

What could possibly go wrong?



Translational Ecology Short Course
April 4, 2018 – Tucson, Arizona

Gregg Garfin



Southwest Climate
Science Center

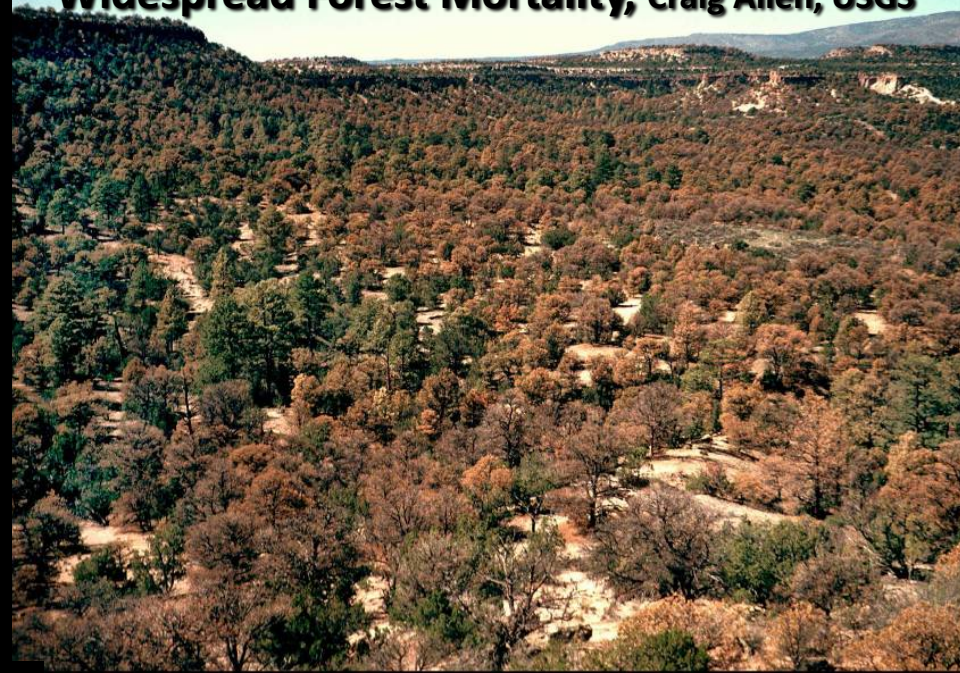




Diminished Surface Water Supply
USGS, New Mexico



Widespread Forest Mortality, Craig Allen, USGS



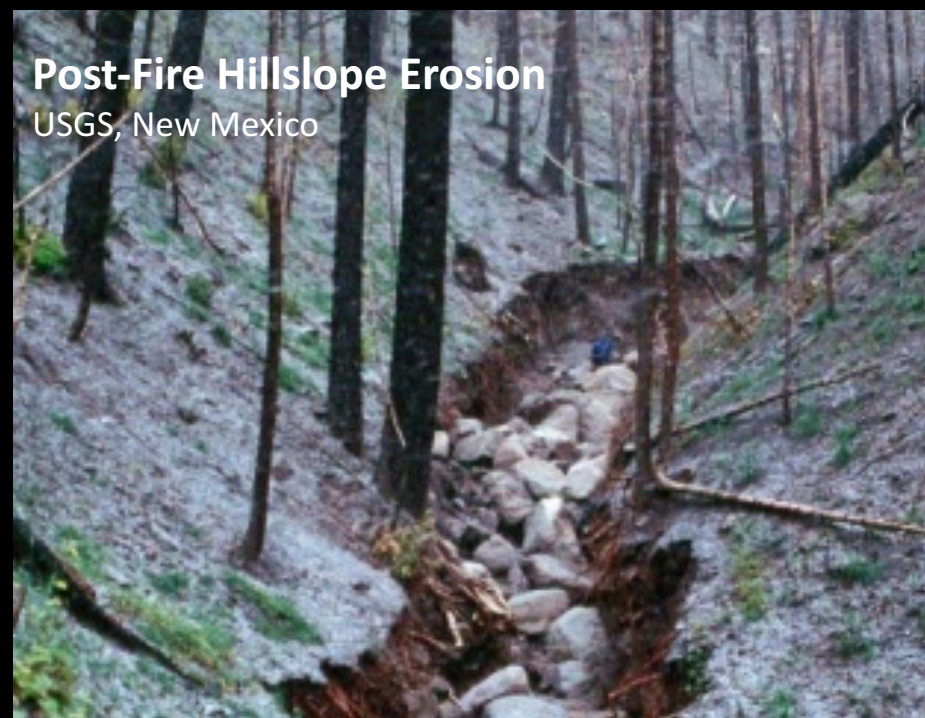
Stand-Replacing Fires

Craig Allen, USGS

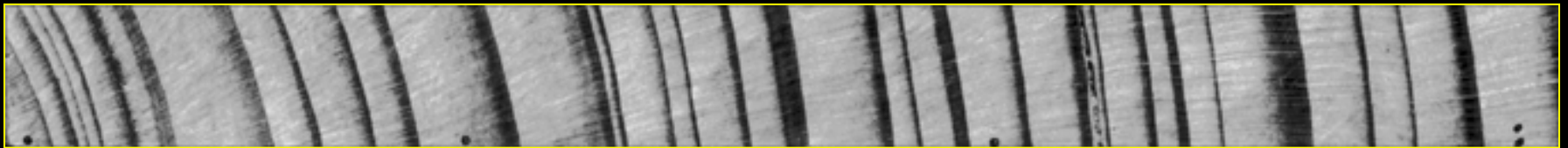
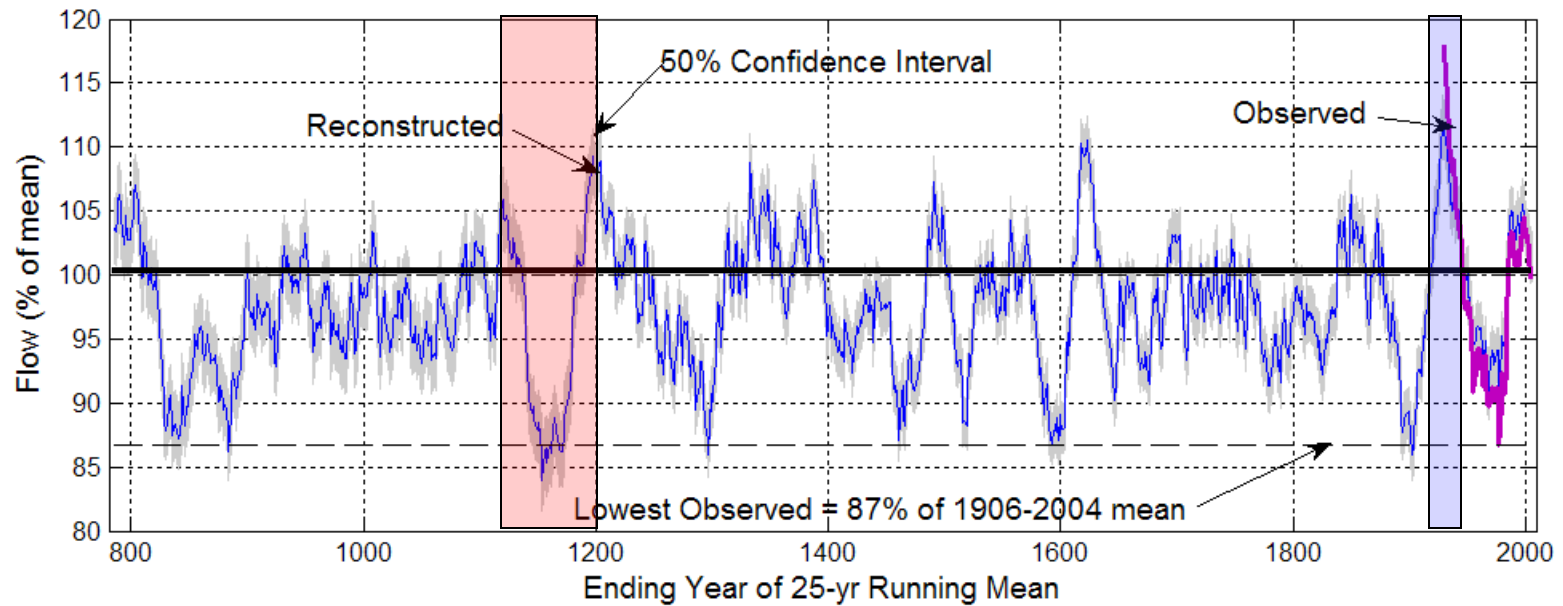


Post-Fire Hillslope Erosion

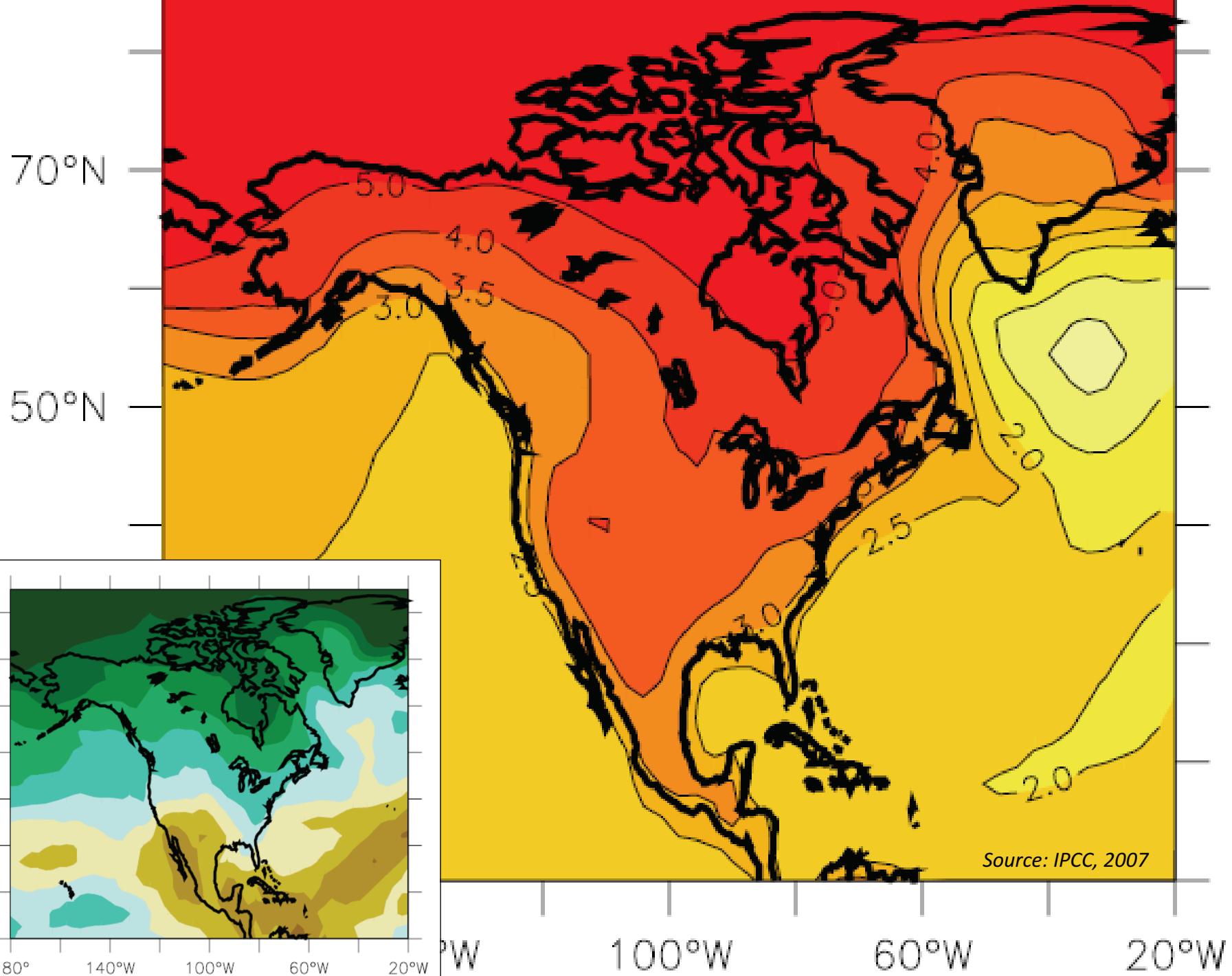
USGS, New Mexico



Colorado River Flow, 762-2005



Dave Meko, UA Laboratory of Tree-Ring Research





Kathy Jacobs






Advisory Committee





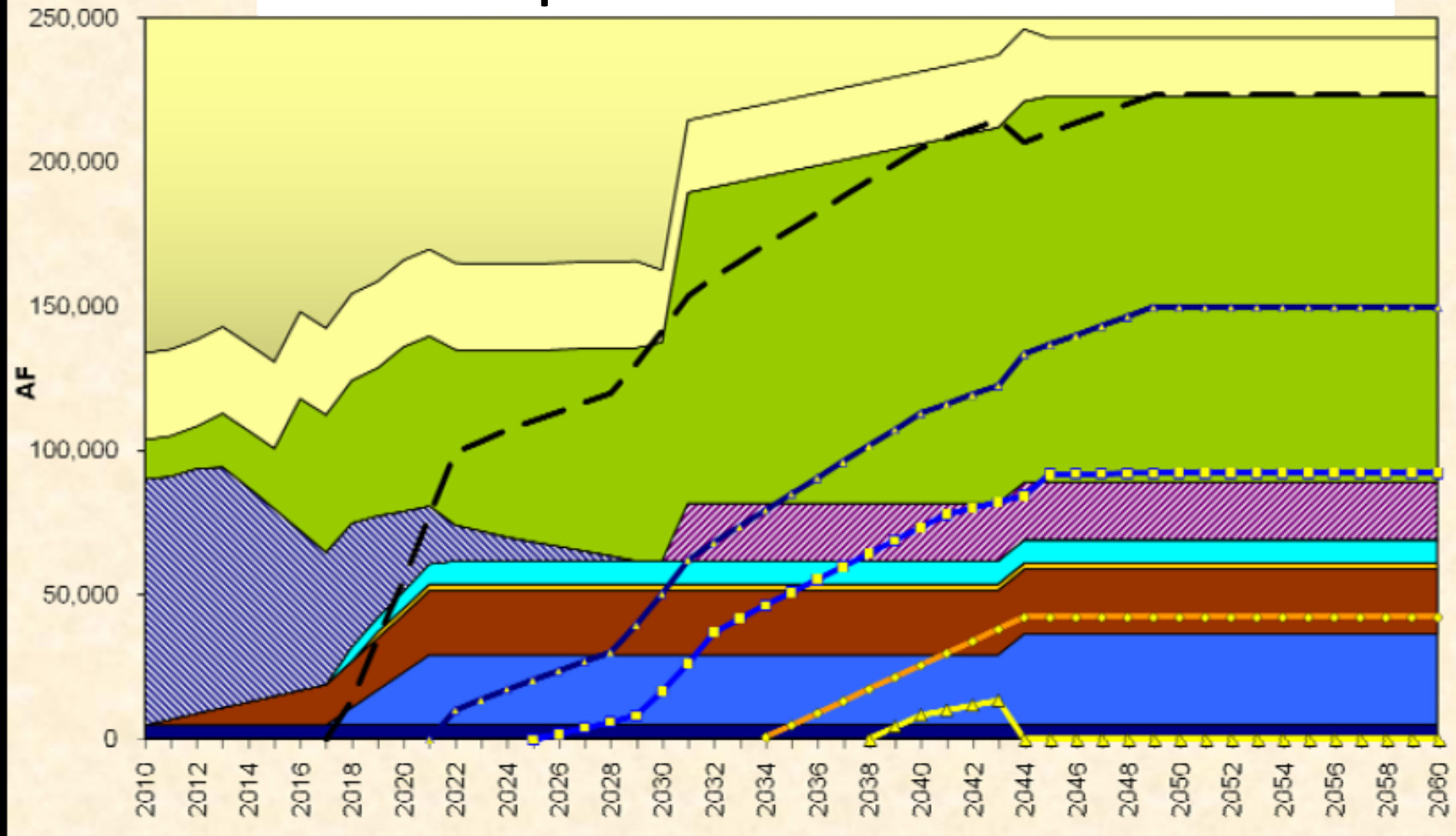
Regional Climate Modeling Team

Phoenix Water Supplies

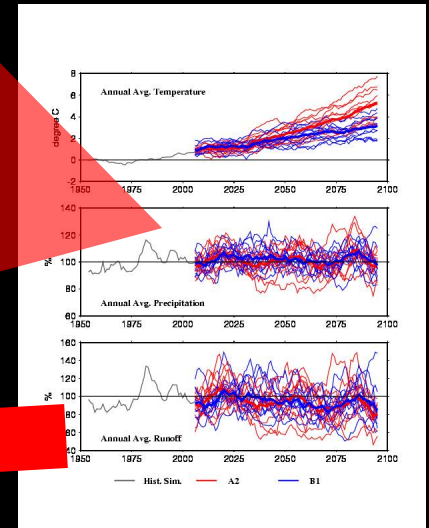
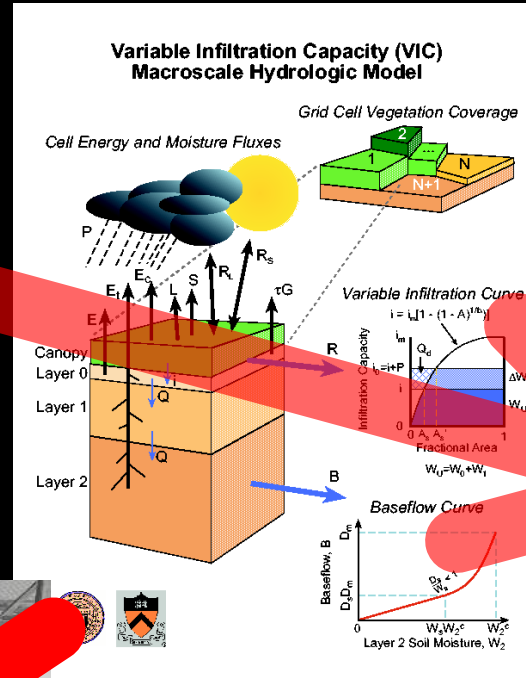
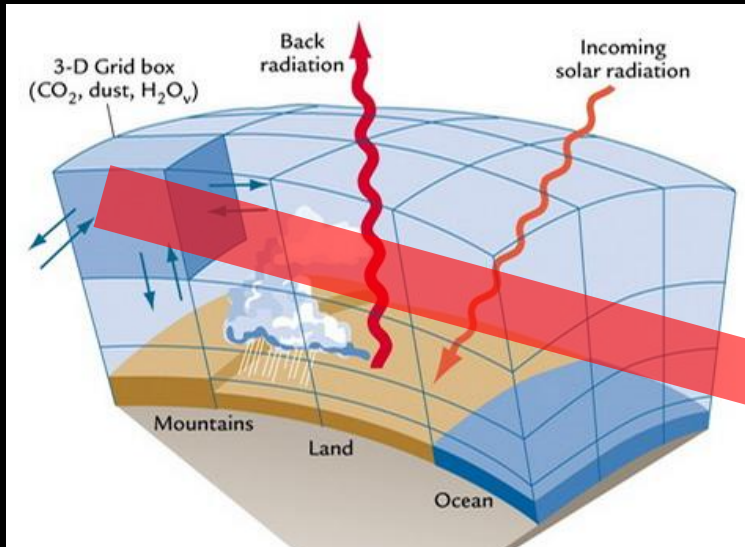
-  CAP Canal
-  13,000 Sq. Mile Project Watershed
-  Project Area



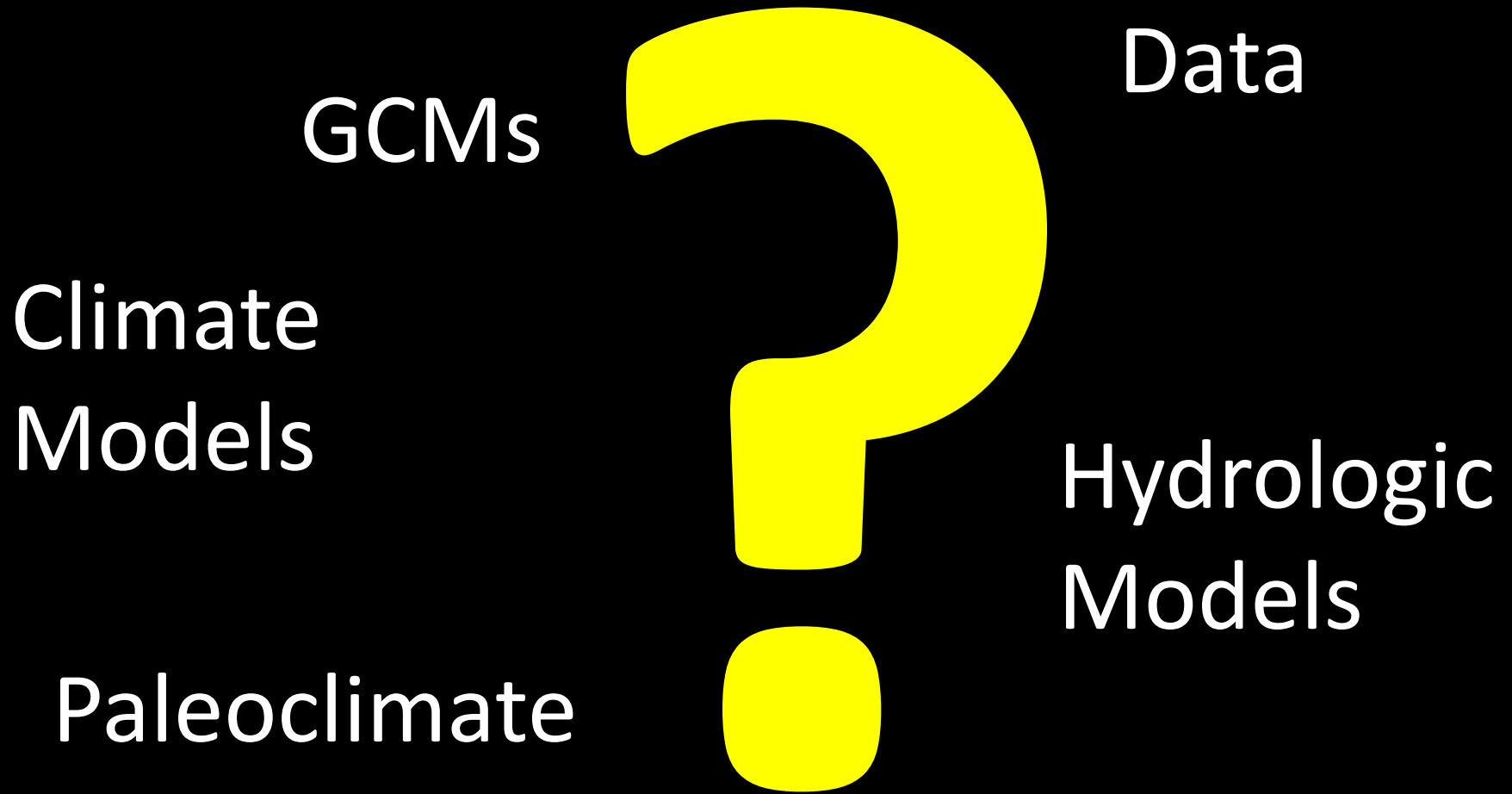
Example of Deficit Scenarios

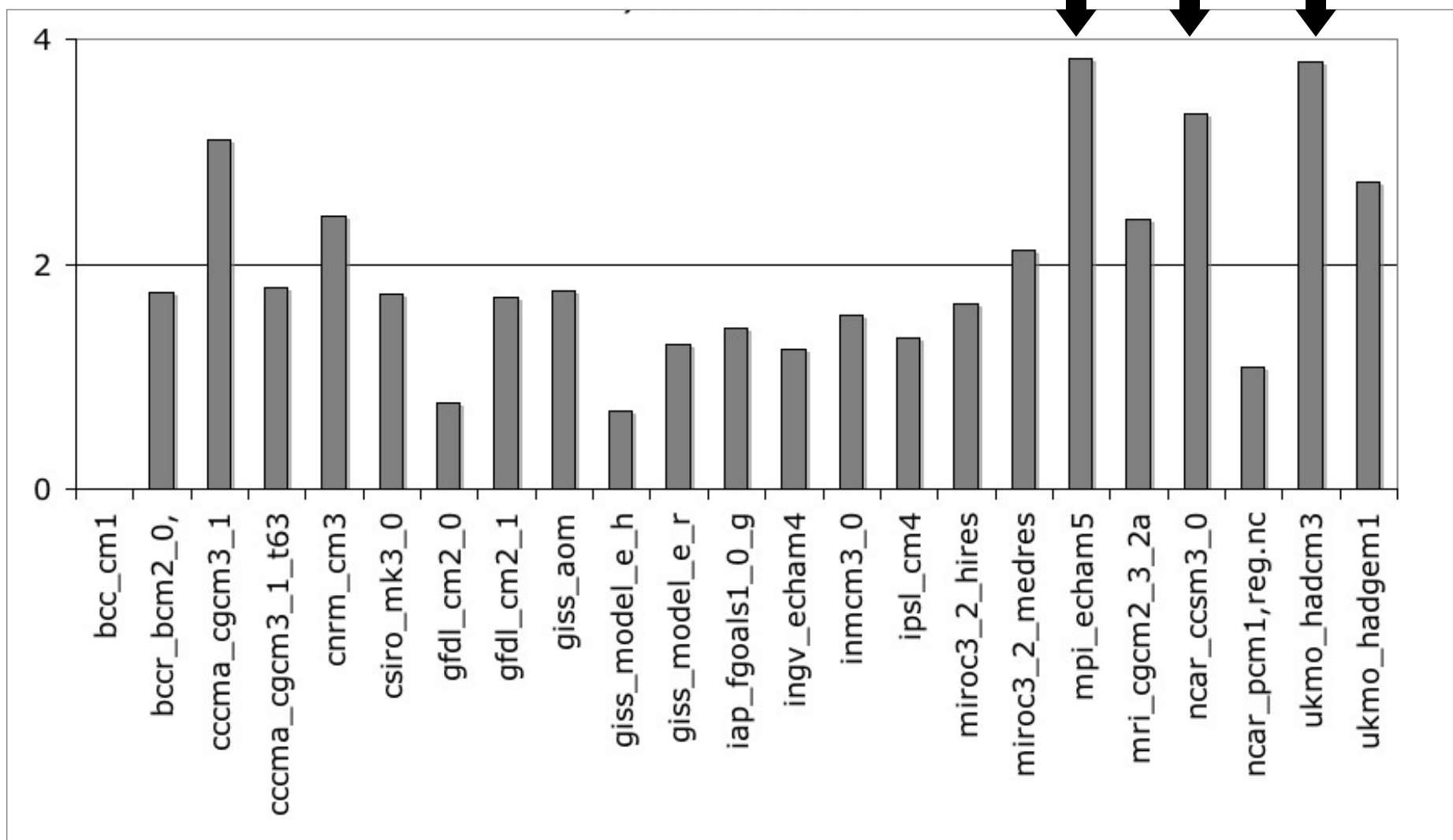


Methodology



DISCUSSION SUPPORT

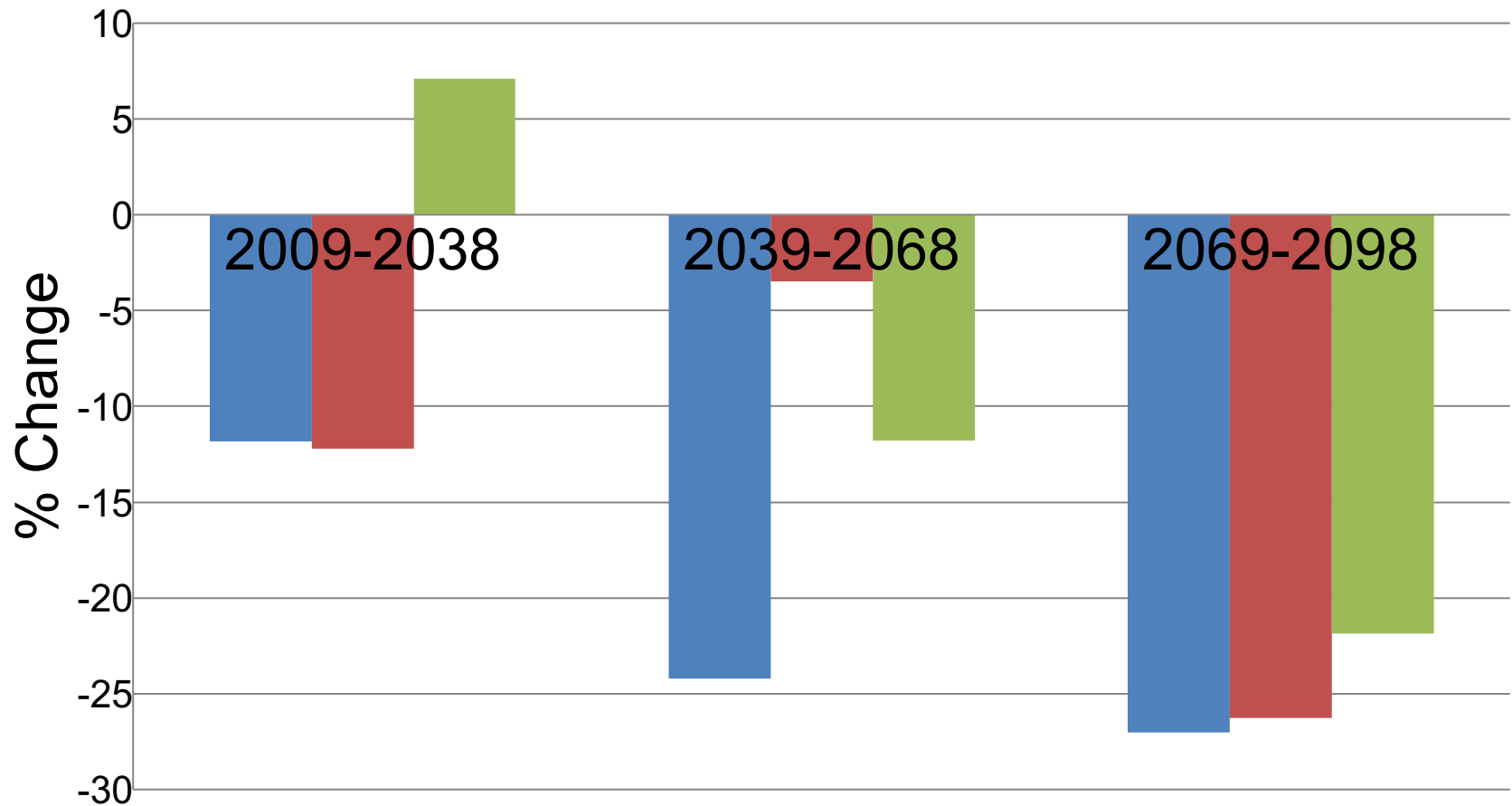




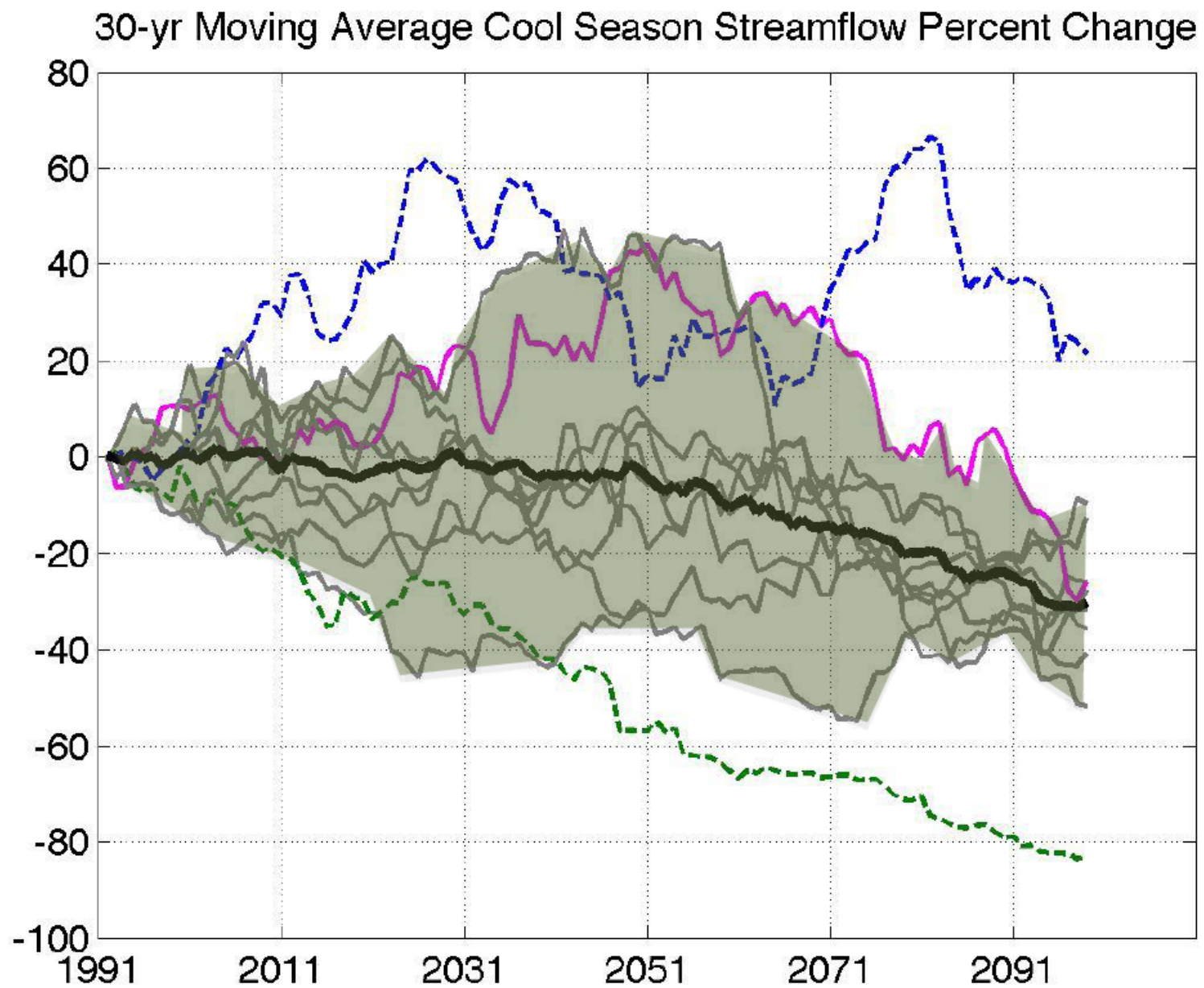
Dominguez, F., J. Cañon, and J. Valdes, 2010: IPCC-AR4 climate simulations for the Southwestern US: the importance of future ENSO projections.

Climatic Change, **99**, 499-514.

Change in Streamflow Volume

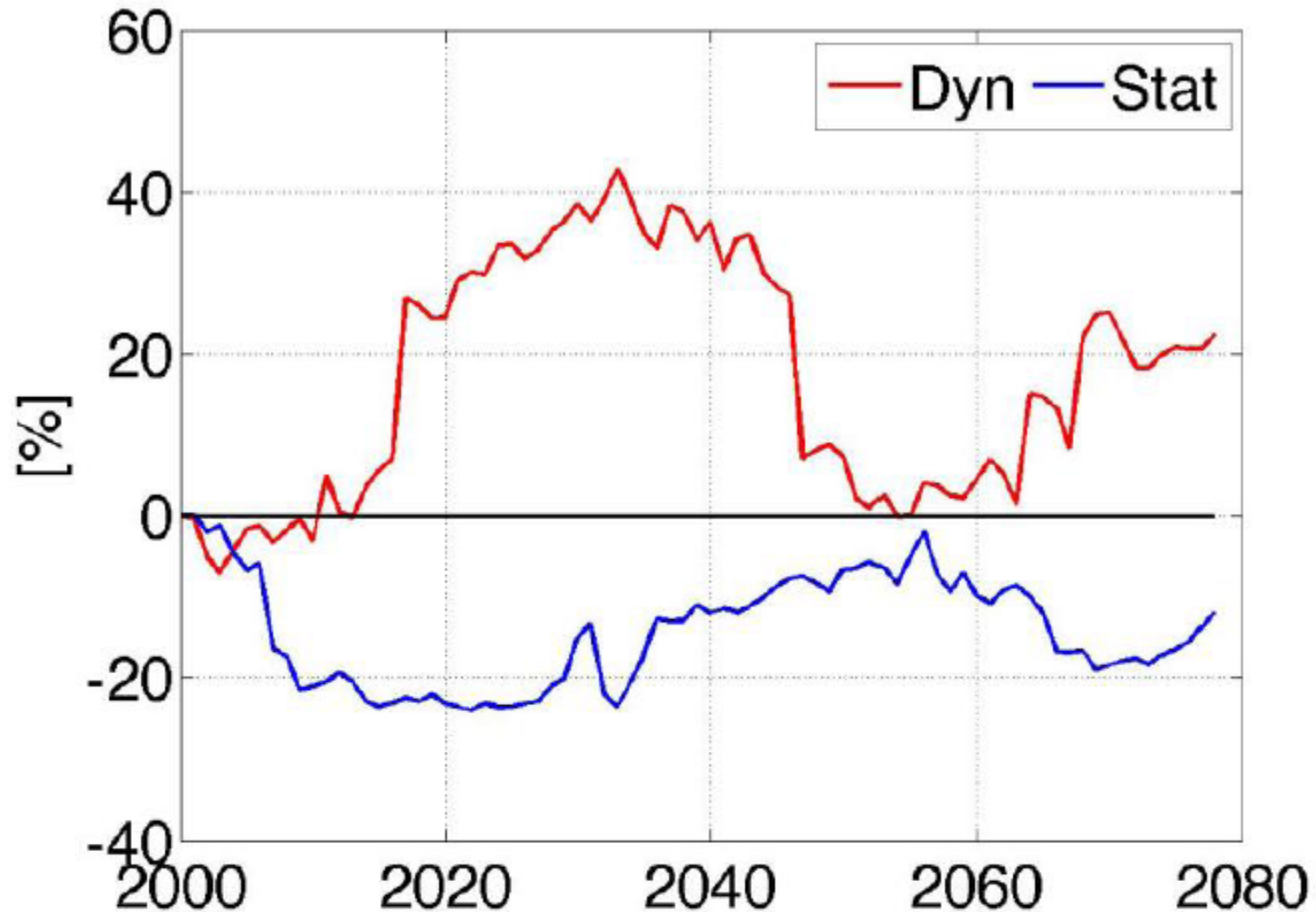


Rajagopal et al. 2010



Dominguez, Rajagopal, Castro, Troch, Demaria, Gupta, Durcik, Chang
University of Arizona

Salt River Warm Season Q



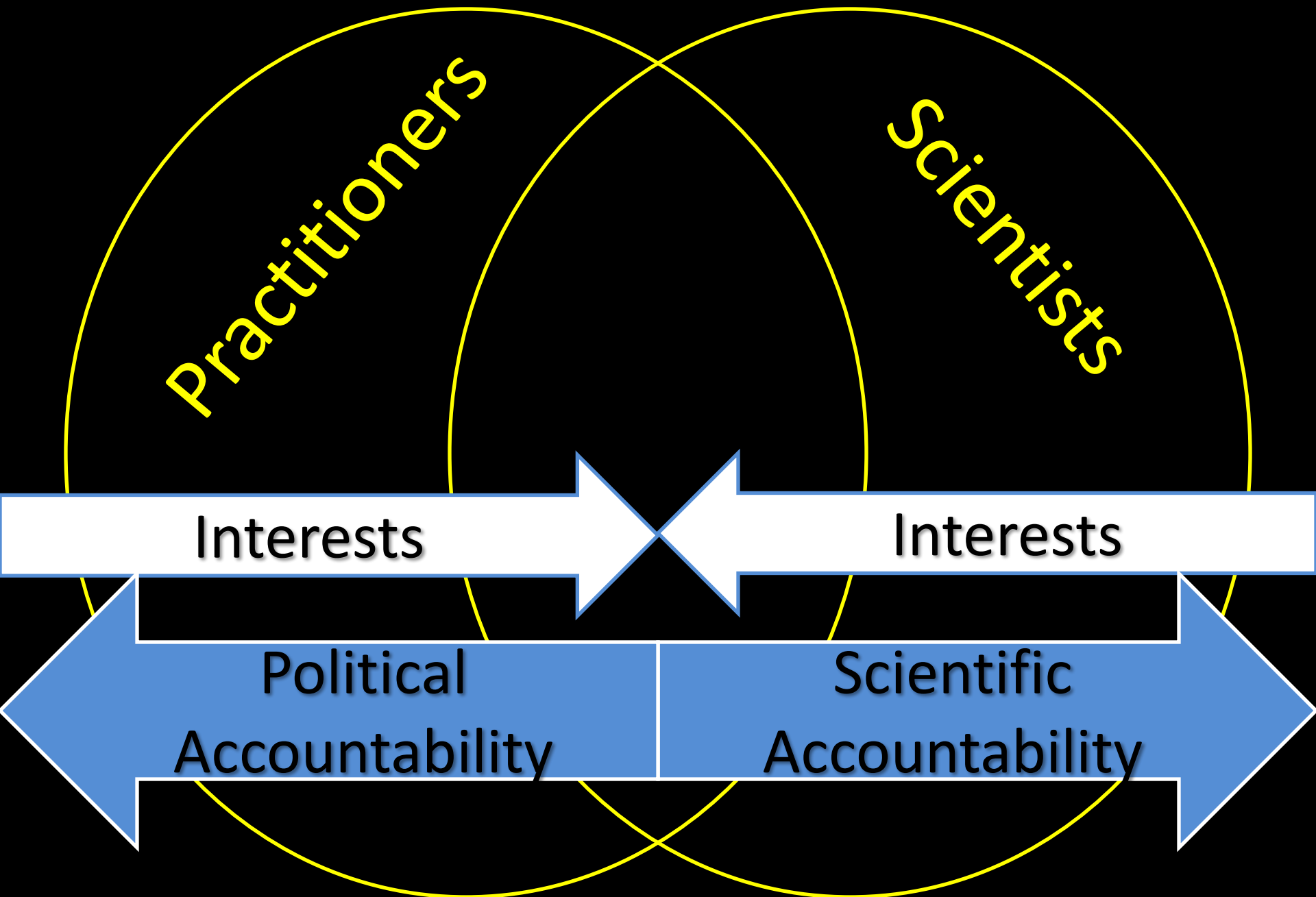






Trust

Mutual Learning Cross-Fertilization Enhanced Discourse



Gregg Garfin

**SNRE: School of Natural Resources
and the Environment**

IE: Institute of the Environment

gmgarfin@email.arizona.edu

520-626-4372

