

Colorado River Basin Water Accounts: 1-page summary

Why Care

- 26 Colorado River managers and experts **constructively improved basin water accounts as a framework to transition emergency reservoir operations into more sustainable, equitable, and adaptive water uses.**
- Time commitment was 1 to 3 hours per participant during Summer and Fall 2021.
- In an online model session, up to 6 participants together consumed, saved, and traded water in six basin accounts in a combined Lake Powell-Lake Mead water bank (Figure 1).
- At each session end, participants shared what they liked and what to improve (Figure 2).

New Features Contributed to Basin Management

1. Counted all evaporation and evapotranspiration from Lake Powell down to U.S.-Mexico border.
2. Accounts for First Nations and Colorado River Delta.
3. A *Shared Reserve* controlled reservoir drawdown below critical levels.
4. Participants choose each year's Lake Powell natural flow (Figure 3).
5. Additional political decisions to implement:
 - a. Decide number and extent of accounts.
 - b. Divide current reservoir storage above critical levels among accounts.
 - c. Divide each year's basin natural flow among accounts.
 - d. Divide end-of-year combined storage between Lake Powell and Lake Mead.

Find and Share Materials

- [Model repository, Let's Start Guide, and Linked Online Help](#) (Hydroshare.org).
- [10 Lessons Learned](#) (Digital Commons).

Next Step

1. Downscale operations that adapt to annual whole basin flow to a monthly timestep.

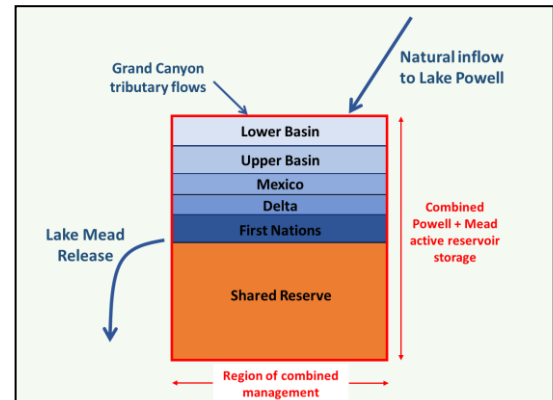


Figure 1. Account balances were the water stored in a combined Lake Powell-Lake Mead bank (account balances not to scale).

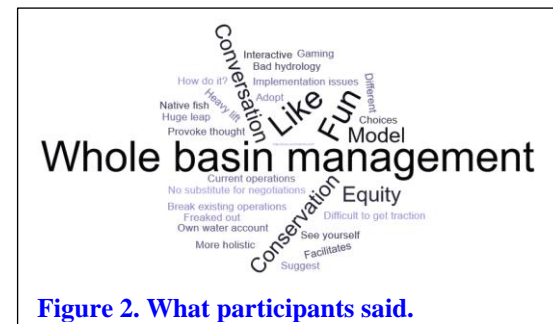


Figure 2. What participants said.

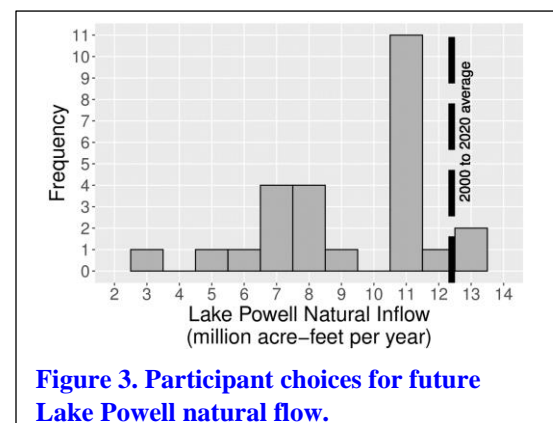


Figure 3. Participant choices for future Lake Powell natural flow.

Dr. David E. Rosenberg

Utah State University

<http://rosenberg.usu.edu>

david.rosenberg@usu.edu | [@WaterModeler](#)