

Water in a changing landscape

Stateline Meeting

DNW

February 27, 2018

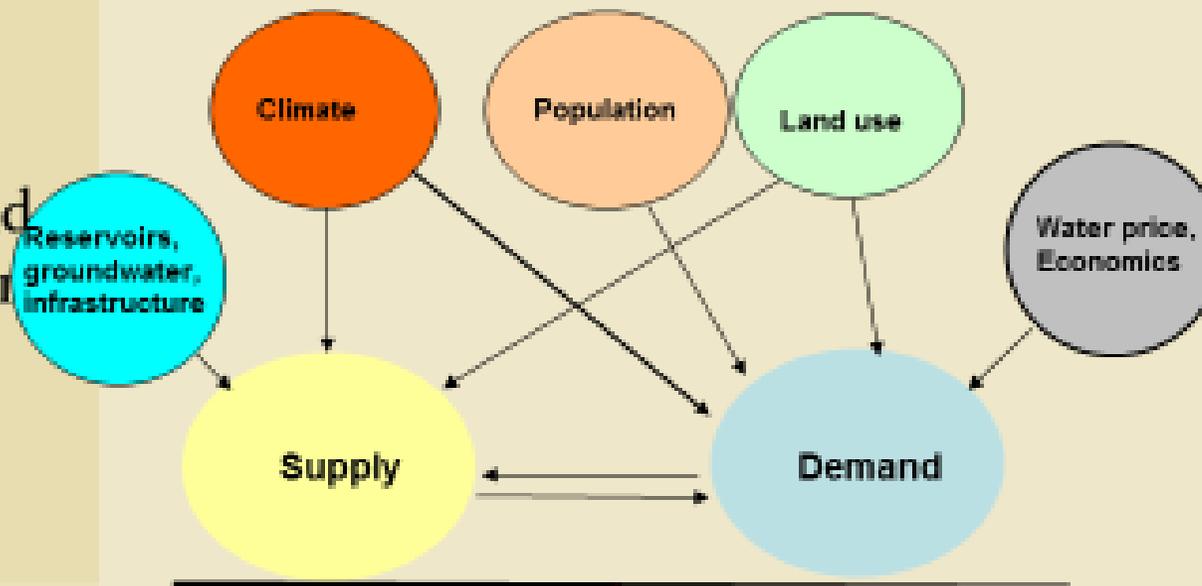


SFFP Key Finding

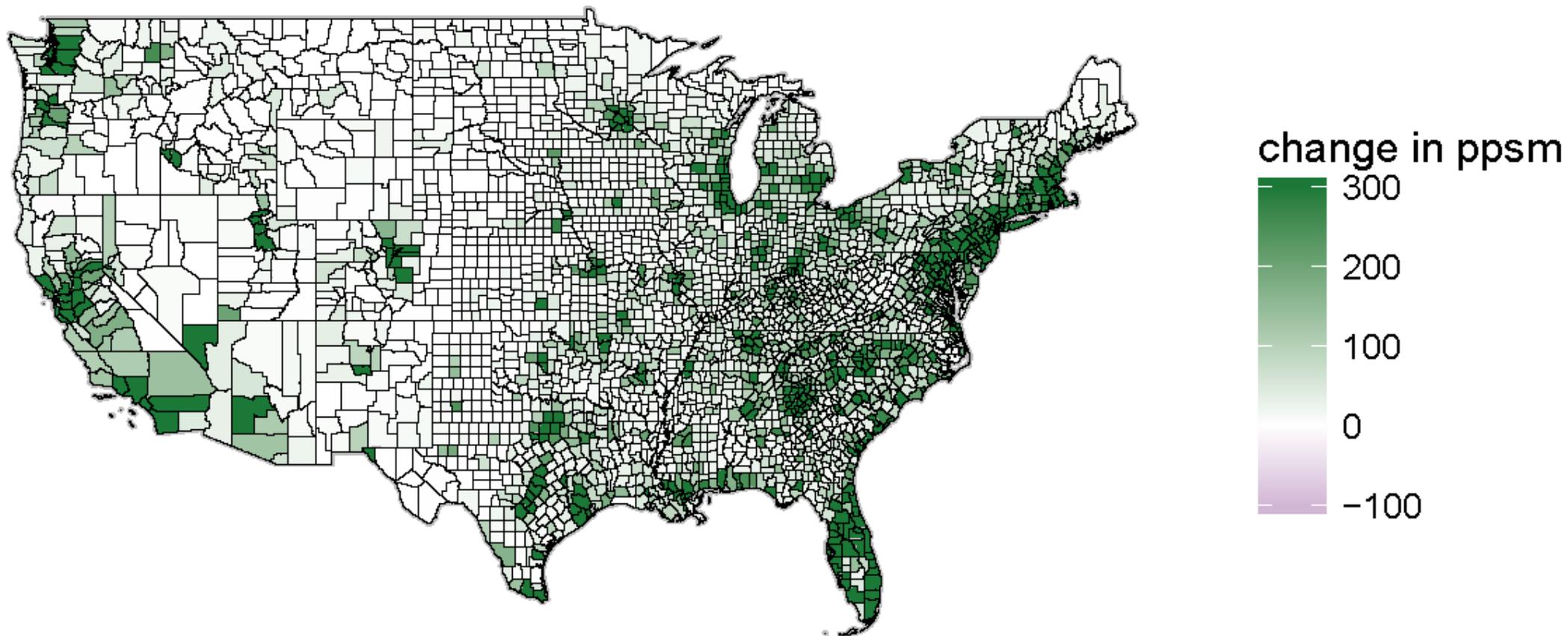
Key Finding 5

A combination of factors has the potential to decrease water availability and degrade quality. Forest conservation and management can help to mitigate these effects

- Futures lead to increased water stress in several areas of the South.
- The future of water quality in developing watersheds will be affected by the area and condition of forests.



SSP5a



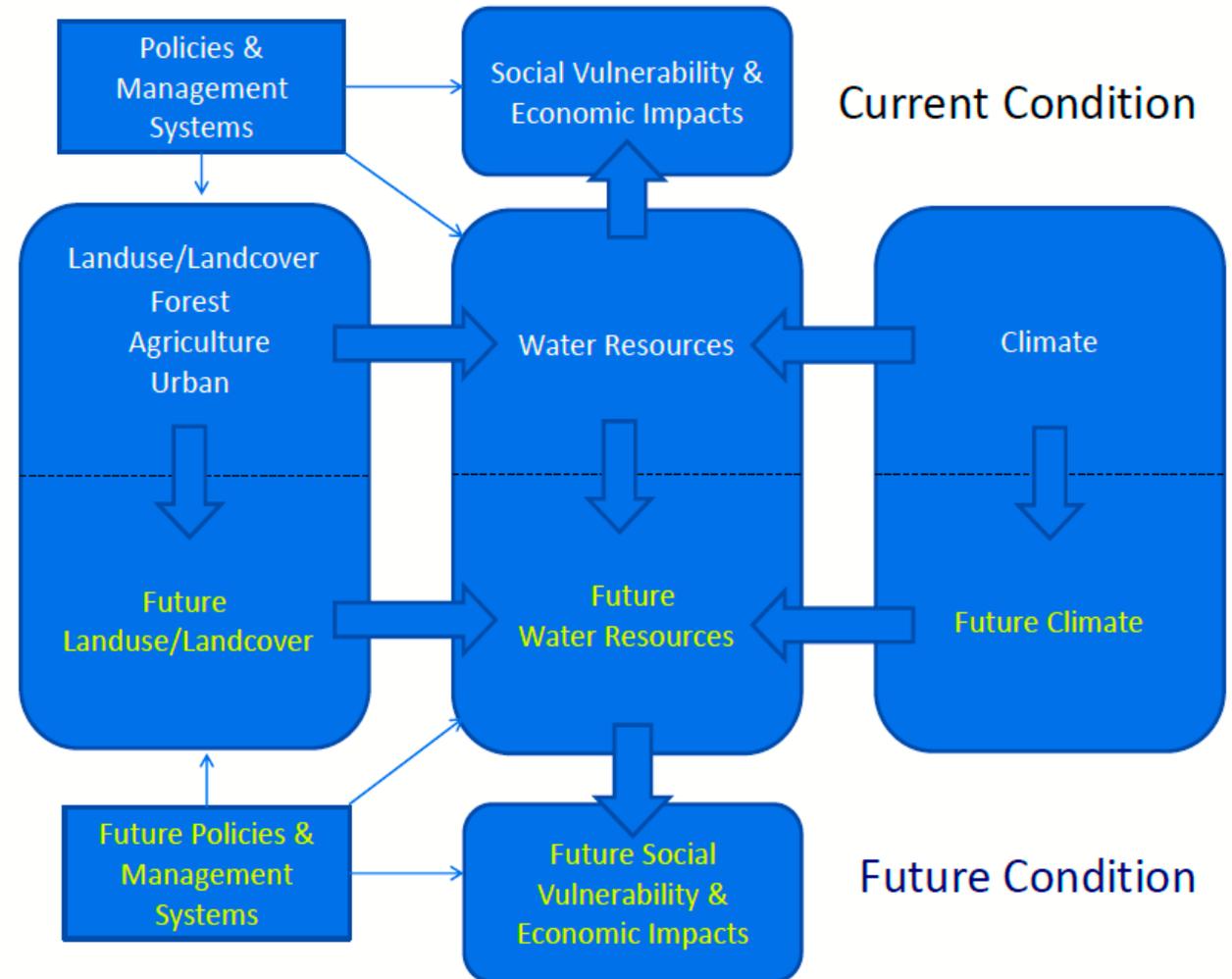
Source: Preliminary projections for 2020 RPA Assessment



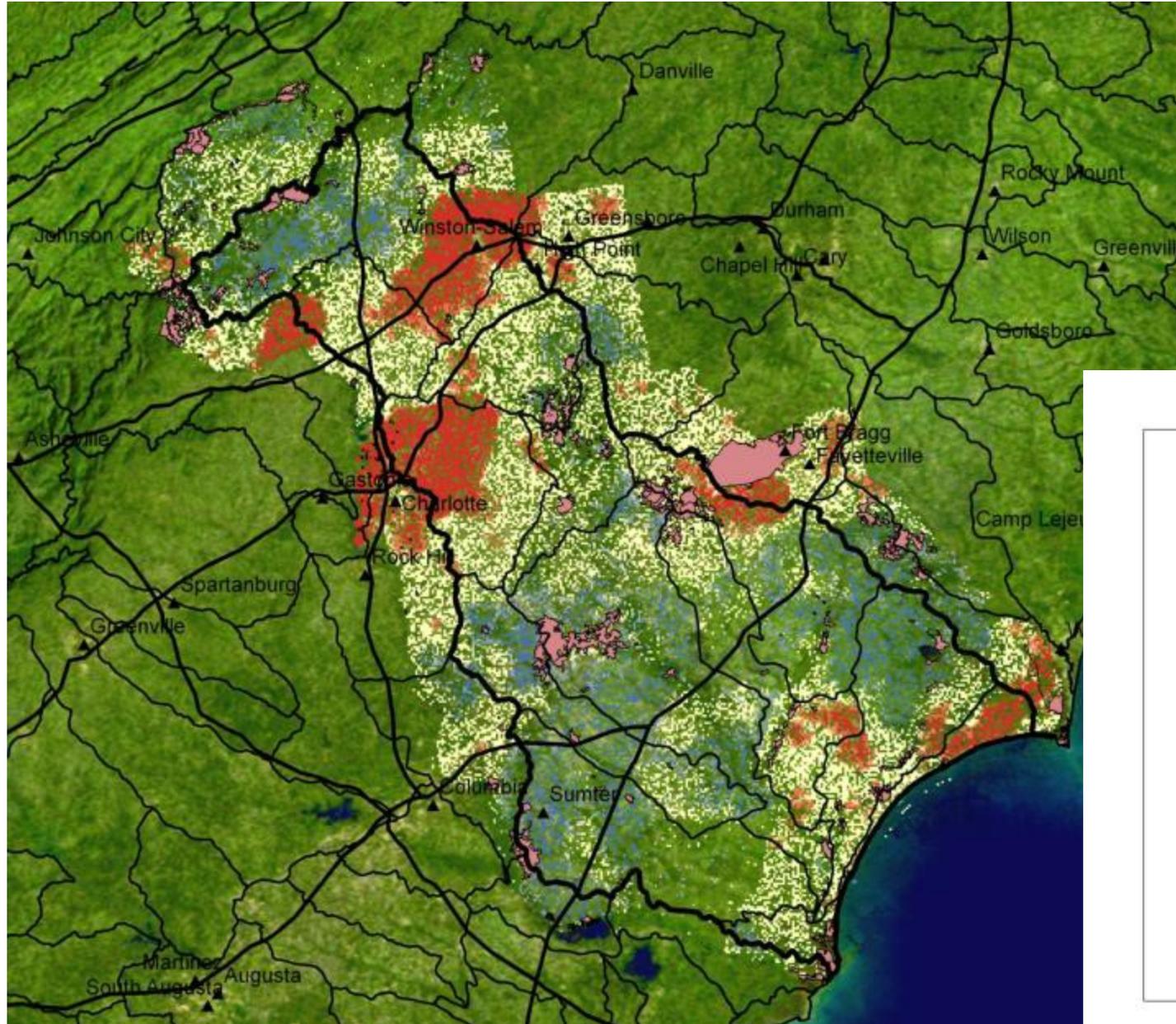
2010-2070

Mountains to Coast Project

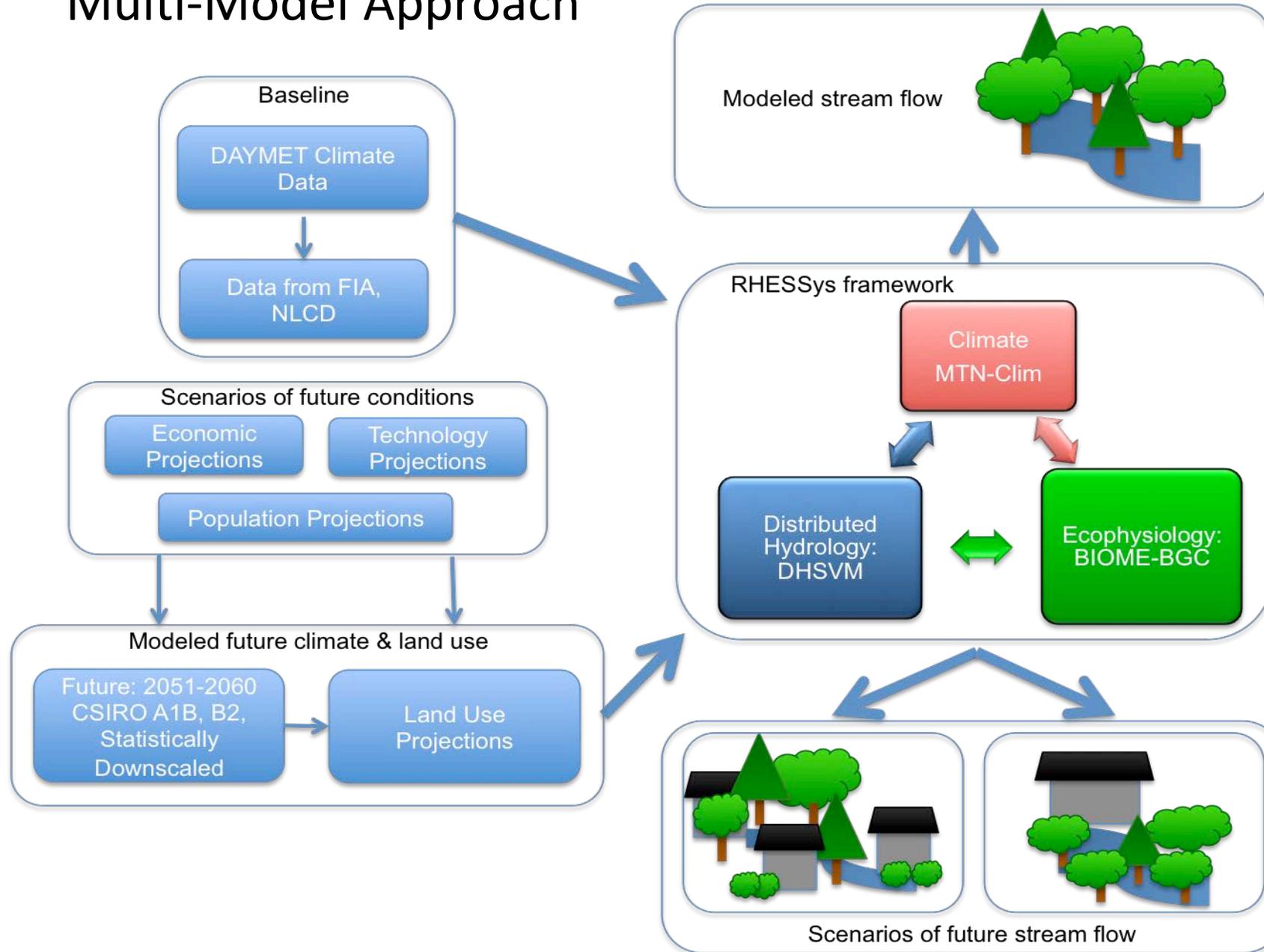
- “Scaling-up”
- Understand the role of forests in context of all other relevant changes
- Link socioeconomics/land/climate in evaluating water issues
- Linking water to social conditions and vulnerability



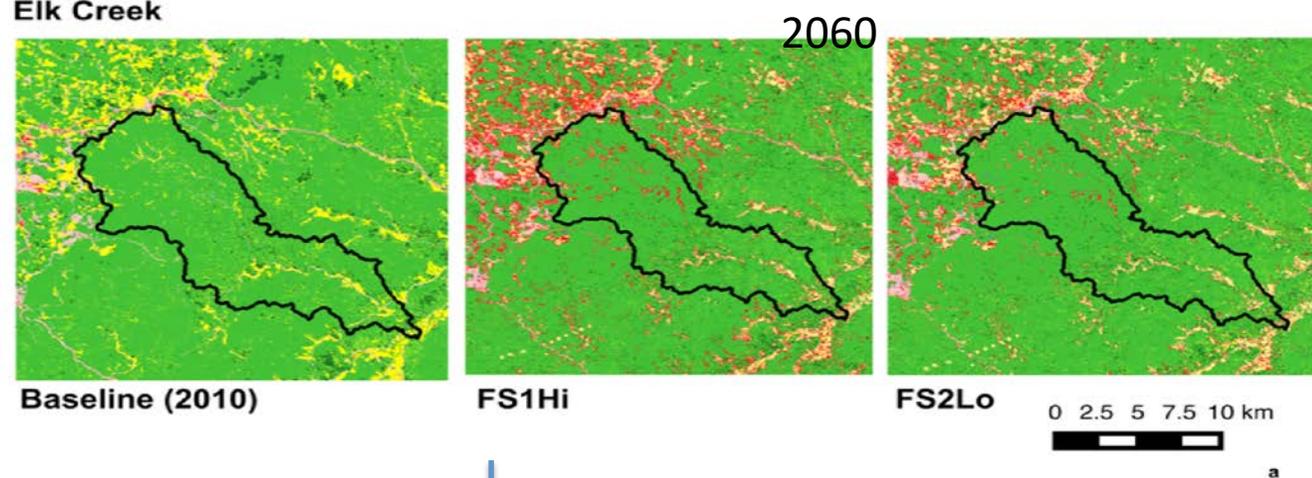
Hotspots of Forest land Use Loss (2010--2060)



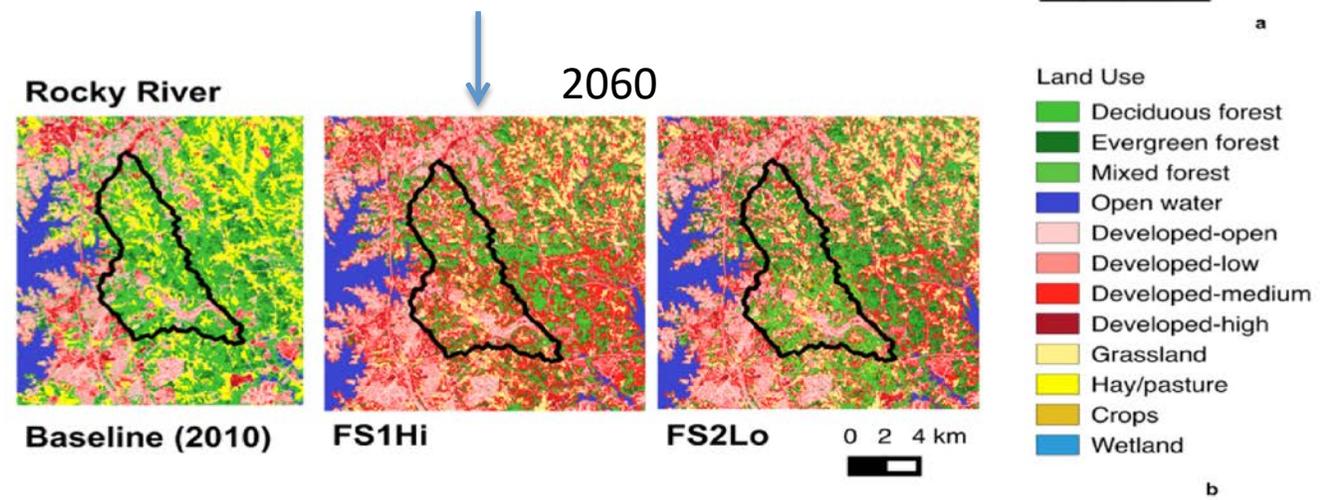
Multi-Model Approach



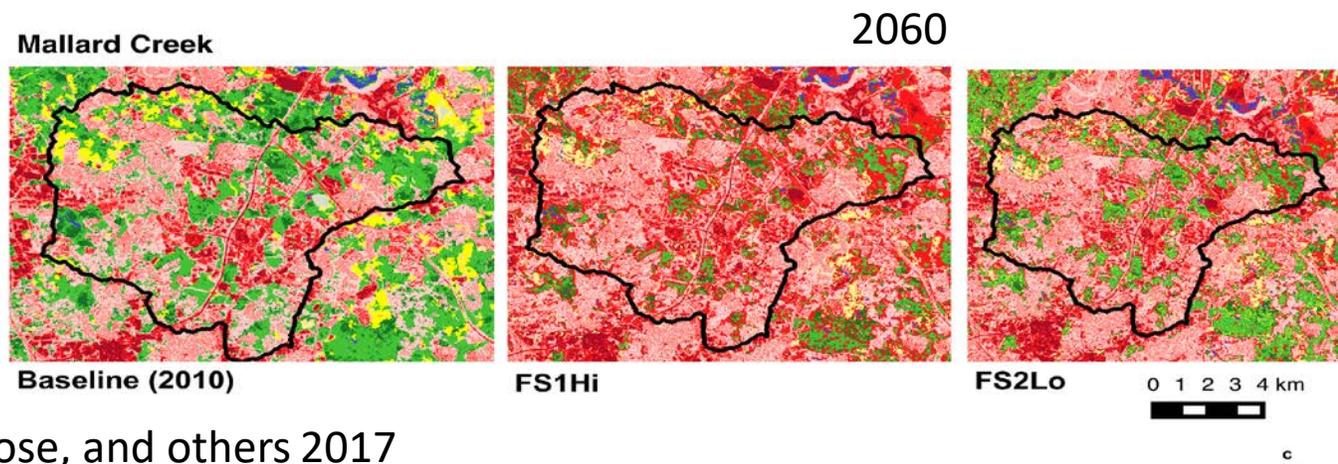
FOREST



MIXED



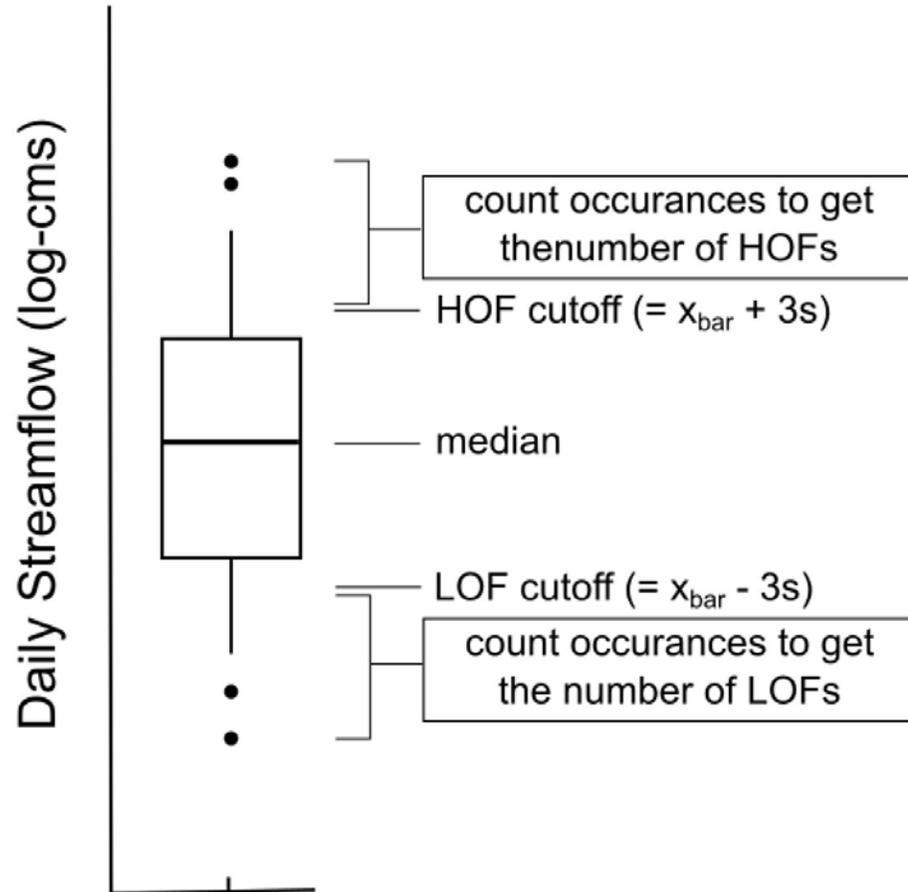
URBAN



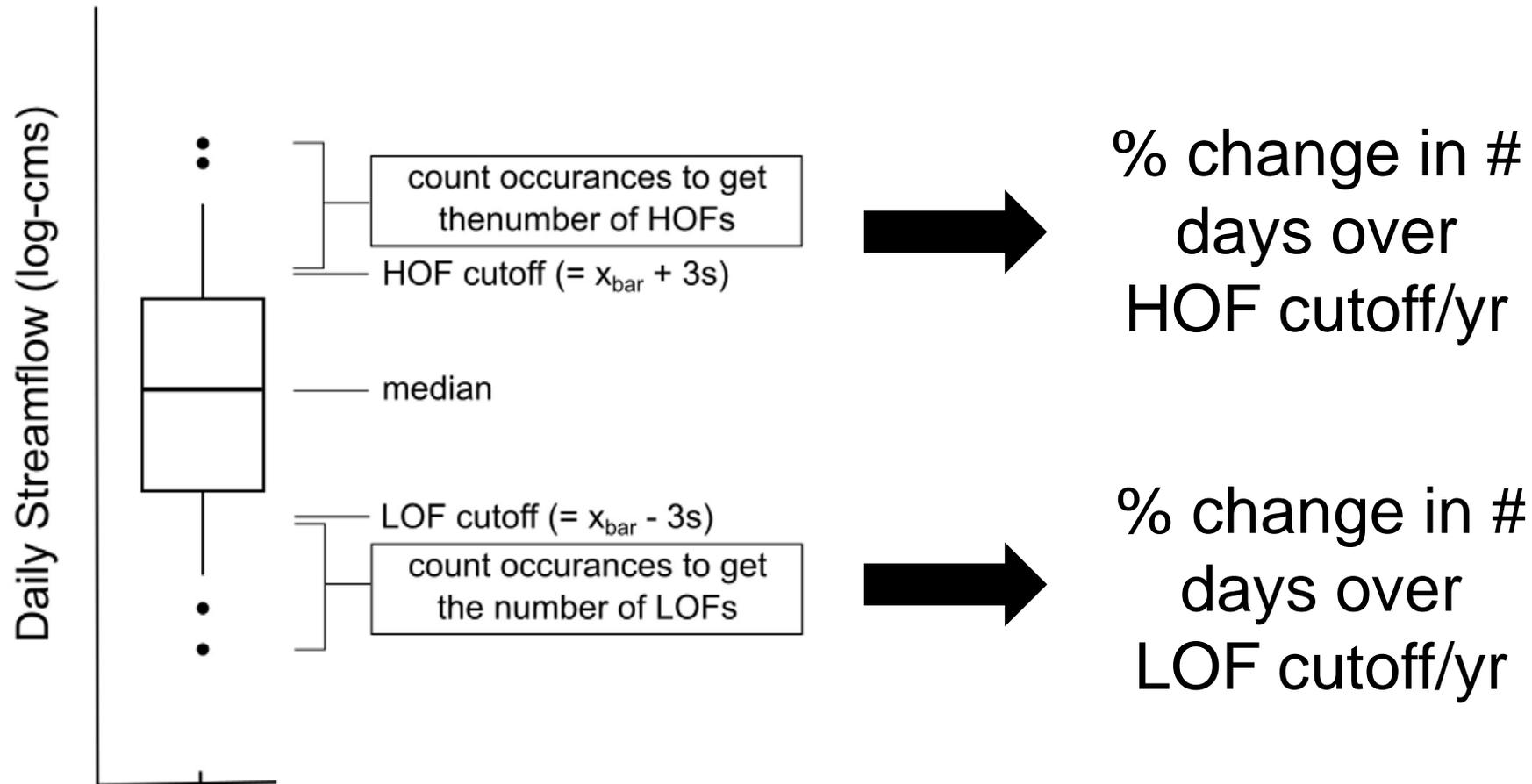
Land Use Change Projections



Methods: Outlier Flows



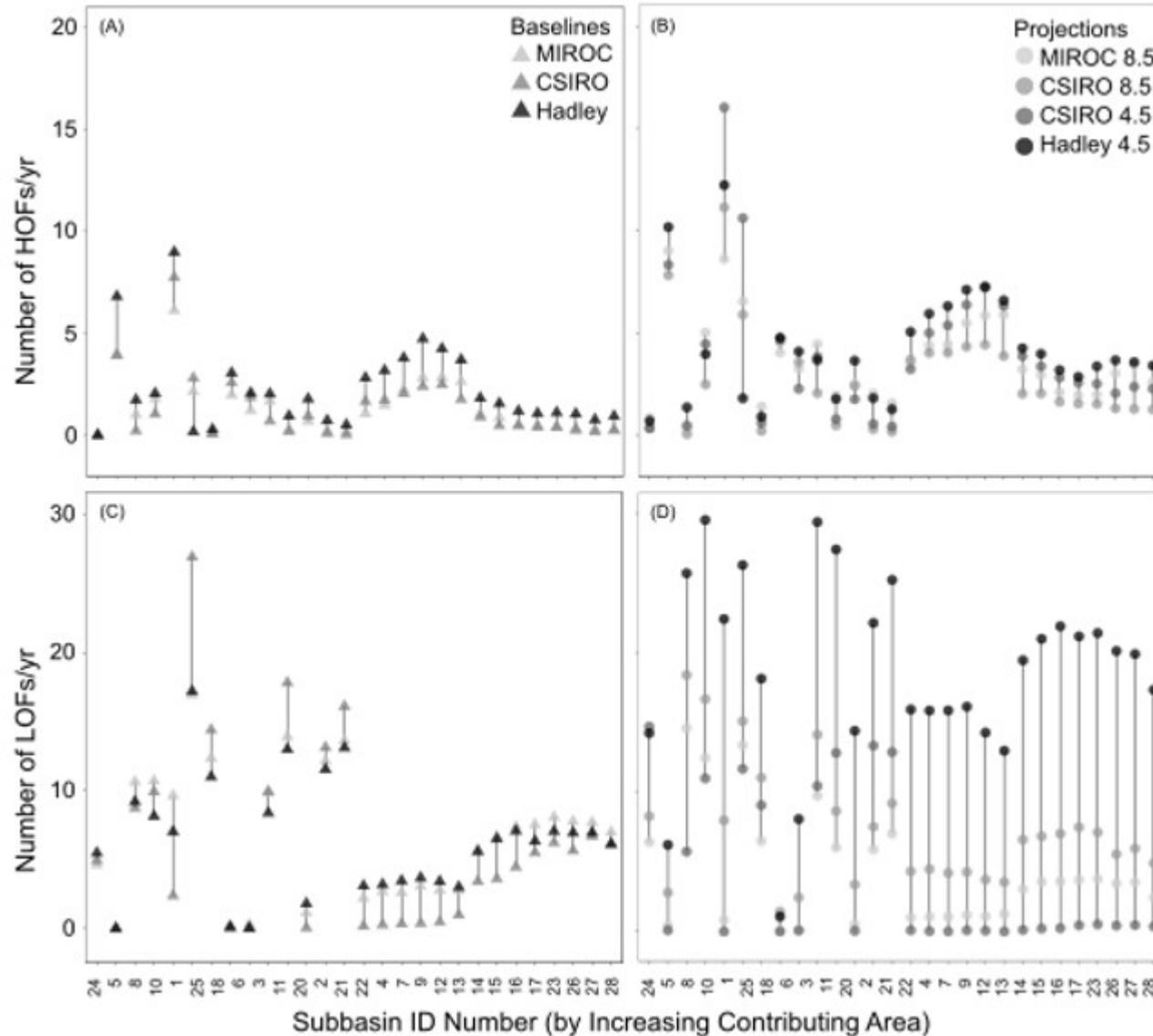
Methods: Outlier Flows



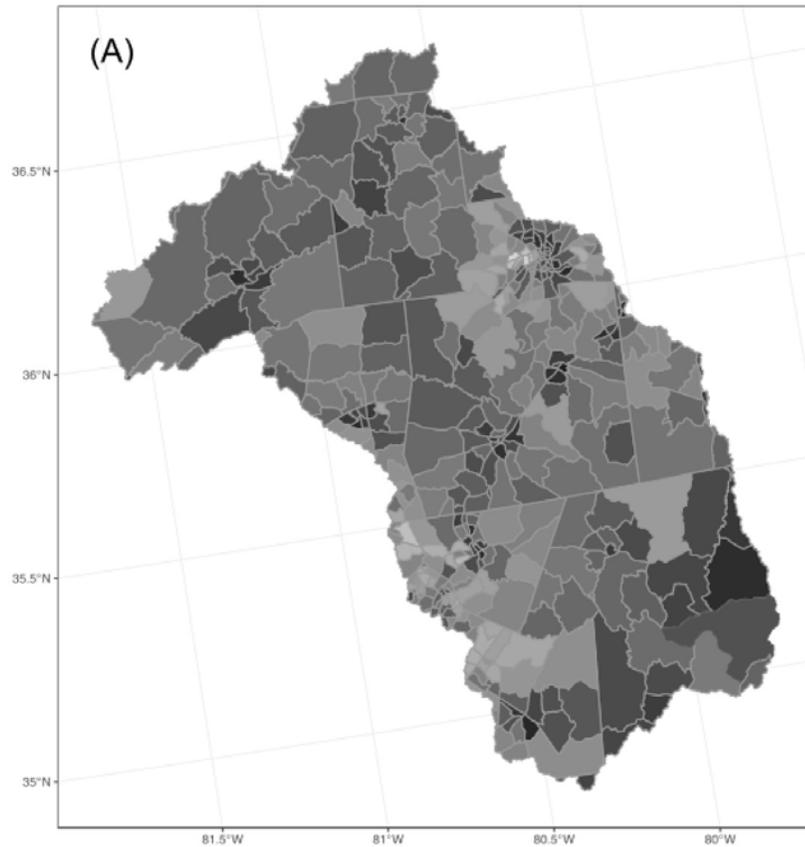
$$\% \text{ change} = (\text{projection} - \text{baseline}) / \text{baseline} \times 100$$



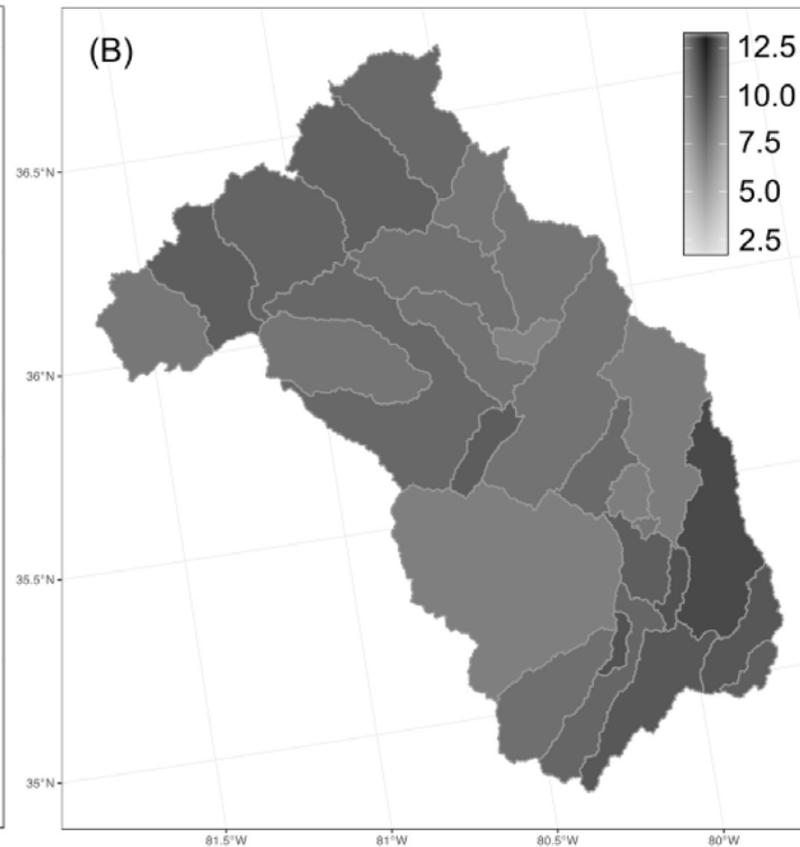
Results: Comparing Climate+Landuse Models



Results: UYPD SoVI



Census Tracts



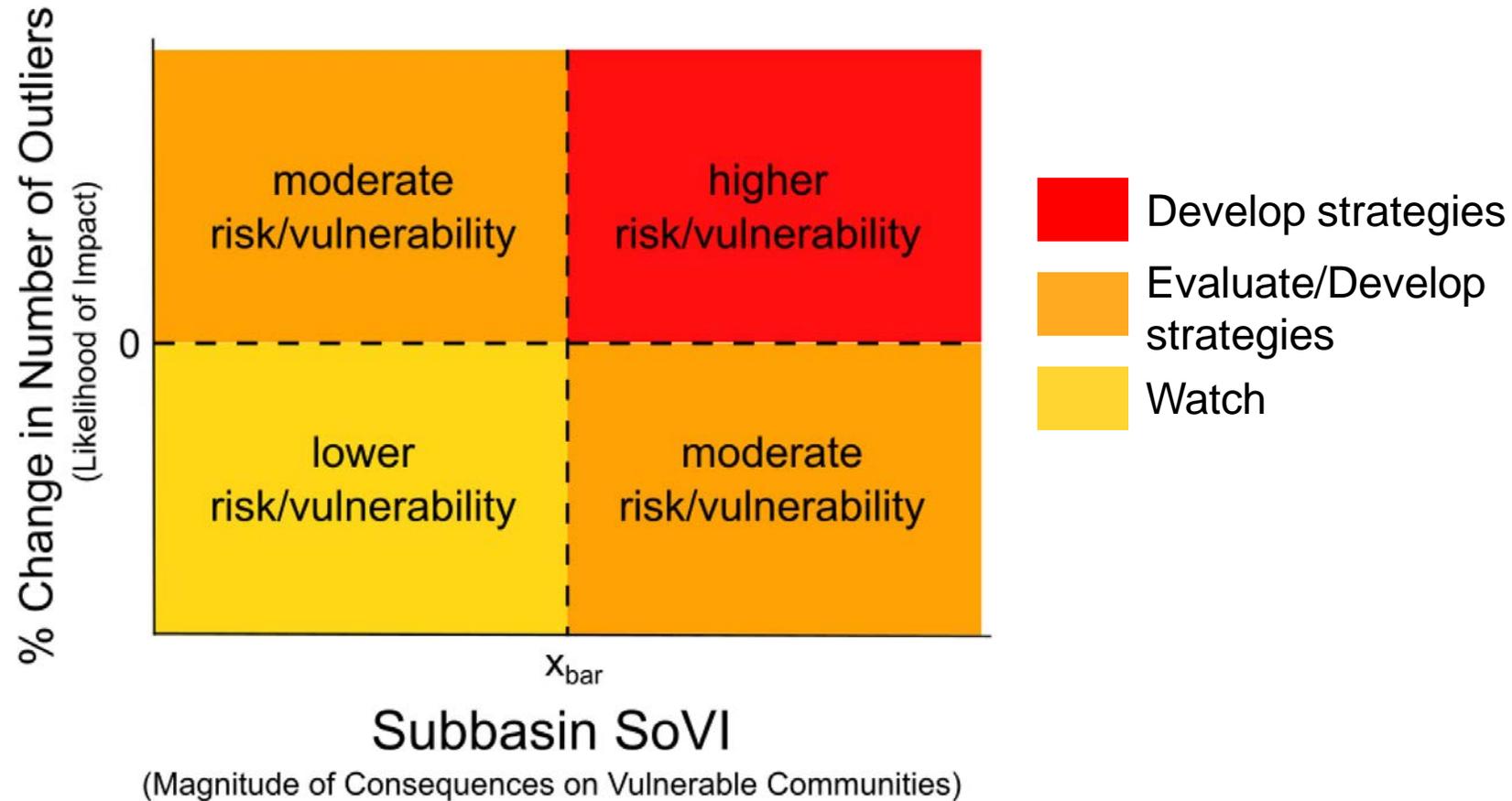
Subbasin Scaled



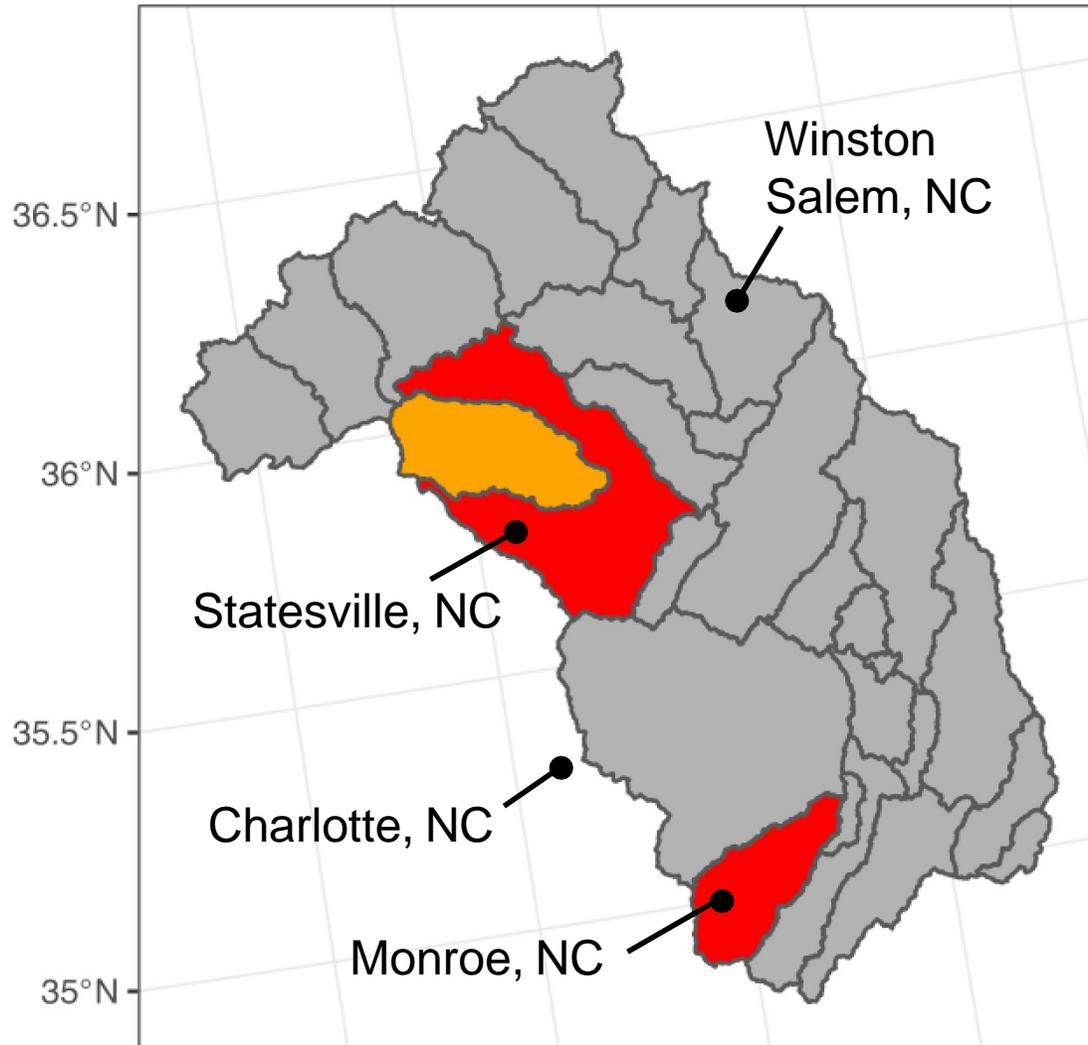
Methods

:

Risk/Vulnerability



Summary



-  Develop strategies
-  Evaluate/Develop strategies
-  Watch



The end

