Combined Lake Powell-Lake Mead Plots

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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 of combined storage capacity, combined storage, Lake Mead conservation account balances, and Protection levels over time.

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 (PowellDataUSBRMay2021.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), "Request for contributions: Pilot test available water accounting to encourage more water conservation in a combined Lake Powell-Lake Mead system" Utah State University. Logan, Utah. https://github.com/dzeke/ColoradoRiverFutures/tree/master/CombinedPowellMead

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

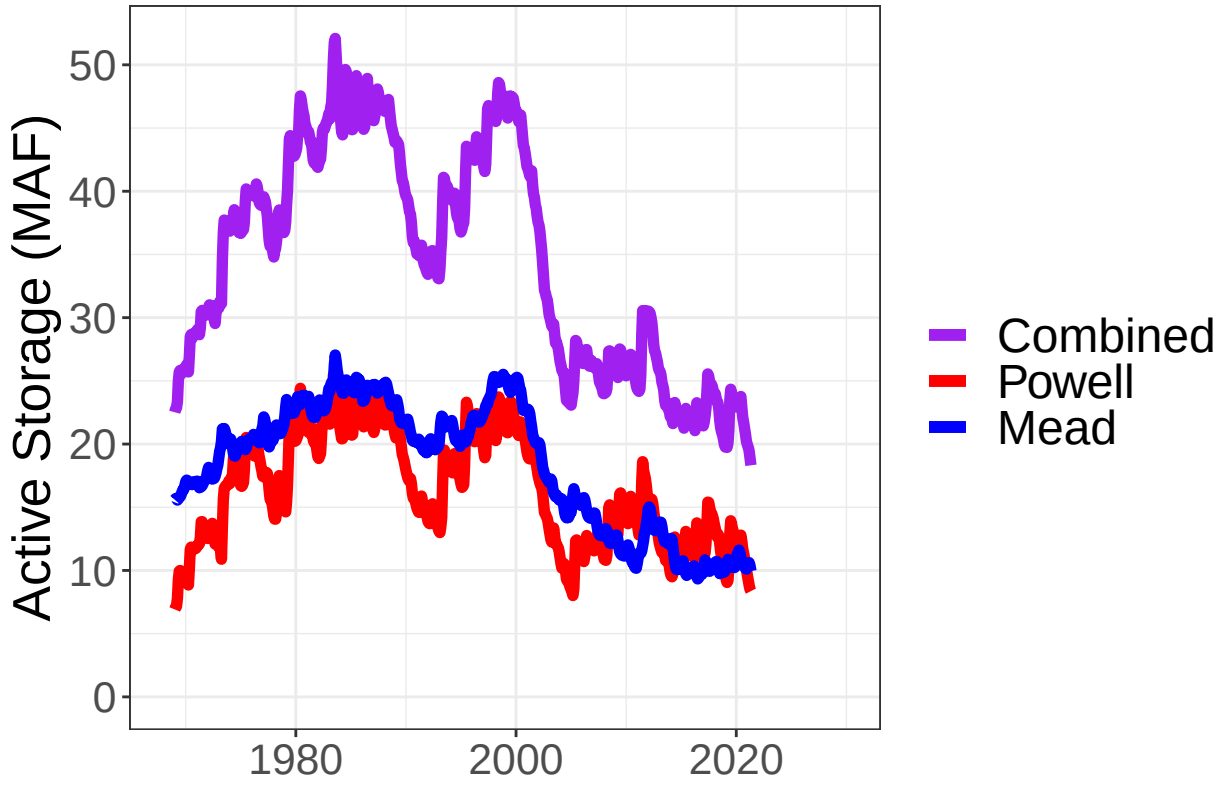

Figure 2. Combined storage, available water, and combined protect elevation