Pilot flex accounting to encourage more water conservation in a combined Lake Powell-Lake Mead system

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1. Guiding principles

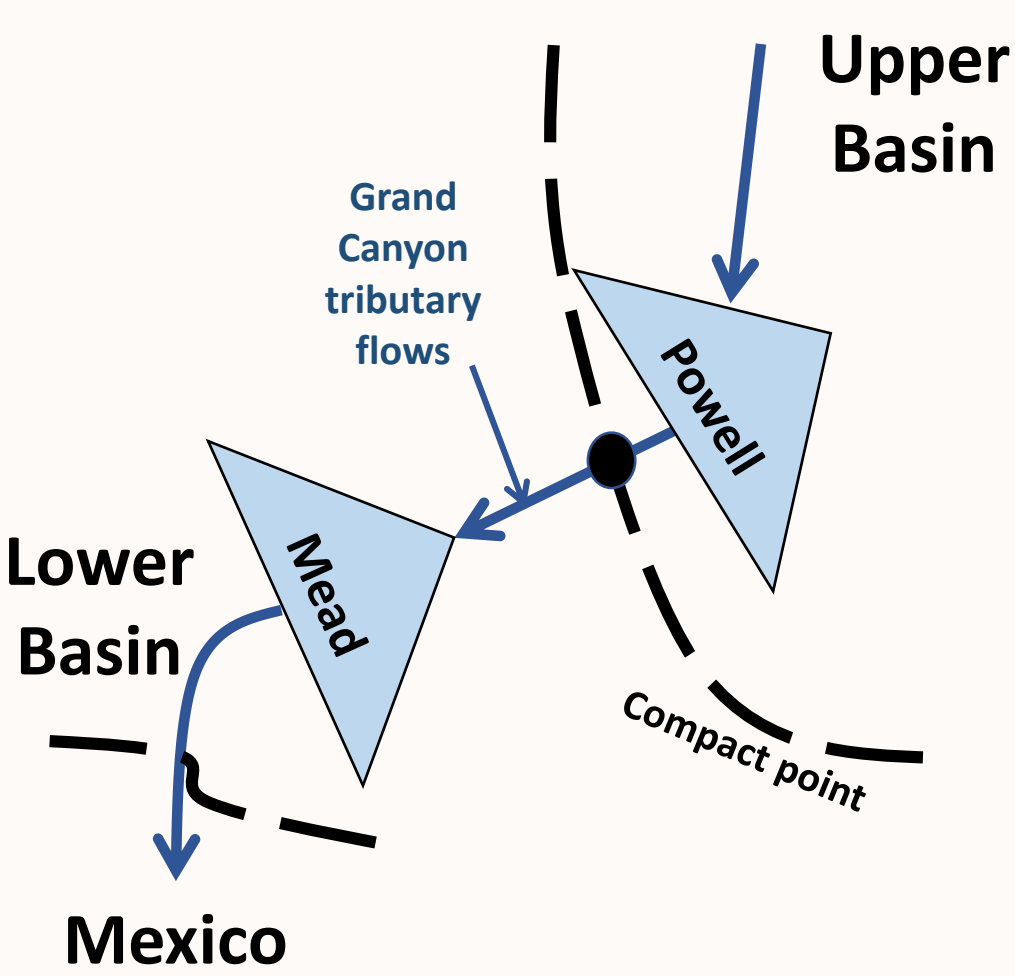
Provoke thought and discussion on renegotiations of Lake Powell-Lake Mead operations.

Current operations expire in 2026.

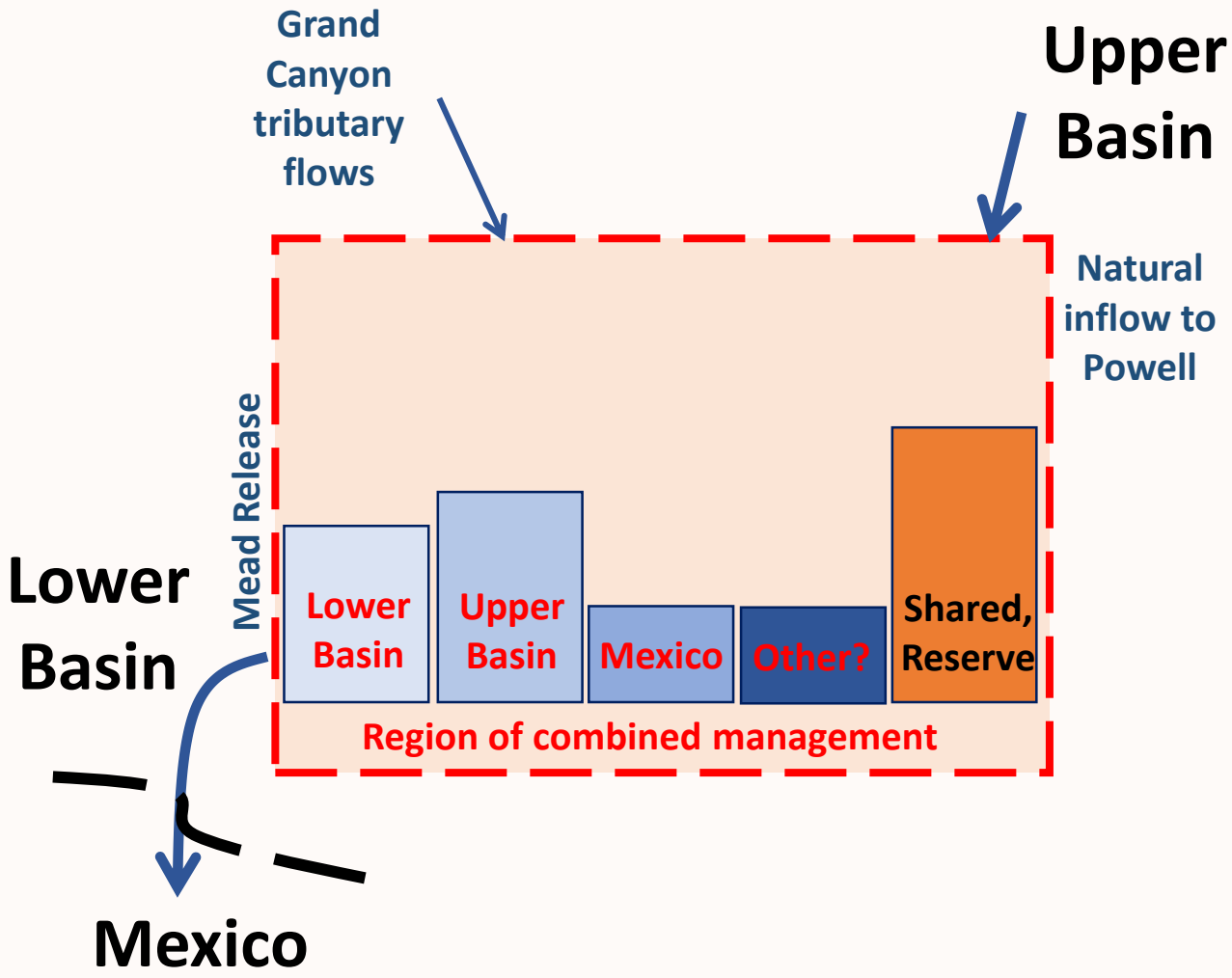
Give managers more flexibility to consume and conserve water independent of other parties.

Convert a shrinking pie (lose-lose) environmental conflict — Colorado River with drought — into expanding pie (win-win) arrangements.

2. Stretch the Lee Ferry Compact Point



A. 1922 to present

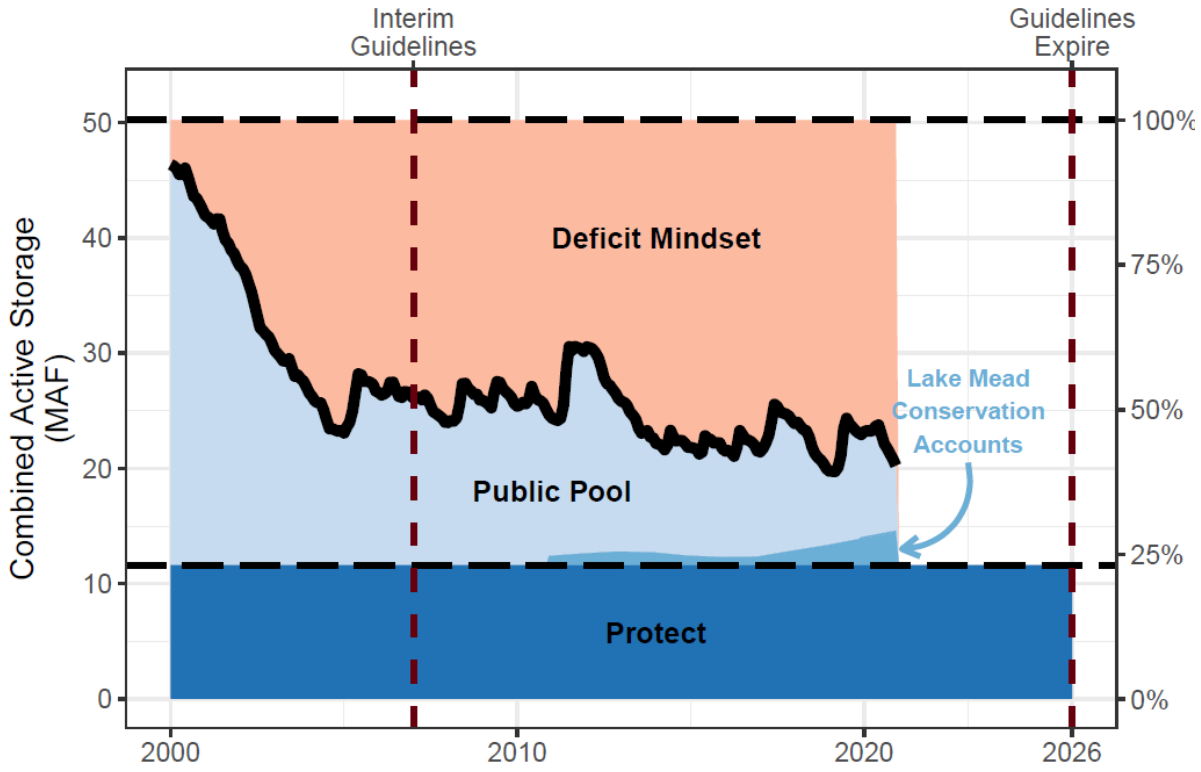


B. Combined system

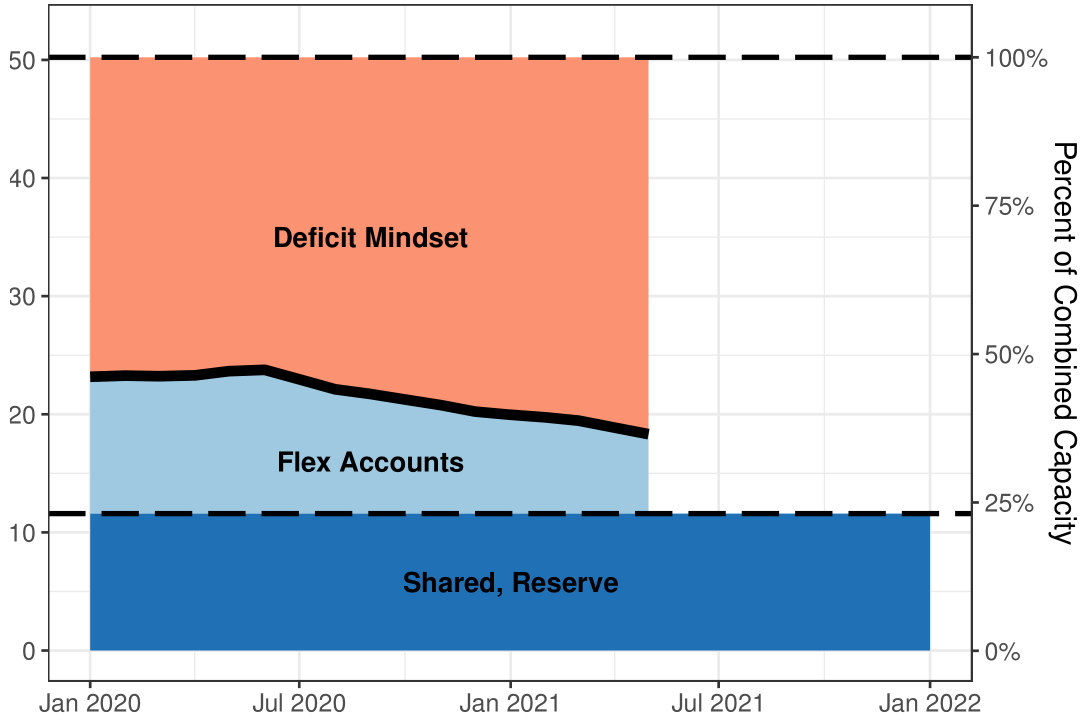
3. Manage all available water not just prior conserved water

$$\text{Available Water} = \text{Flex Account Balance} + \text{Share of Inflow} - \text{Share of Evaporation} + \underbrace{\text{Purchases} - \text{Sales}}_{\text{Optional}}$$

4. Convert Lake Mead Conservation accounts and Public Pool to Flex account balances



A. 2000 to present



B. Combined system

5. Try to manage a flex account?

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Model structure

Physical watershed data
Political decision - Player chooses
Calculated cell