A model musing:

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

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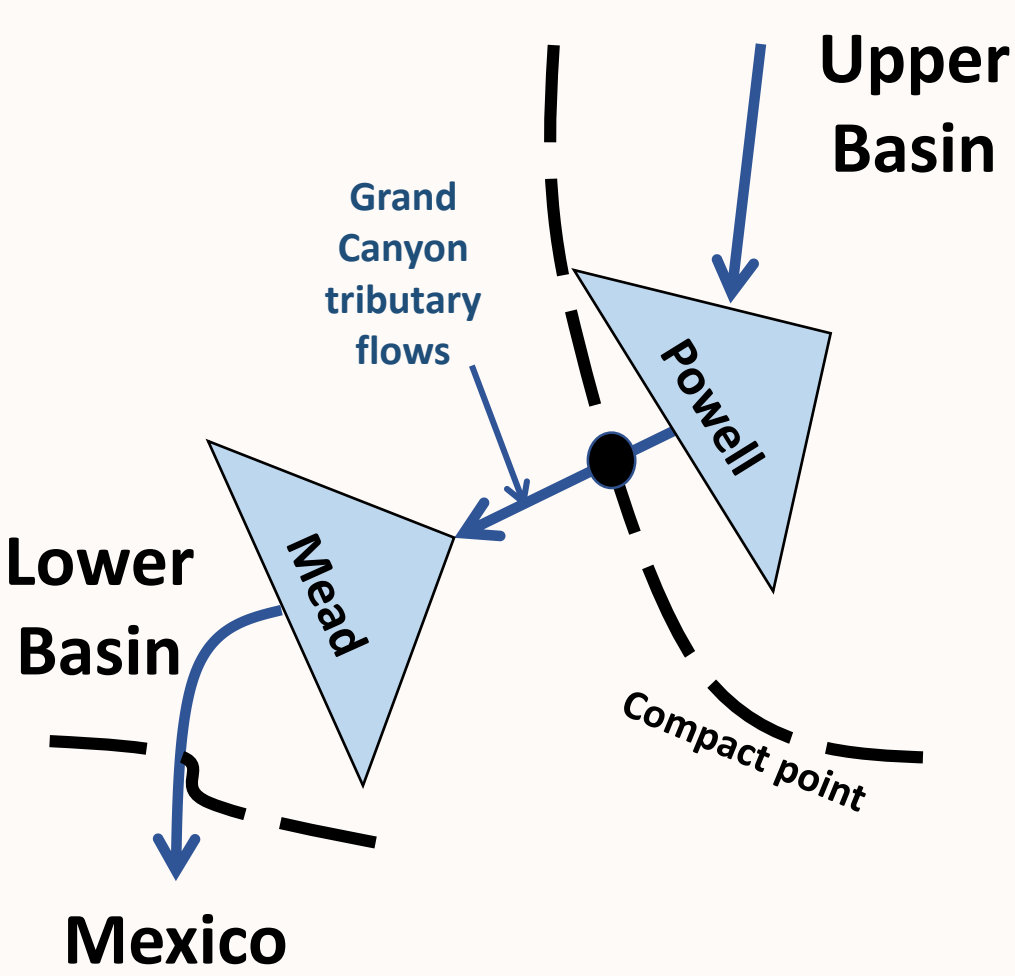
1. Guiding principles

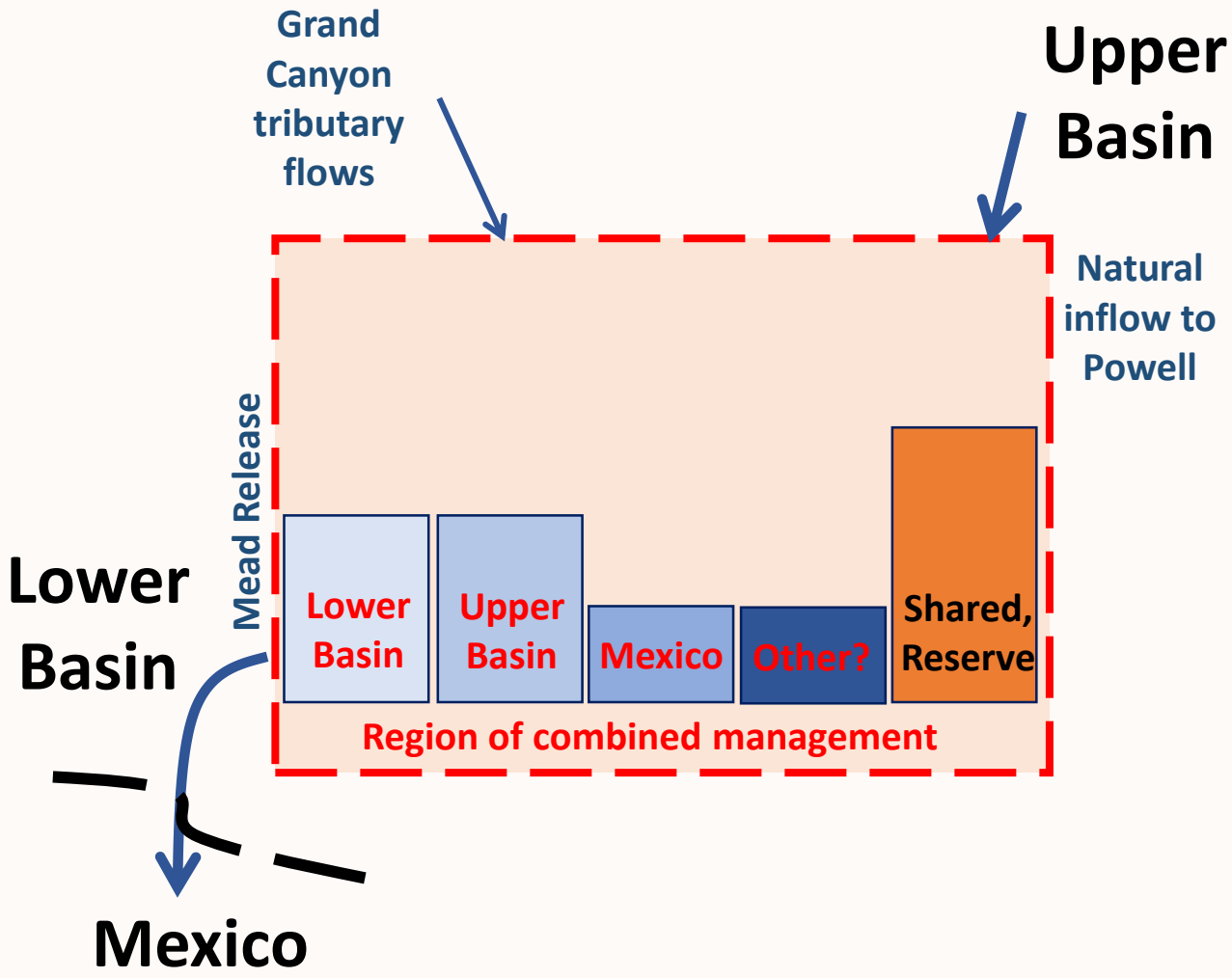
Give managers more flexibility to consume and conserve water independent of other parties

Build on prior agreements

2. Stretch the Lee Ferry Compact Point



A. 1922 to present



B. Combined system

3. Manage all available water not just prior conserved water

Available Water = Account Balance + Share of Inflow − Share of Evaporation + Purchases − Sales

Optional

4. Will you try a pilot flex account?

Physical watershed data
Political decision - Player chooses
Calculated cell

	A	B	C	D
20	**Assumptions**	**Powell**	**Mead**	
21	Evaporation rate (feet/year)	5.7	6.0	
22	Starting storage (million acre feet)	11.0	10.1	
23	Protect elevation (feet)	3,525	1,020	
24	Storage at protection elevation (maf)	5.9	5.7	
25				
26	**Water Budget Component**	**Initialize**	**Year 1**	**Year 2**
27	**Natural inflow to Lake Powell**			
28	**Intervening (Grand Canyon) inflow**			
29	**Combined Storage - Beginning of Year**	21.1		
30	Upper Basin Balance	5.1		
31	Lower Basin Balance	4.3		
32	Mexico Balance	0.17		
33	Mohave & Havasu Evap & ET Balance	0		
34	Shared, Reserve Balance	11.6		

GitHub

Download link