Combined Lake Powell-Lake Mead Plots

David E. Rosenberg

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Description

This is an R Markdown document. This document shows plots of combined Lake Powell-Lake Mead storage over time.

- 1. Line plot of the Lake Mead, Lake Powell, and combined storage over time.
- 2. A stacked area plot shows combined storage of Lake Powell and Lake Mead over time in comparison to Lake Mead conservation account balances, combined protection volume, and 2026 expiration of Interim Guidelines. Combined storage is split between Lake Mead conservation accounts and a public pool (current opperations).
- 3. A stacked area plot of combined storage over with where all available water is transitioned into private flex accounts.
- 4, A stacked area plot of Lake Mead storage showing conservation account amounts.

Data are from:

- 1. Storage elevation curves for Lake Powell and Lake Mead: Colorado River Simulation System (Wheeler et al 2019). MeadDroughtContingencyPlan.xlsx.
- 2. Lake Powell storage: USBR (2021). "Water Operations: Historic Data, Upper Colorado River Division." U.S. Buruea of Reclamation. https://www.usbr.gov/rsvrWater/HistoricalApp.html (Powell-DataUSBRMay2021.csv).
- 3. Lake Mead storage: USBR (2021). "LAKE MEAD AT HOOVER DAM, END OF MONTH ELEVATION (FEET)". Lower COlorado River Operations, U.S. Buruea of Reclamation https://www.usbr.gov/lc/region/g4000/hourly/mead-elv.html (MeadLevel.xlsx).
- 4. Lake Mead conservation account balances: USBR (2020). "Boulder Canyon Operatoins Office Program and Activites: Water Accounting Reports". https://www.usbr.gov/lc/region/g4000/wtracct.html. (IntentionallyCreatedSurplus-Summary.xlsx)

Requested Citation

David E. Rosenberg (2021), "Combined Lake Powell-Lake Mead plots." Utah State University. Logan, Utah. https://github.com/dzeke/ColoradoRiverFutures/tree/master/CombinedPowellMead.

Figure 1. Lake Mead, Lake Powell, and combined storage over time

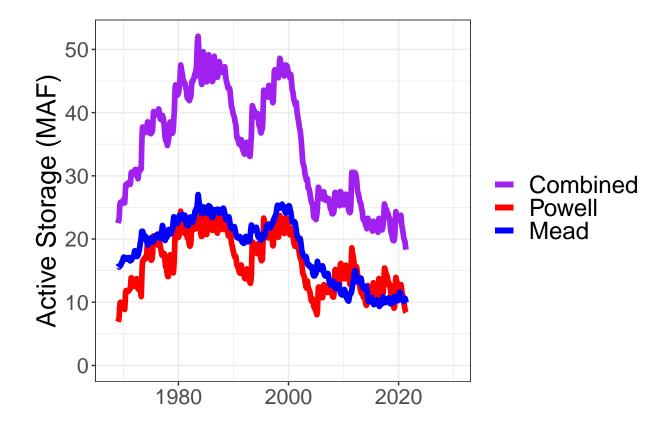


Figure 2. Combined storage of Lake Powell and Lake Mead over time in comparison to Lake Mead conservation account balances, combined protection volume, and 2026 expiration of Interim Guidelines.

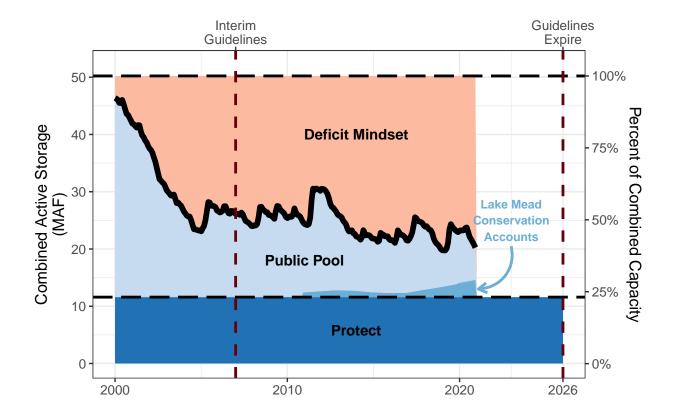


Figure 3. Combined storage of Lake Powell and Lake Mead over time with private flex accounts

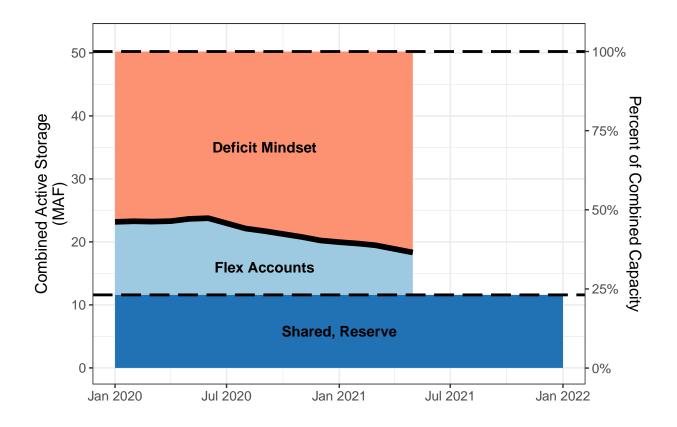


Figure 4. Mead Storage over time with conservation accounts

