

Denver Water & the Colorado River



Julia Keedy, P.E.

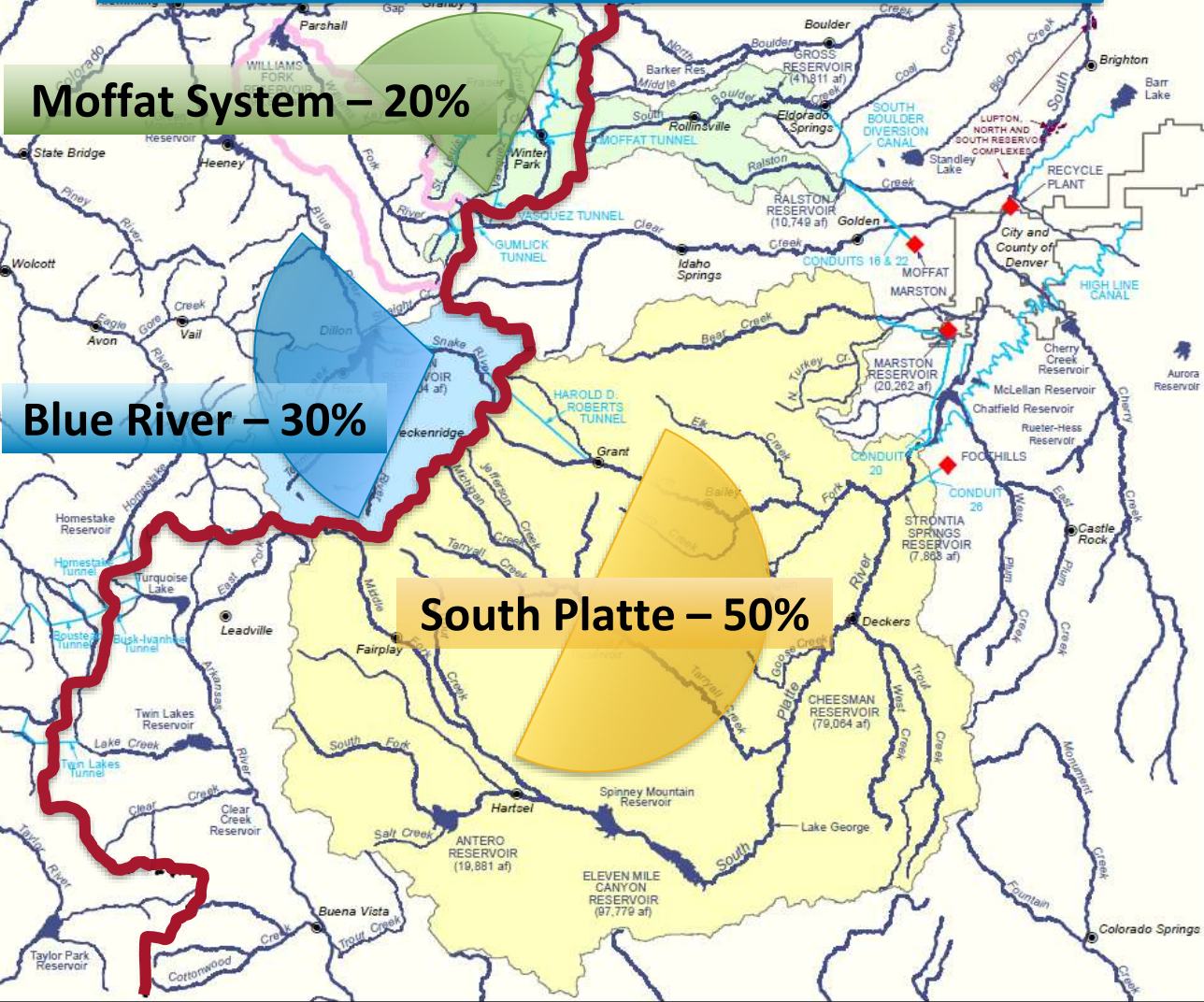
Water Resources Analysis Team

Denver Water Service Area Facts

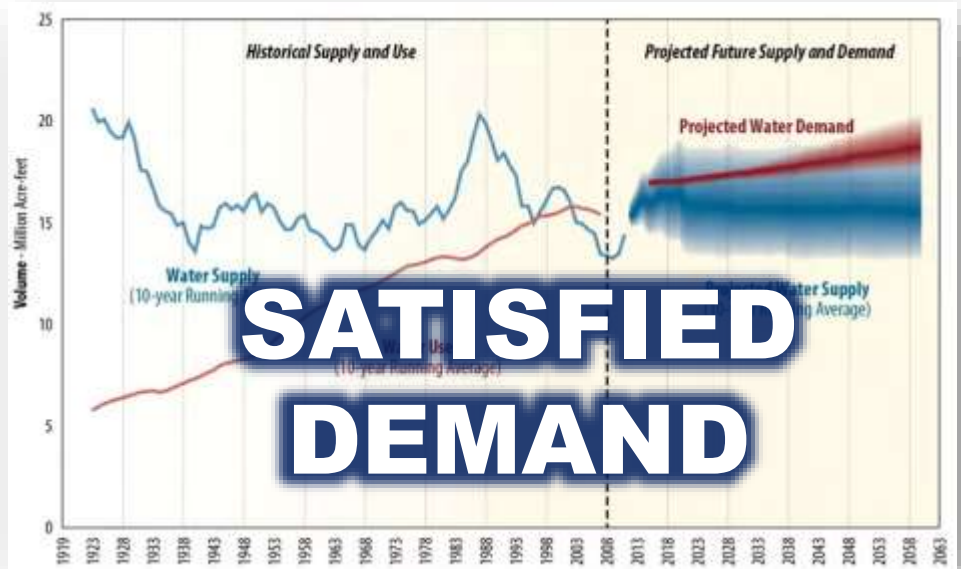
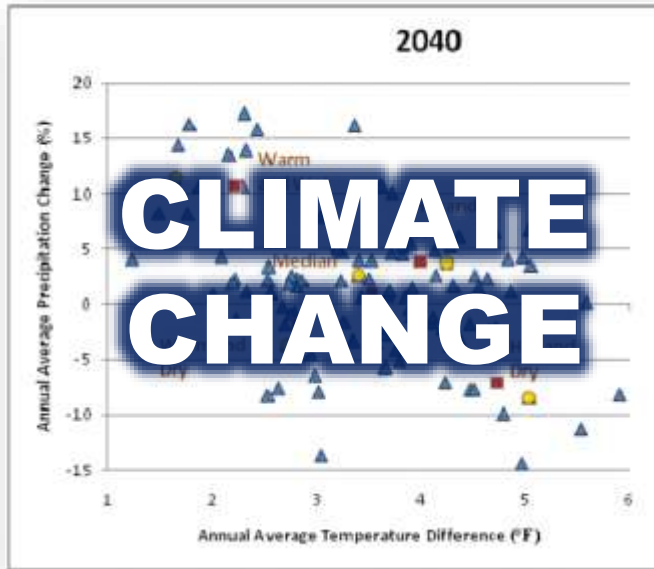
- Serve 1.4 million people (25 percent of state population)
- Use only **two percent** of available water in the state
- Service area encompasses **less than one percent** of land area in the state



Denver Water's Supplies



Colorado River Uncertainty



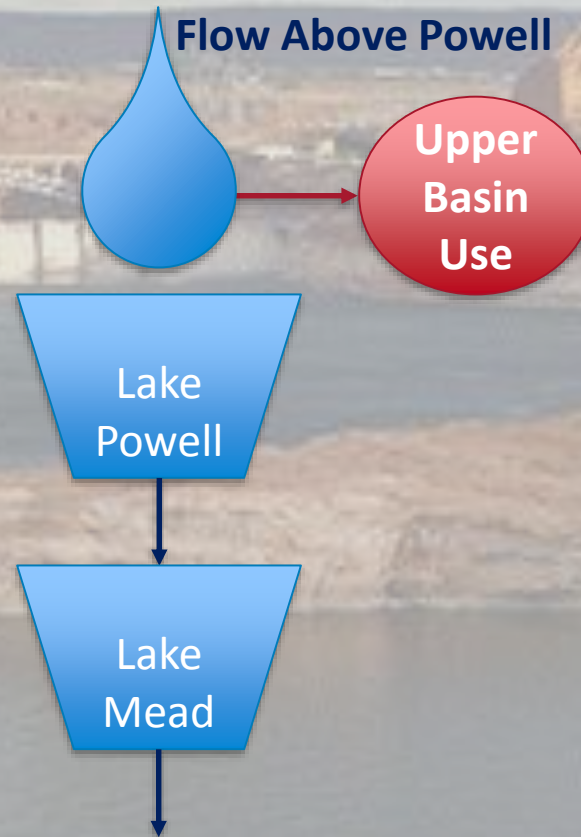
Except as provided in Section 10-1-101, this agreement shall terminate on December 31, 2025 (through preparation of the 2020 AOT).

OPERATIONS

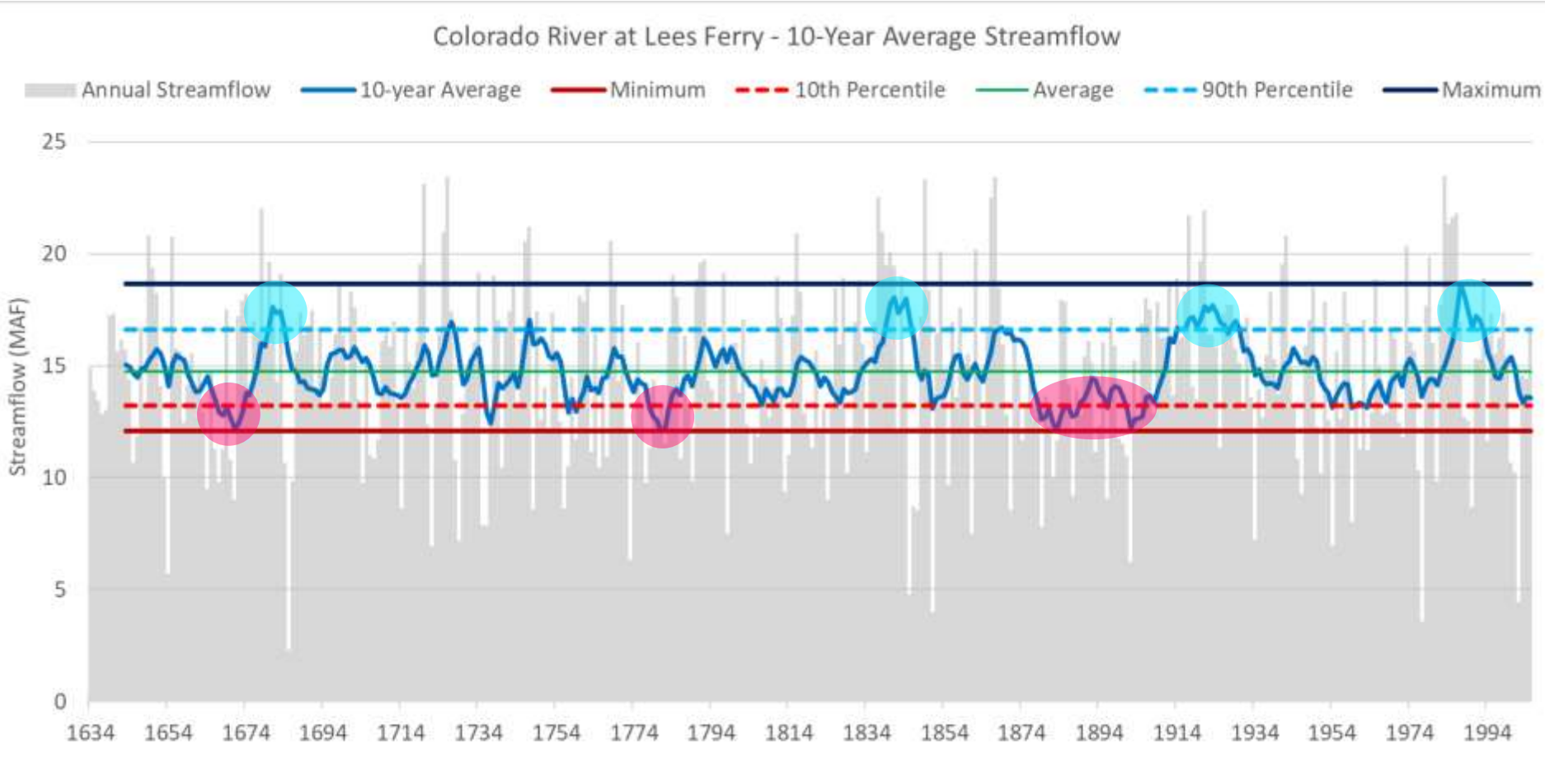
Colorado River Modeling

- Very simple water balance model
- Annual timestep
- Paleo streamflow
- 2060 Demands
- Lake Powell release operations

$$I - O = \Delta S$$



Paleo Streamflow

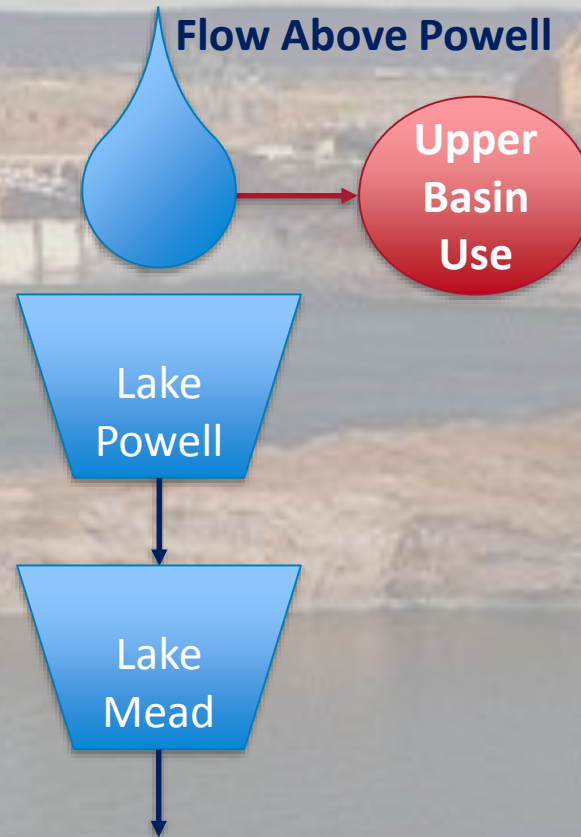


Data Source: Meko et al, 2007

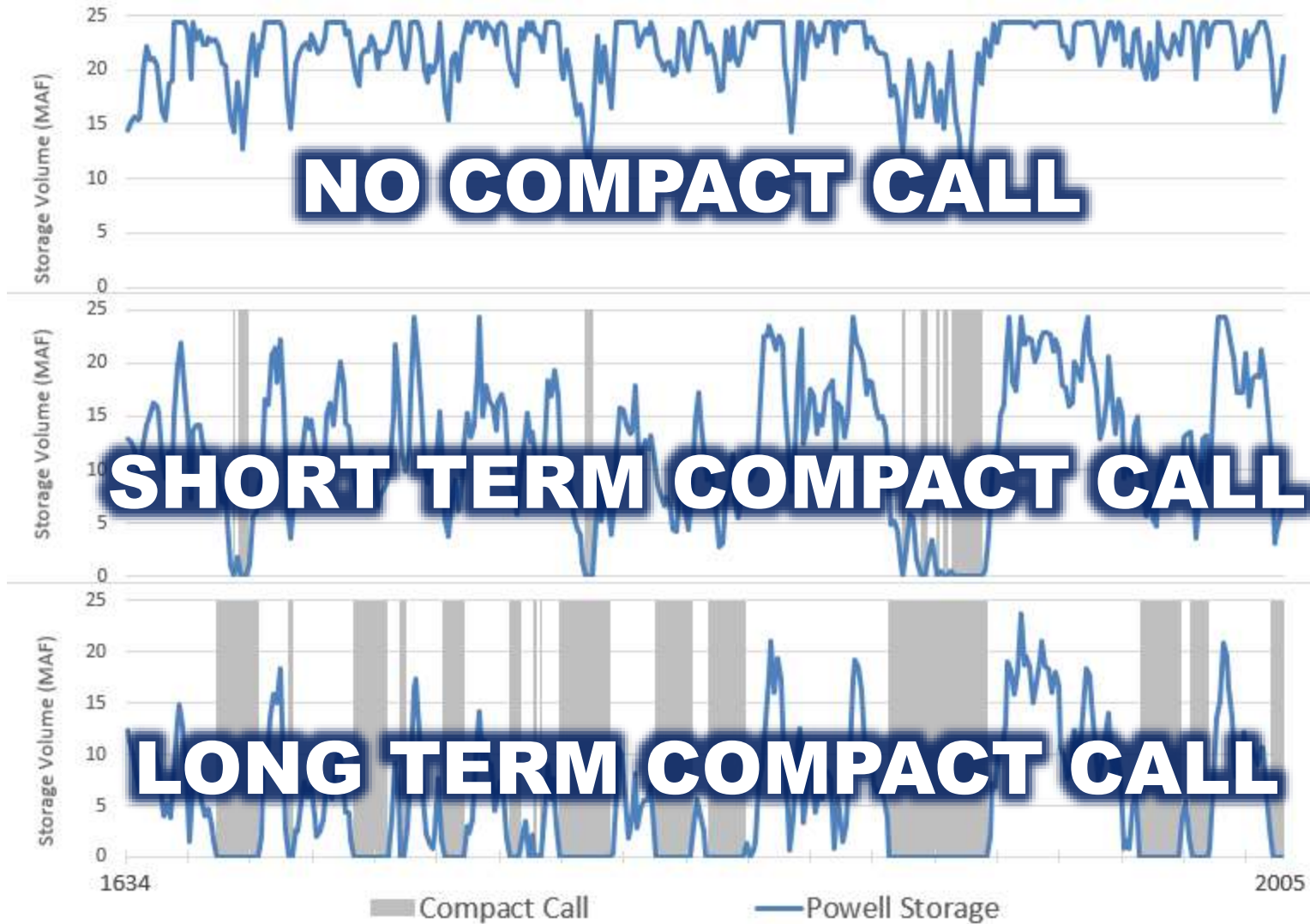
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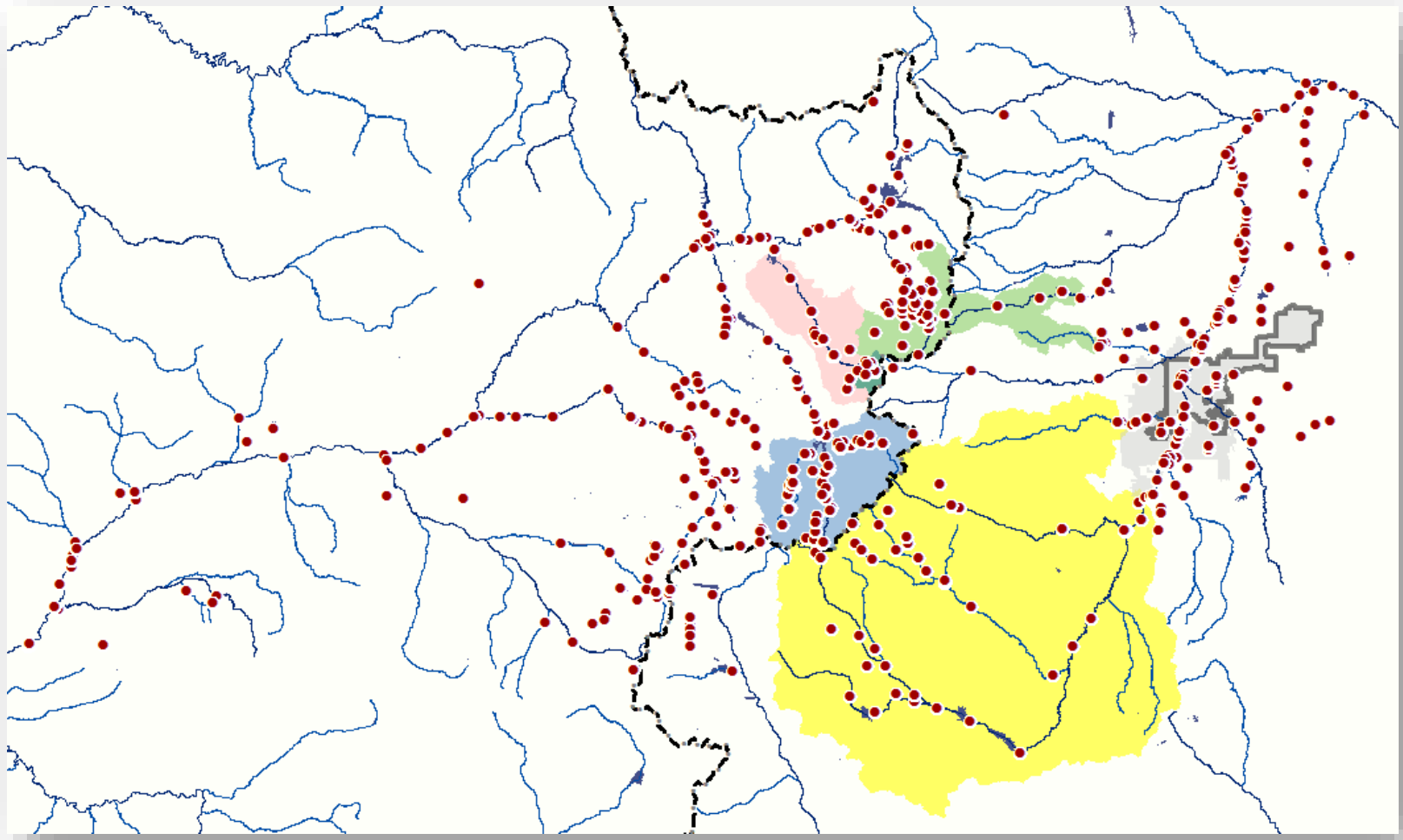


Compact Call Scenarios



Denver Water System Modeling

Platte And Colorado Simulation Model (PACSM)



Potential Impacts to Denver Water

No Impact

Partial Curtailment

Full Curtailment

- Minimal Impact
- Greater Impact

- Short Term Call
- Long Term Call



Denver Water System Lessons Learned

- Water use restrictions
- North end storage
- Maximize reuse
- Minimize reservoir evaporation
- Keep a storage buffer

- Cooperate and Collaborate