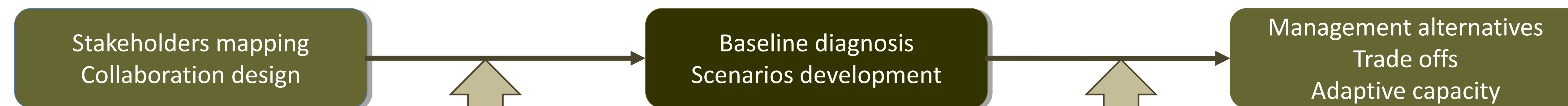


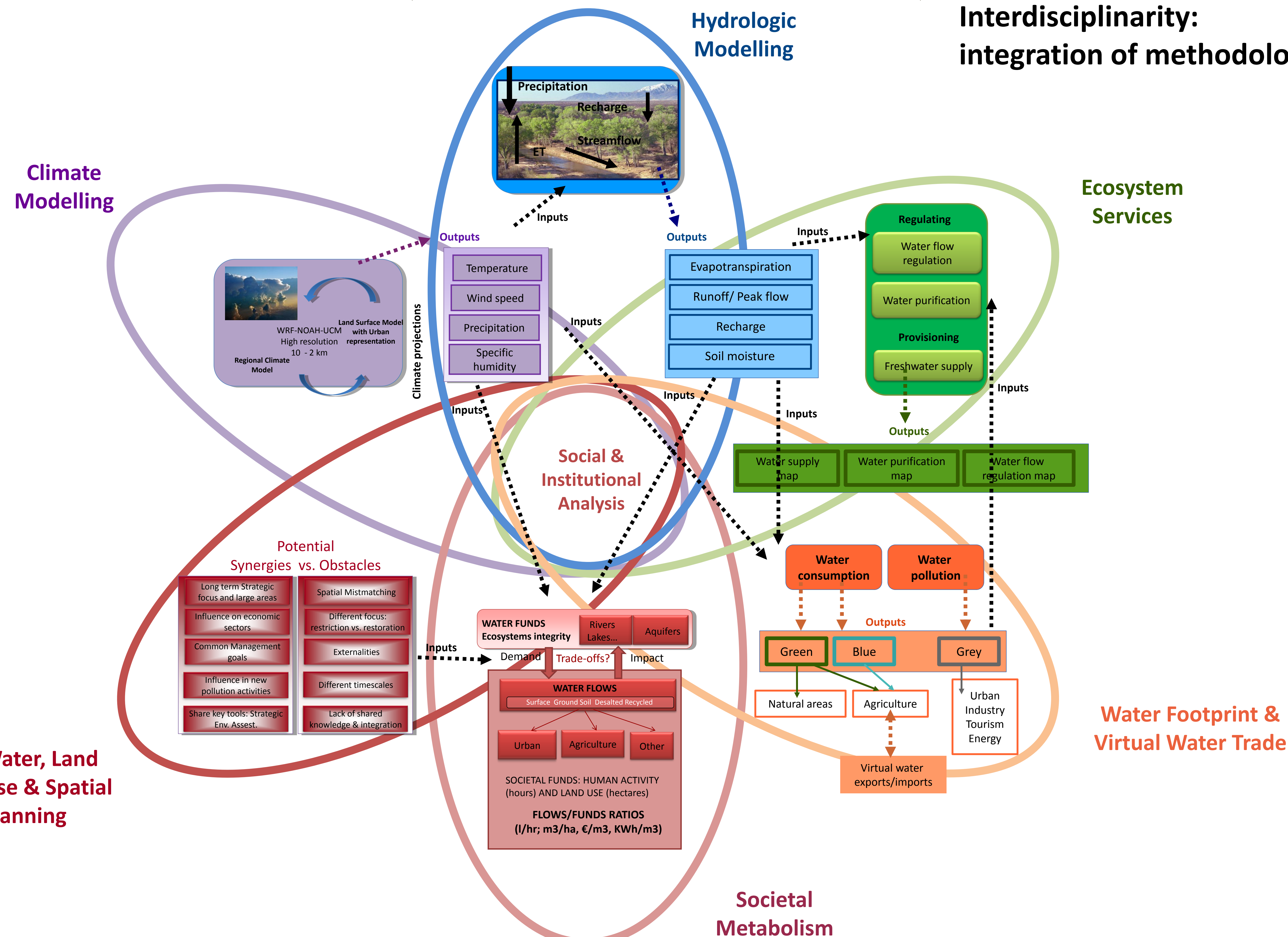
## Transdisciplinarity: stakeholder participation



Analysis

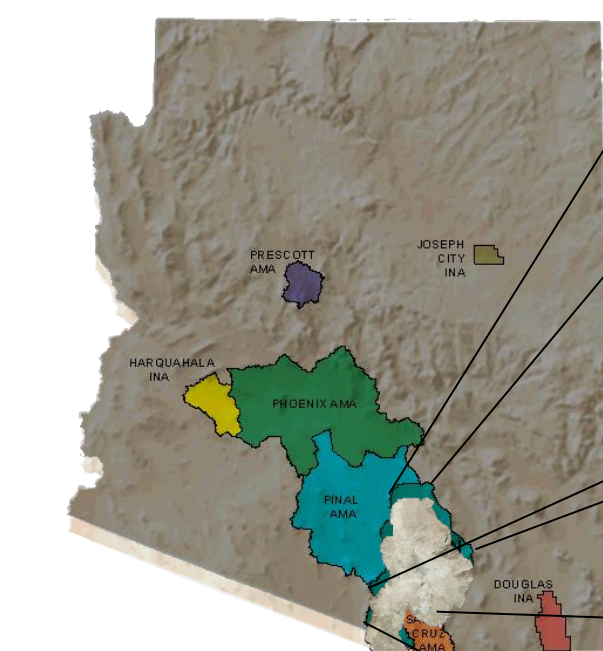
Assessment

## Interdisciplinarity: integration of methodologies



## Case study in Tucson

### Arizona State



### Tucson Active Management Area

- ◆ 6222 km<sup>2</sup>
- ◆ Portions of Pima, Pinal and Santa Cruz counties
- ◆ 900,000+ people
- ◆ Diverse user community

### First research questions

1. Expected changes in precipitation pattern due to climate and land use change
2. How natural recharge of TAMA aquifer will be affected?
3. Trends in Colorado River run-off? Potential impact for Tucson basin supply.
4. Which are the current Water-Related Ecosystems Services and how will they be impacted by 1 and 2?
5. Water footprint (WF) and virtual water trade of agriculture in Arizona. WF variability based on climate projections.
6. Societal Metabolism of water in the TAMA. Evolution 1980-2006. Scenario assessment to achieve management goal: safe yield in 2025.
6. What are the common points and misfits between comprehensive and water planning?
7. How are water management boundaries defined in the TAMA? How are decisions regarding water resources management in TAMA made and legitimize? Who sits at the decision-making table?

### Multiple scales of analysis

- ↑ Colorado River Basin
- Arizona State
- Arizona Sun Corridor (Tucson-Fenix)
- Tucson Active Management Area
- Tucson urban area