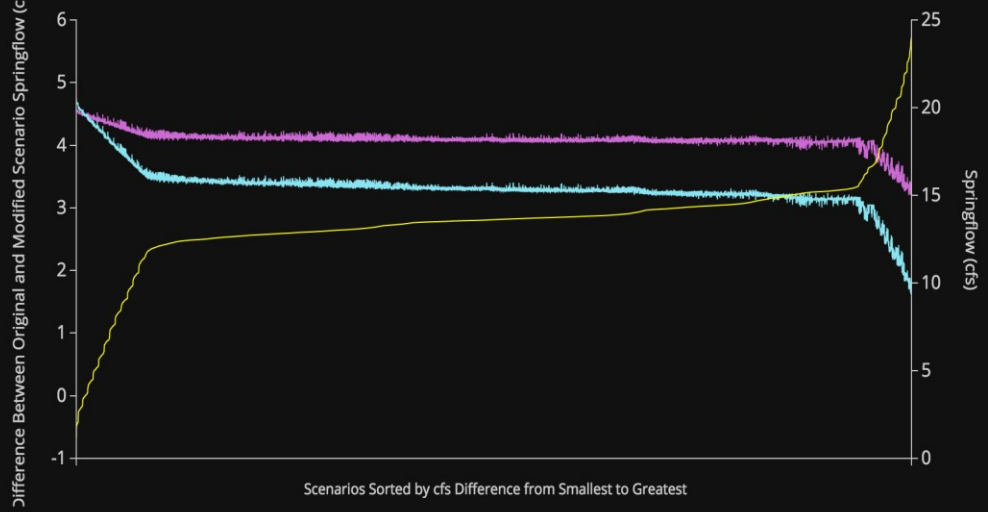
Multi-Criteria Spatial Decision Support System

Map Layers

Science & Uncertainty | Policy Implications | Management Implications | Topical Modelling | Watermark

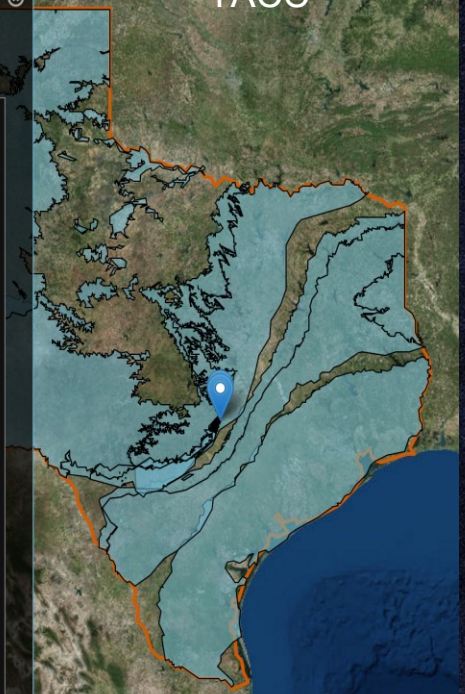
Policy Implications



Watermark: Barton Springs Case Study

Learn More

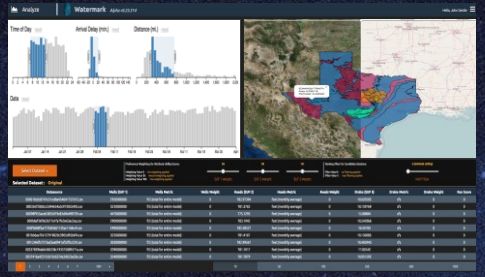
Suzanne Pierce
TACC

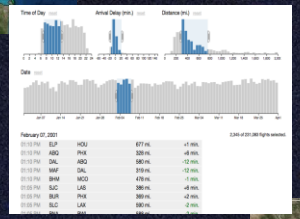


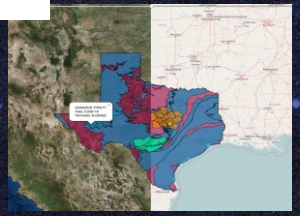
200 km
100 mi

Leaflet | © Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, UPR-EGP, and the GIS User Community

Watermark | DSS Development







Interactive Workspace

- Dashboard Builder
- Integrated Jupyter notebooks
- Advanced AI and DSS Scenario Ranking
- Basic Machine Learning support

Stage Four

Decision Design & Ranking

- Problem setup and formulation tools
- Select attributes and link for relationships
- Parameter and graph configuration tools
- Simple modeling to define relationships

Stage Three

Information Ecosystem

- Filter time series data
- table and graph views
- Discover interlinked events via data exploration

Stage Two

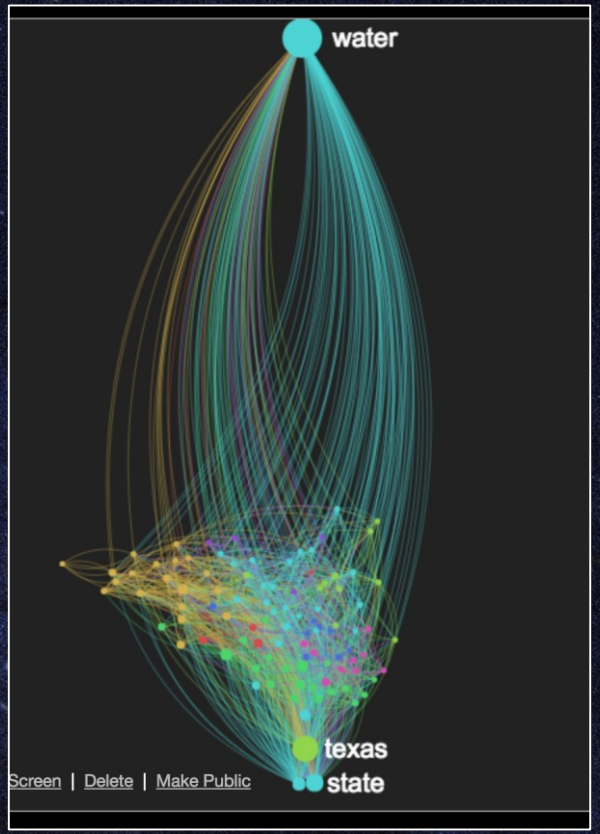
Basic Build and Display Tools

- Web-enabled application
- Data loading and transformation tools
- Map Slider for comparisons across scenarios
- Basic data format conversion from SWAT

Stage One

(from Pierce and Gentle, in prep)

- This Phase I work serves as a proof of concept effort
- Extend to evaluate sustainable aquifer yield and related topics
- Understand connectivity within network relationships
- Identify network motifs, Recurring circuits in topology & overall dynamics
- Modularity of analysis identifies structural organization
- New tool to generate dialogue and create cognitive dissonance
- Linking the social contexts with biophysical knowledge



Anticipated Outcomes of Watermark