

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



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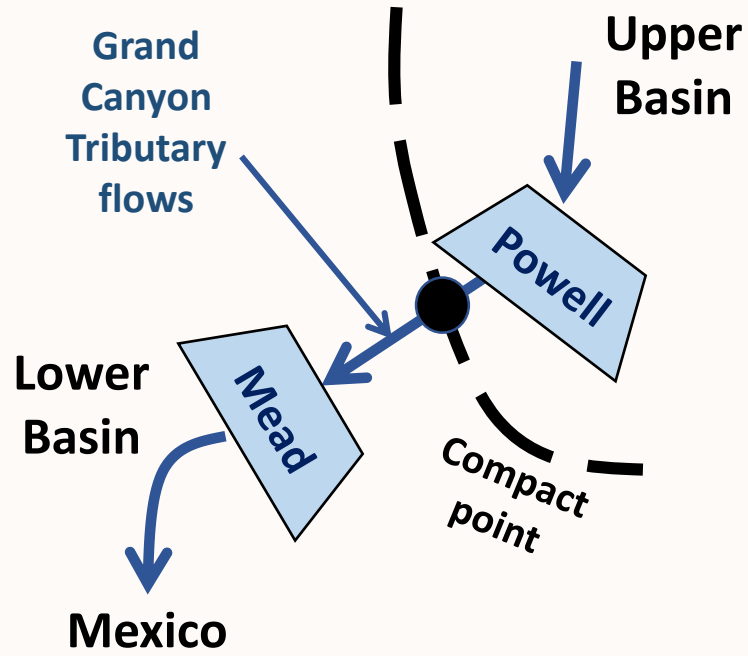
1. Guiding principles

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

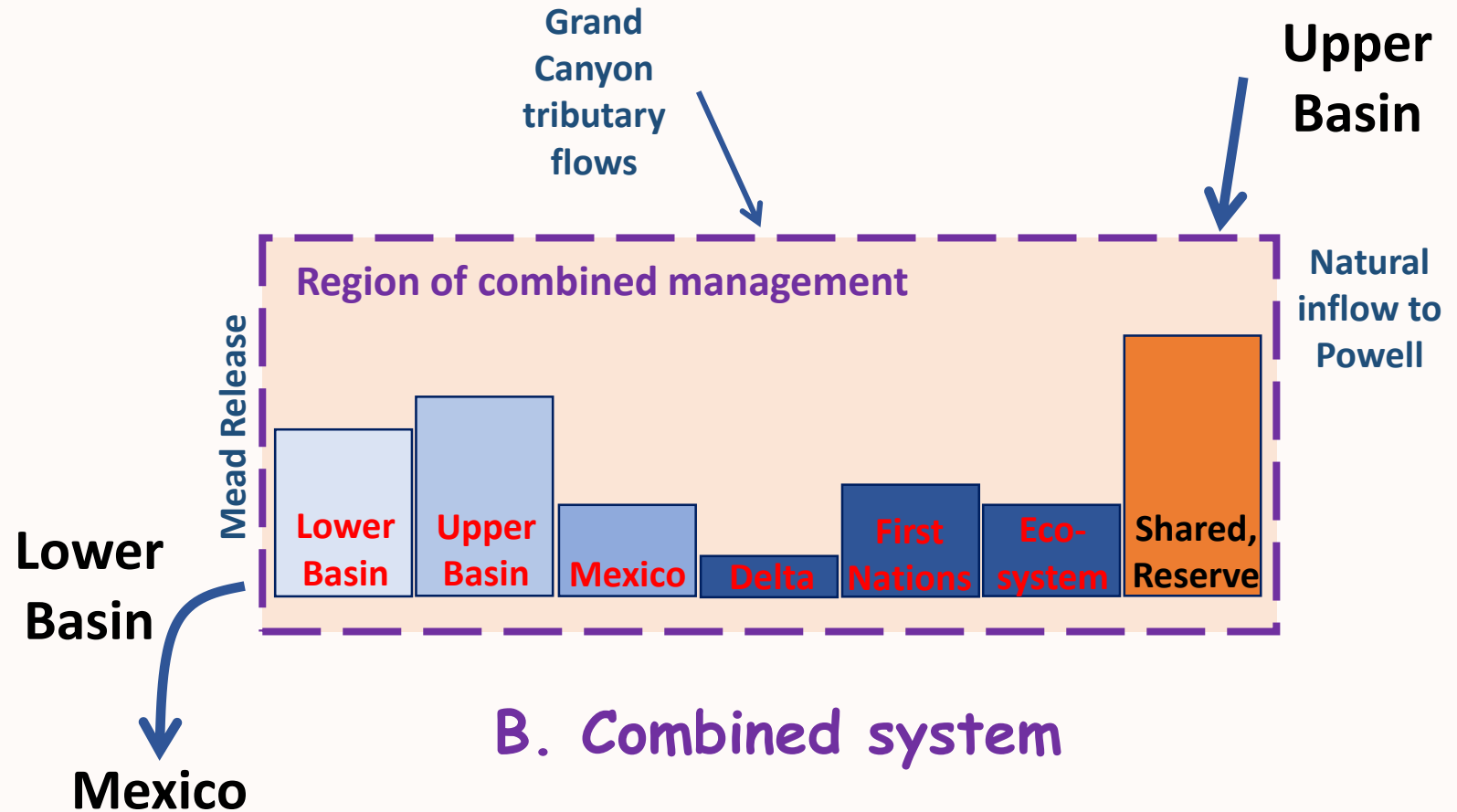
Give managers more flexibility to conserve and consume water independent of other parties.

Convert a shrinking pie (lose-lose) conflict — Colorado River drying — into more positive processes for people and endangered fish.

2. Stretch the Lee Ferry Compact Point



A. 1922 to present



B. Combined system

3. Include more parties

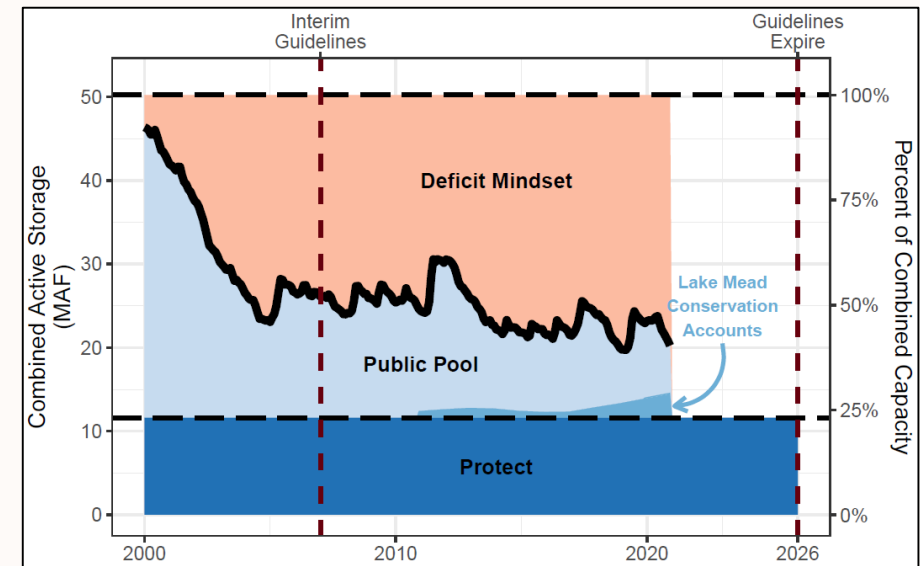
4. Manage all available water not just prior conserved water

$$\begin{array}{ccccccccccc} \text{Available} & & & & \text{Flex} & & \text{Share of} & & \text{Share of} & & \text{Purchases} & - & \text{Sales} \\ \text{Water} & = & \text{Account} & + & \text{Balance} & & \text{natural} & - & \text{Evaporation} & + & & & \\ & & \text{Balance} & & & & \text{flow} & & & & & & \\ & & & & & & & & & & \underbrace{\hspace{10em}} & & \\ & & & & & & & & & & \text{Optional} & & \end{array}$$

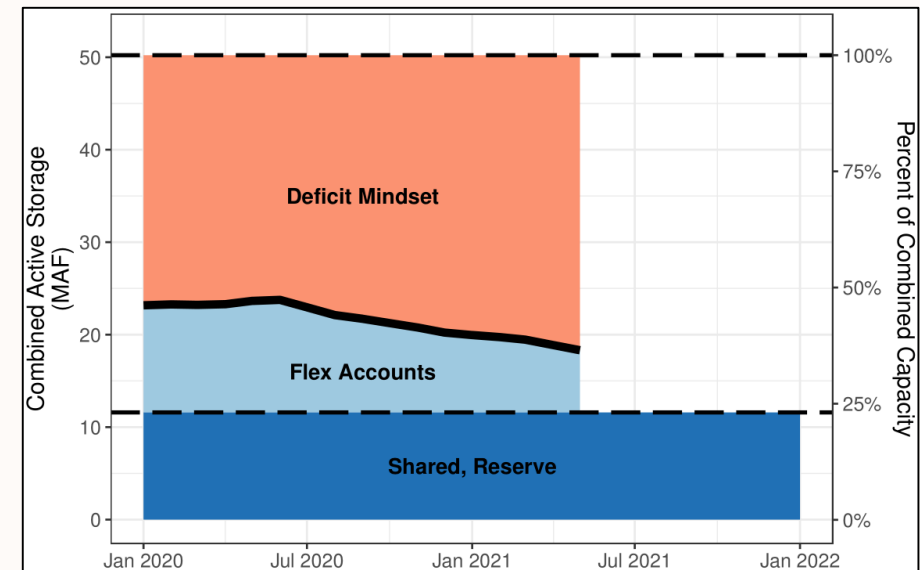
5. Adapt releases to natural flow and storage levels

6. Key Steps

1. Decide which parties get a flex account.
2. Assign reservoir storage (top) to accounts (bottom).
3. Divide natural flow among parties.
4. Parties conserve & consume within their available water.
5. Split physical storage between Powell & Mead.



2. Assign reservoir storage (top) to accounts (bottom).



7. Access water while help protect endangered fish
(a visualize exercise)

8. Effect on Existing Agreements?



Keep

- 1922 Compact, except define Upper & Lower Basins
- US-Mexico Treaty, Minutes 319, 323
- 1948 Upper Basin Compact
- Arizona v. California
- Interim surplus guidelines
- Quantification settlement agreement
- Lake Mead conservation account balances

Maybe ?

- Protect volumes (Lower and Upper Basin drought contingency plan).
- Mandatory conservation targets (Lower Basin drought contingency plan)
- Equalization

Redefine

- 1922 Compact, define Upper and Lower Basins

9. Next Steps



Manage a flex account!



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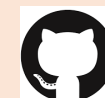
<https://github.com/dzeke/ColoradoRiverCoding/tree/main/ModelMusings>



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