will decrease in the 21st century as the climate warms.

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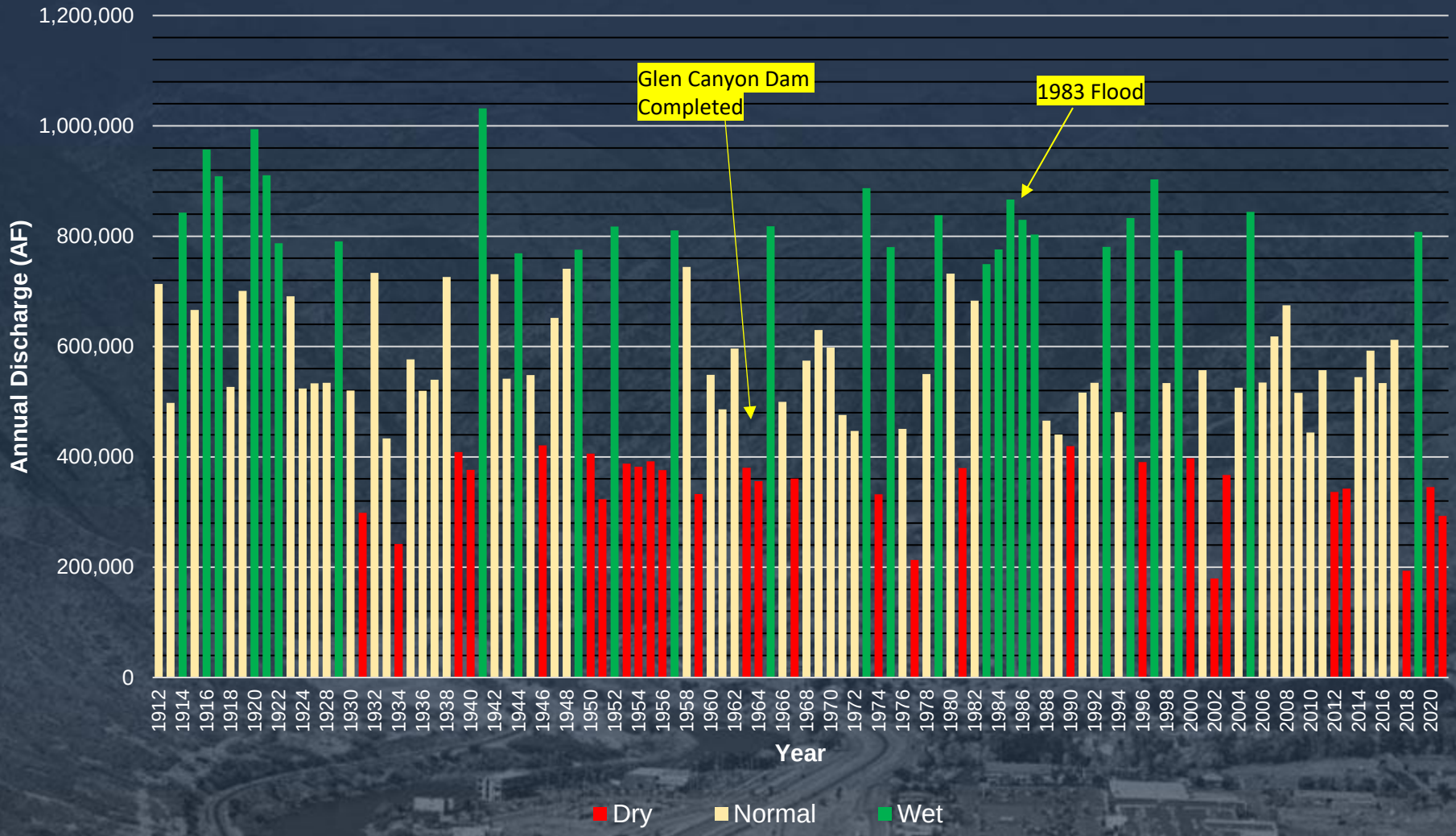
Animas River at Durango, CO (USGS 09361500)



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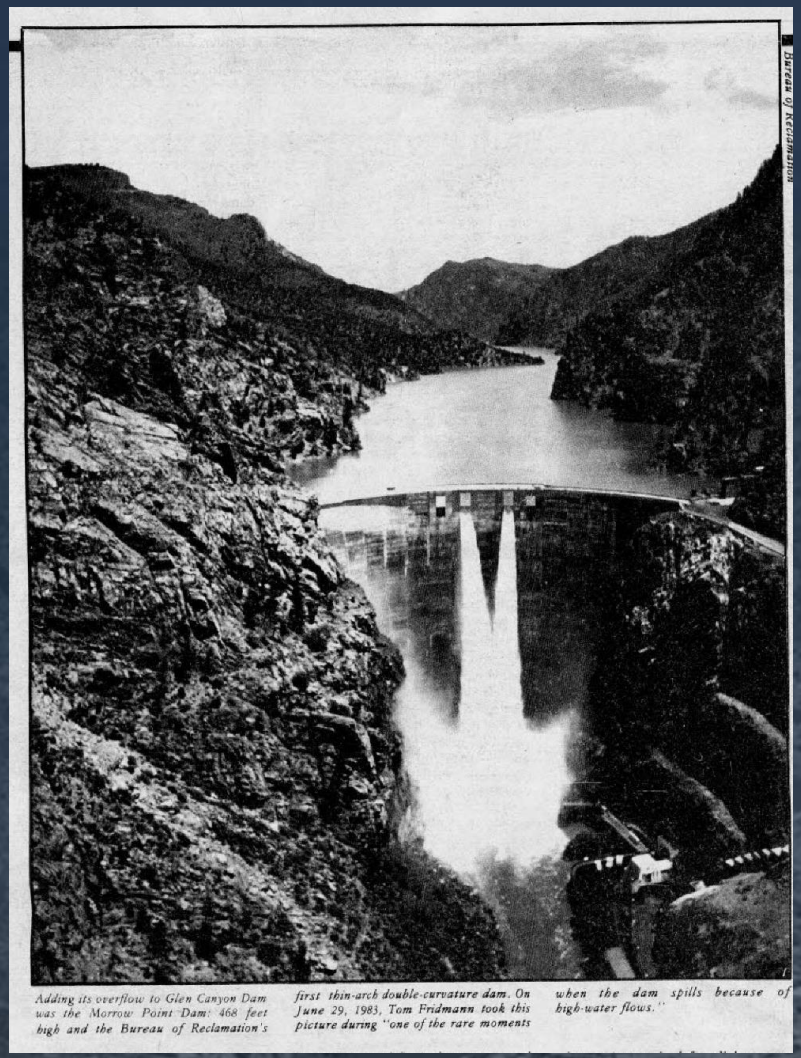
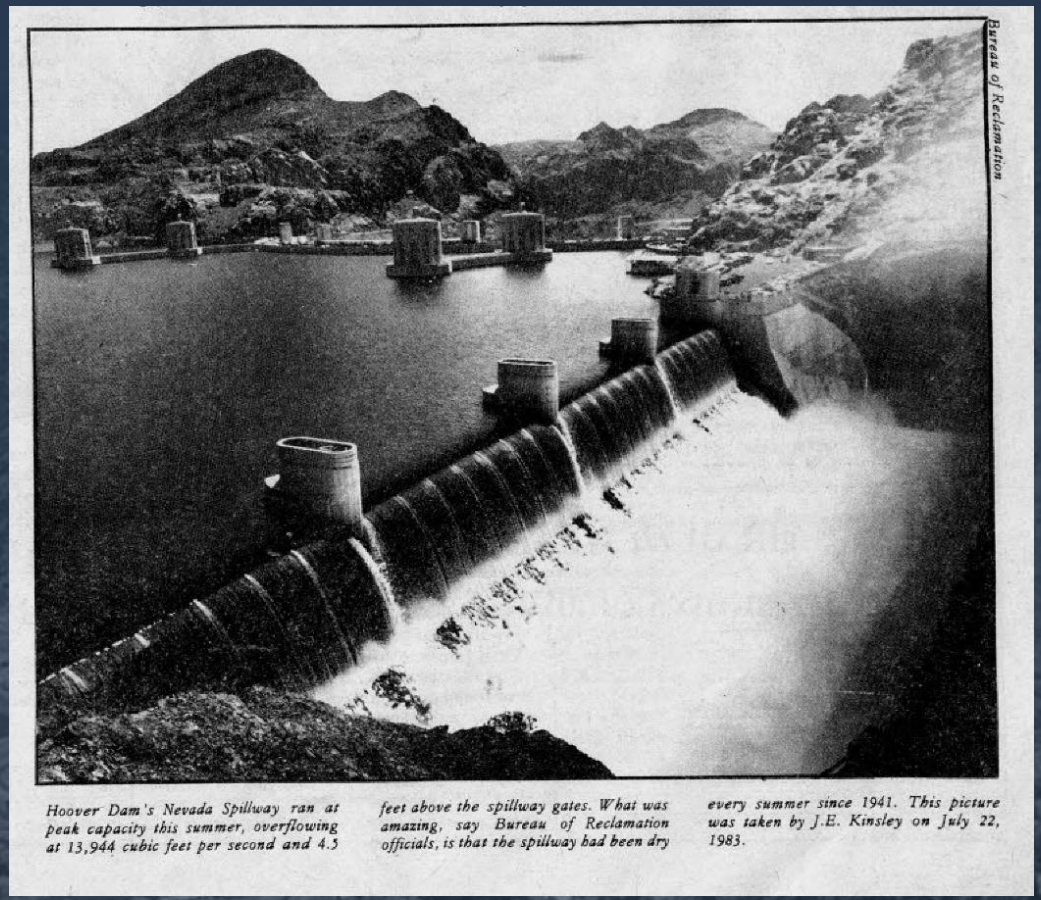
Lake Powell -1983 Flood

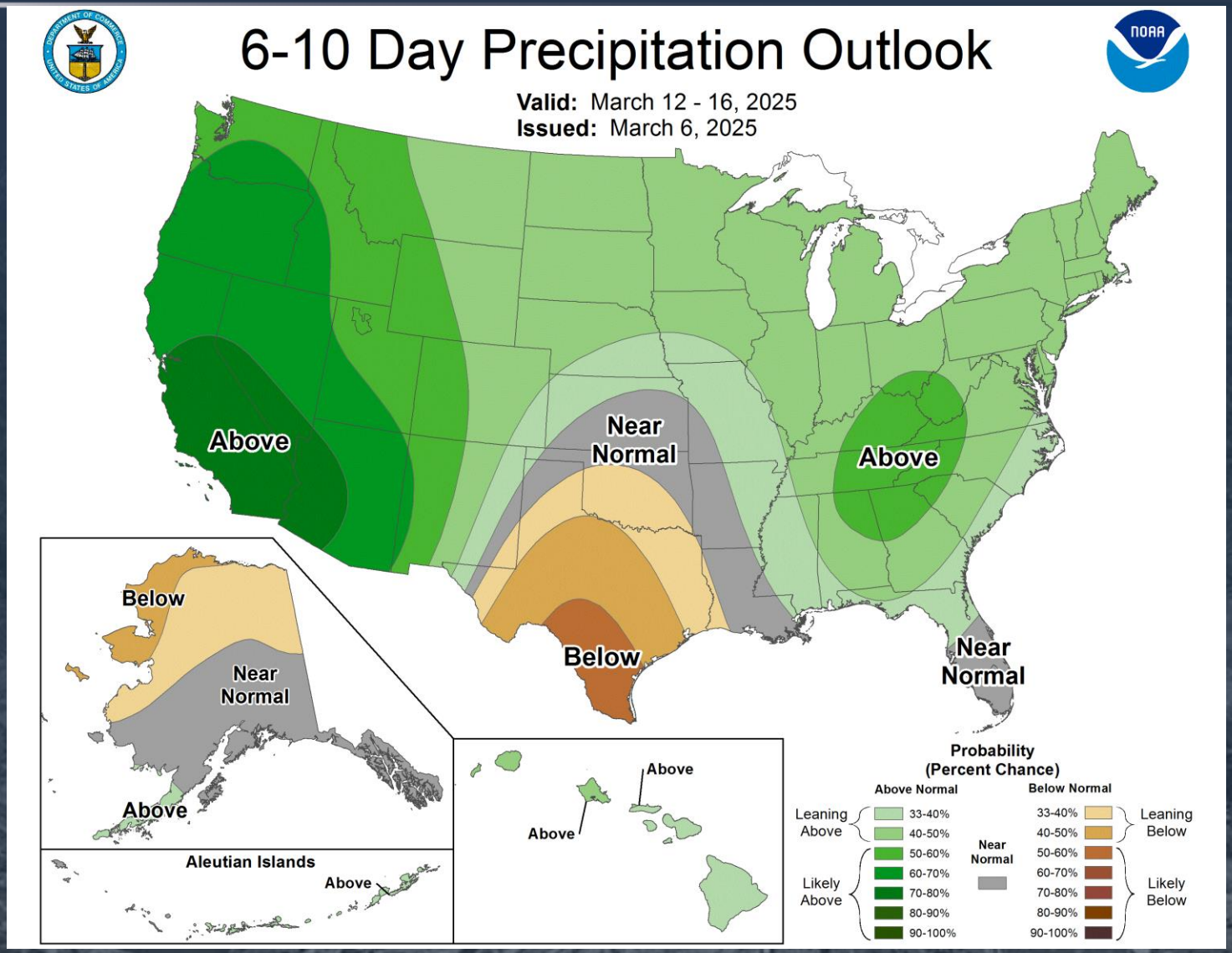


Adding its overflow to Glen Canyon Dam was the Morrow Point Dam: 468 feet high and the Bureau of Reclamation's first thin-arch double-curvature dam. On June 29, 1983, Tom Fridmann took this picture during "one of the rare moments when the dam spills because of high-water flows."



Hoover Dam's Nevada Spillway ran at peak capacity this summer, overflowing at 13,944 cubic feet per second and 4.5 feet above the spillway gates. What was amazing, say Bureau of Reclamation officials, is that the spillway had been dry every summer since 1941. This picture was taken by J.E. Kinsley on July 22, 1983.

Some Good News…



Questions?

Links and References

- Rapid intensification of the emerging southwestern North American megadrought in 2020–2021
  - https://escholarship.org/uc/item/6sm1c6hf
  - The Future Hydrology of the Colorado River Basin
  - https://qcnr.usu.edu/coloradoriver/futures
  - High Country News "How Lake Powell almost broke free of Glen Canyon Dam this summer" Dec. 12, 1983
  - https://www.hcn.org/issues/15.23/how-lake-powell-almost-broke-free-of-glen-canyon-dam

"Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River" Eric Kuhn and John Fleck

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