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Western Consortium of Idaho, Nevada, and New Mexico

Study Proposal: Climate Change Impacts on Small Watershed Hydrography Using an Analog Approach

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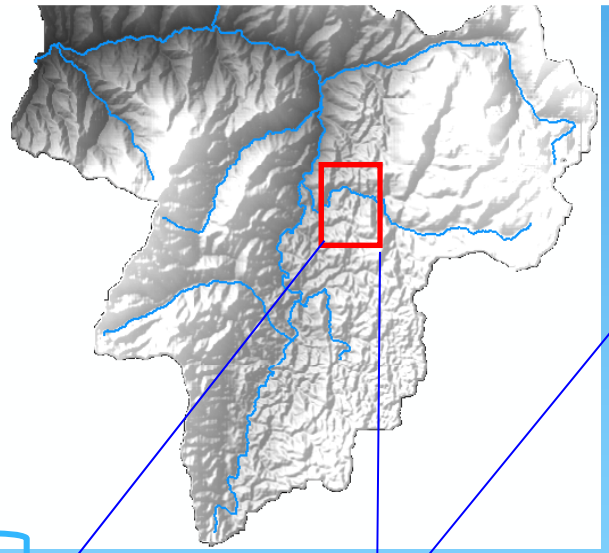
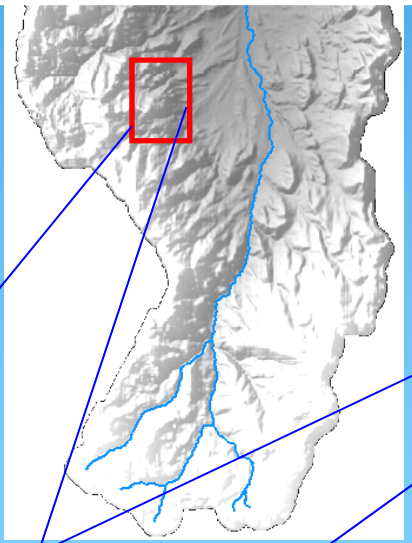
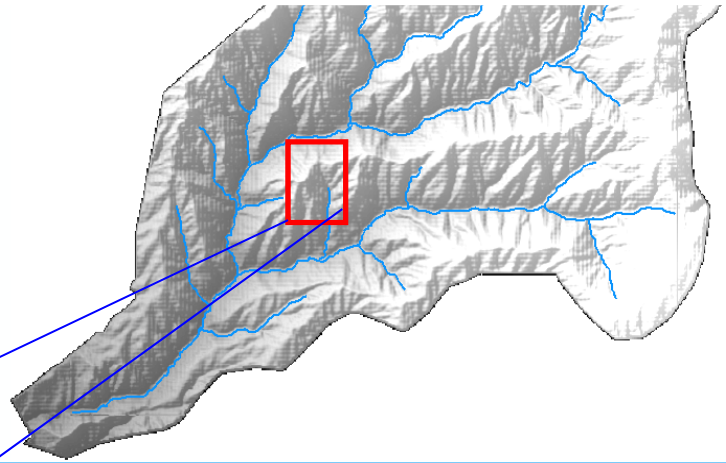
Question: How might rapid climate change impact small watershed hydrology/hydrography?

1. Identify ***n*** (50+?) small watersheds of similar size, shape, and terrain characteristics.
2. Extract detailed geomorphology metrics (LiDAR?) and climate/soil/land cover variables (GIS data) for each.
3. Identify variance between watersheds which may be attributed to climate differences.
4. Make predictions about potential change to a specific watershed by identifying most likely analog for a particular climate scenario.

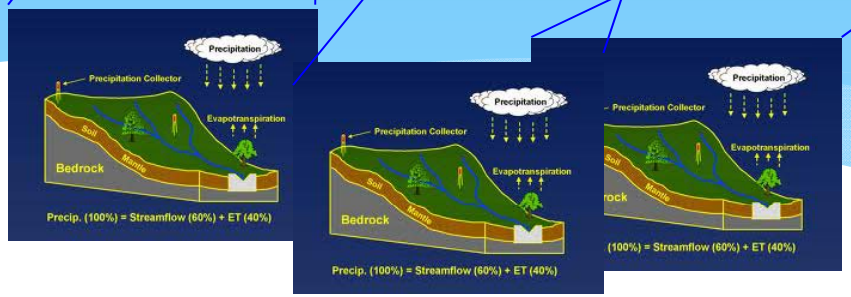
Proposed Approach

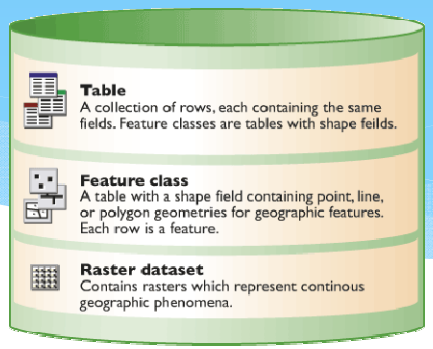


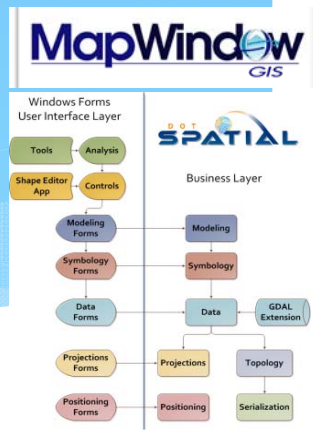




Elevation
Slope
Area
…







Climate Change Impact on Watershed