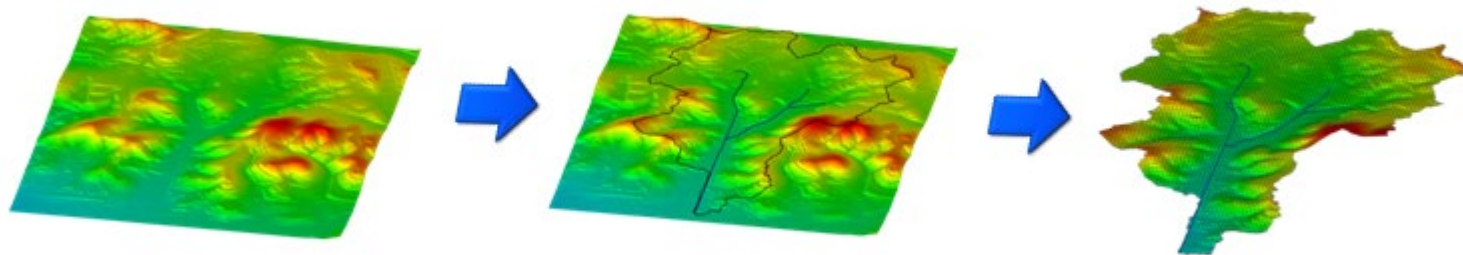


Watershed Modeling With DEMs

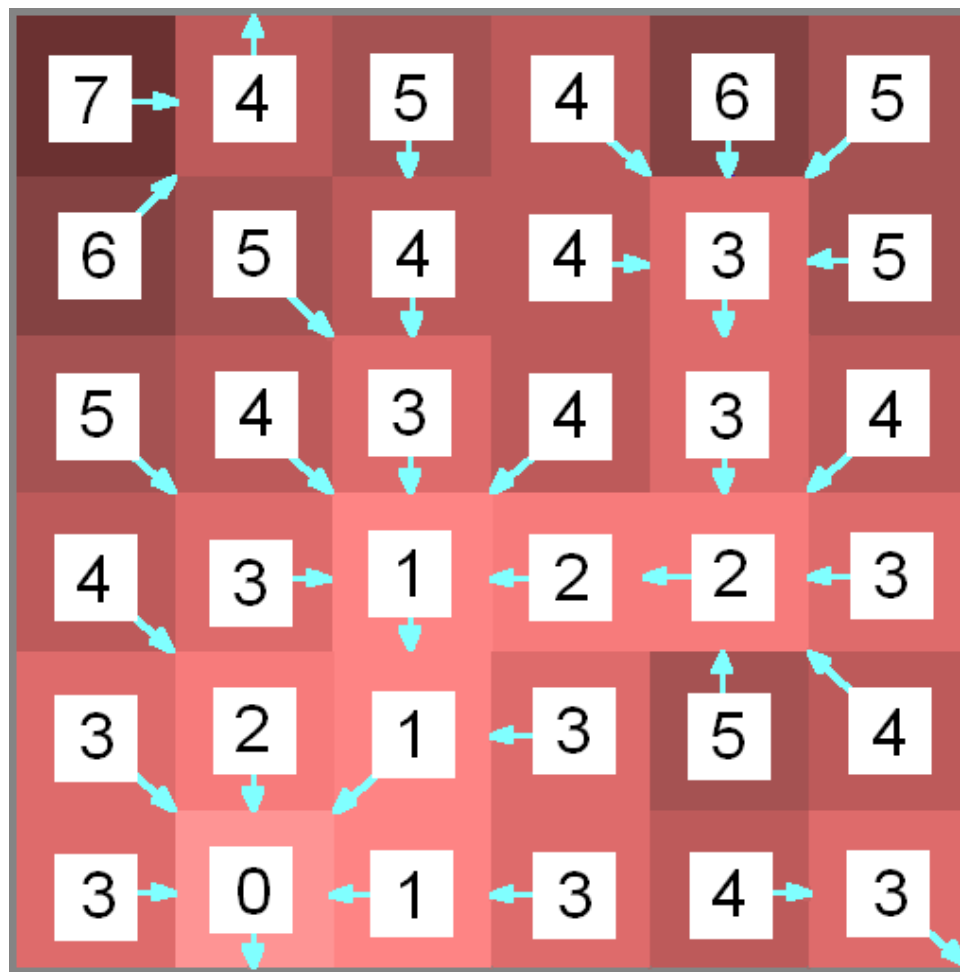


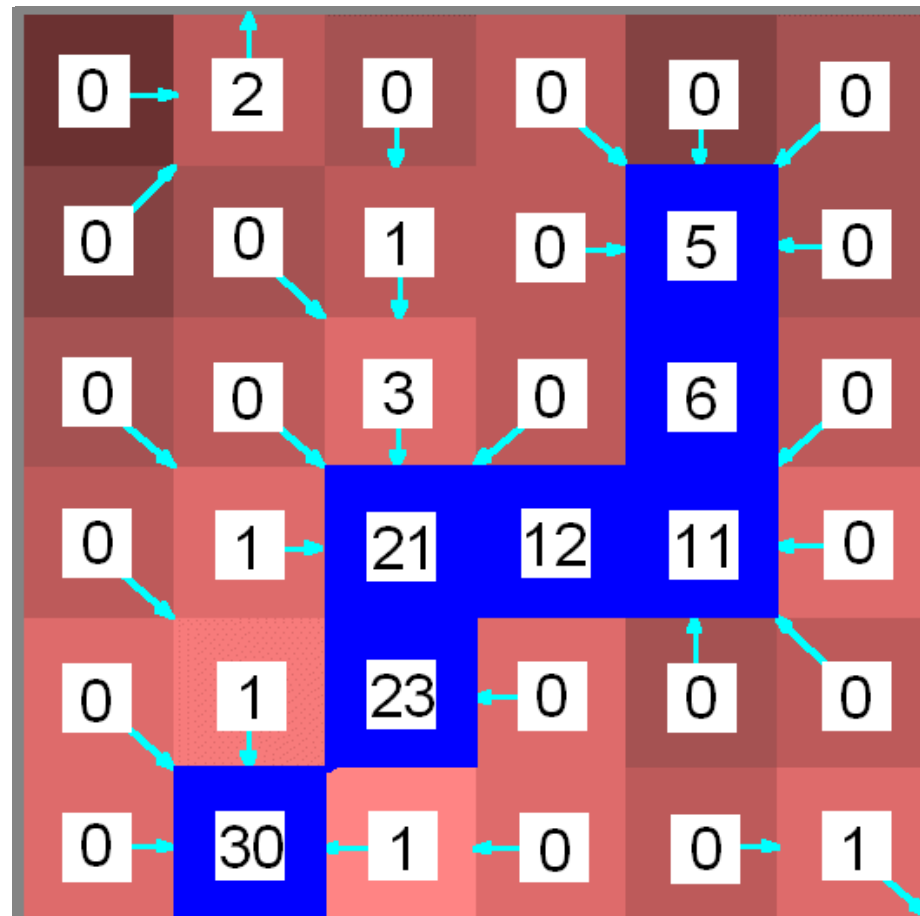


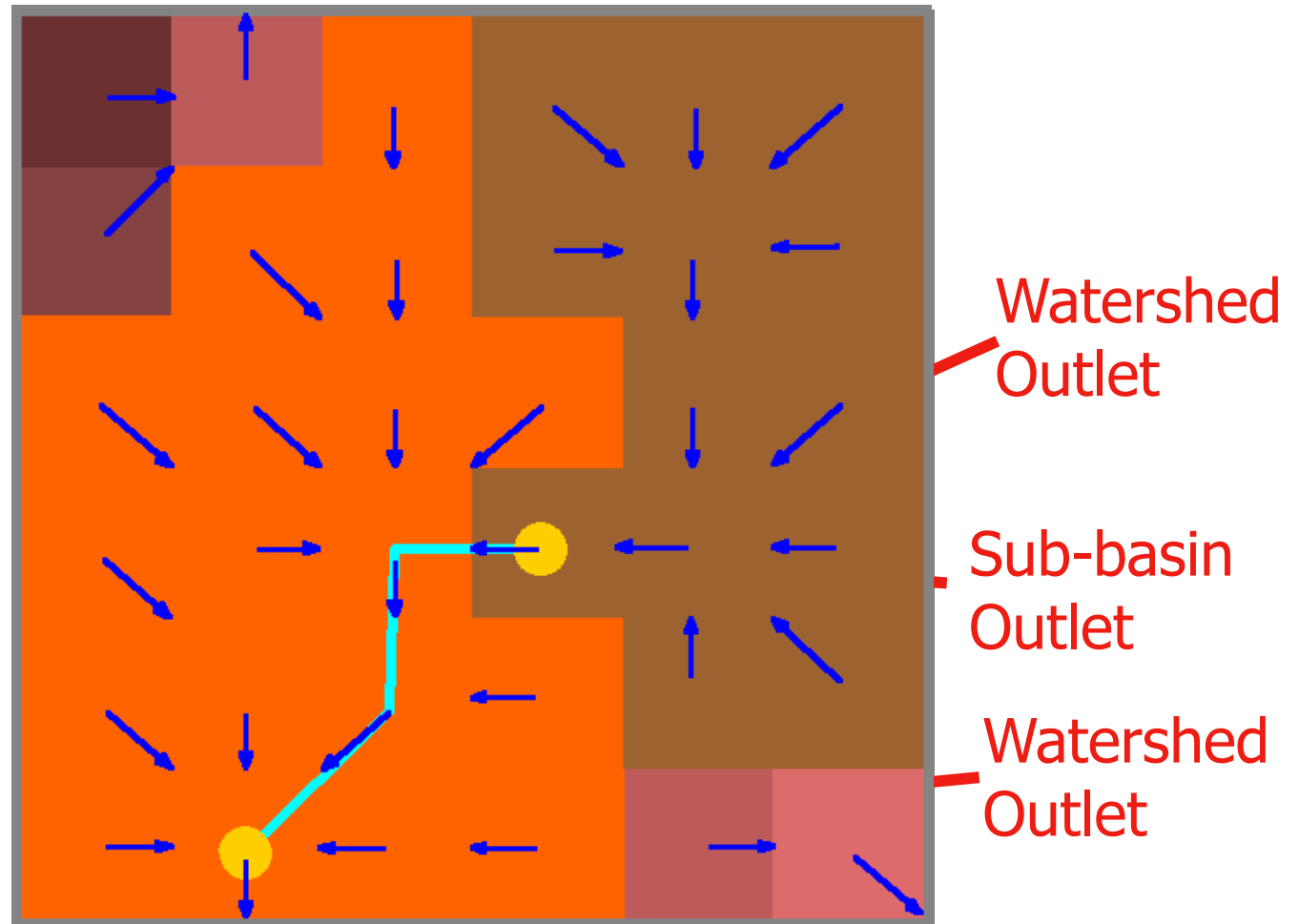
- Use DEMs for watershed delineation.
- Explain the relationship between DEMs and feature objects.
- Use WMS to compute geometric basin data from a delineated watershed.



- Fundamental Processes
 - Cell By Cell Flow Directions
 - Flow Accumulations
 - Streams and Basin Delineation





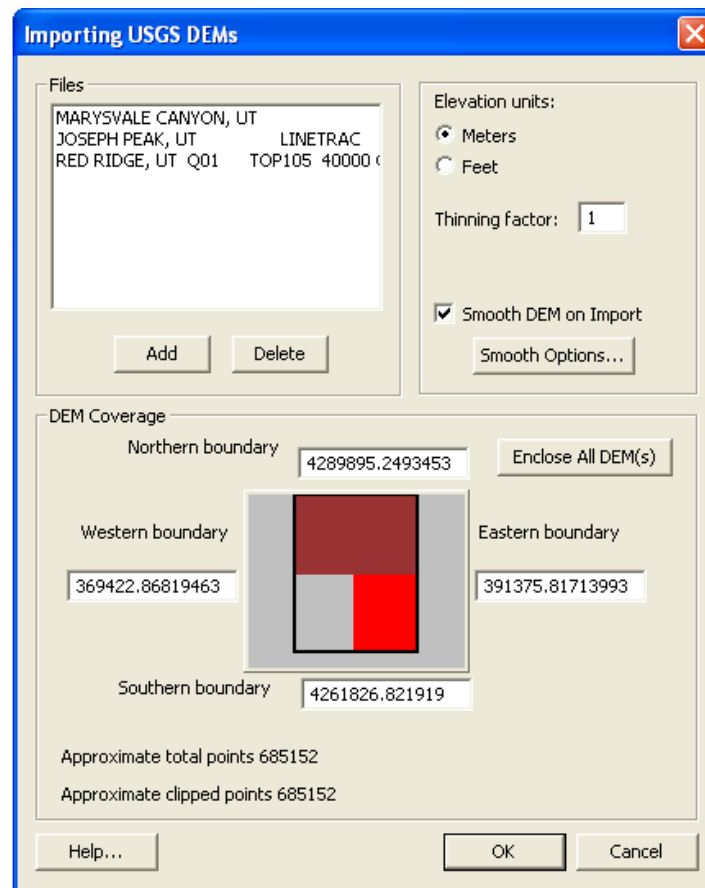


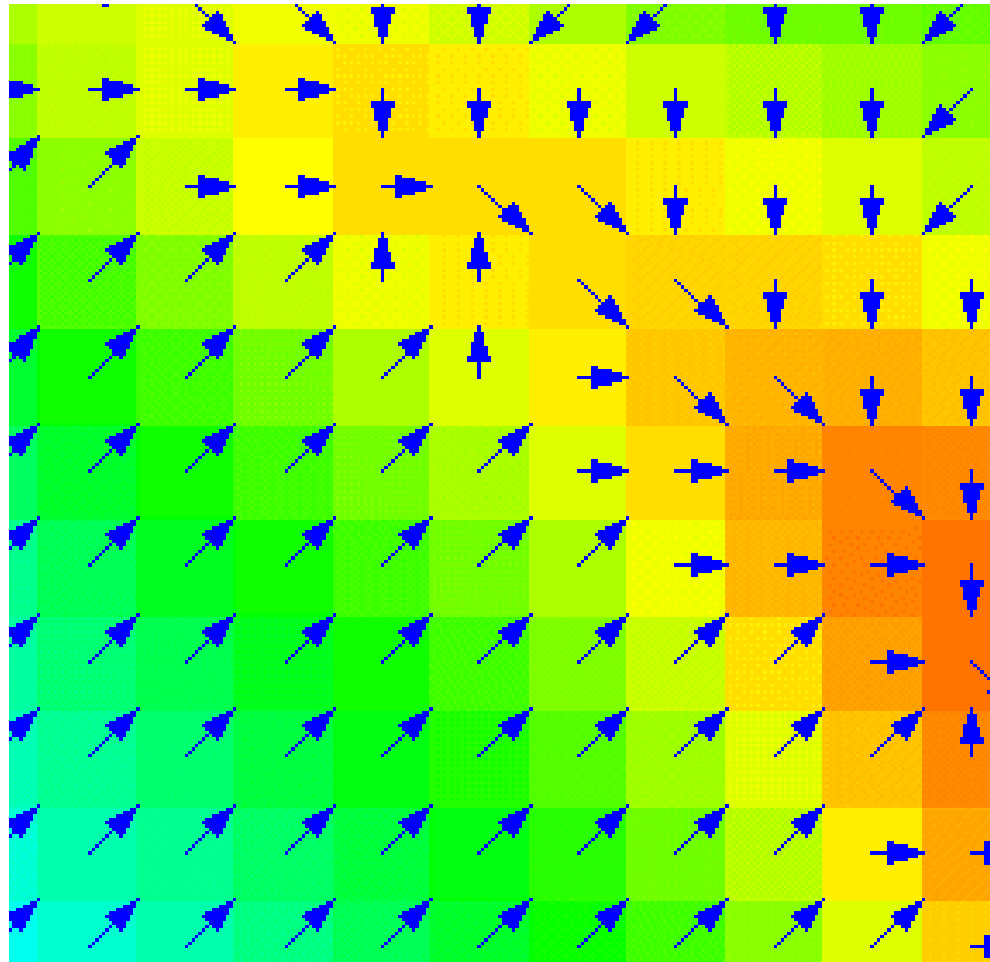


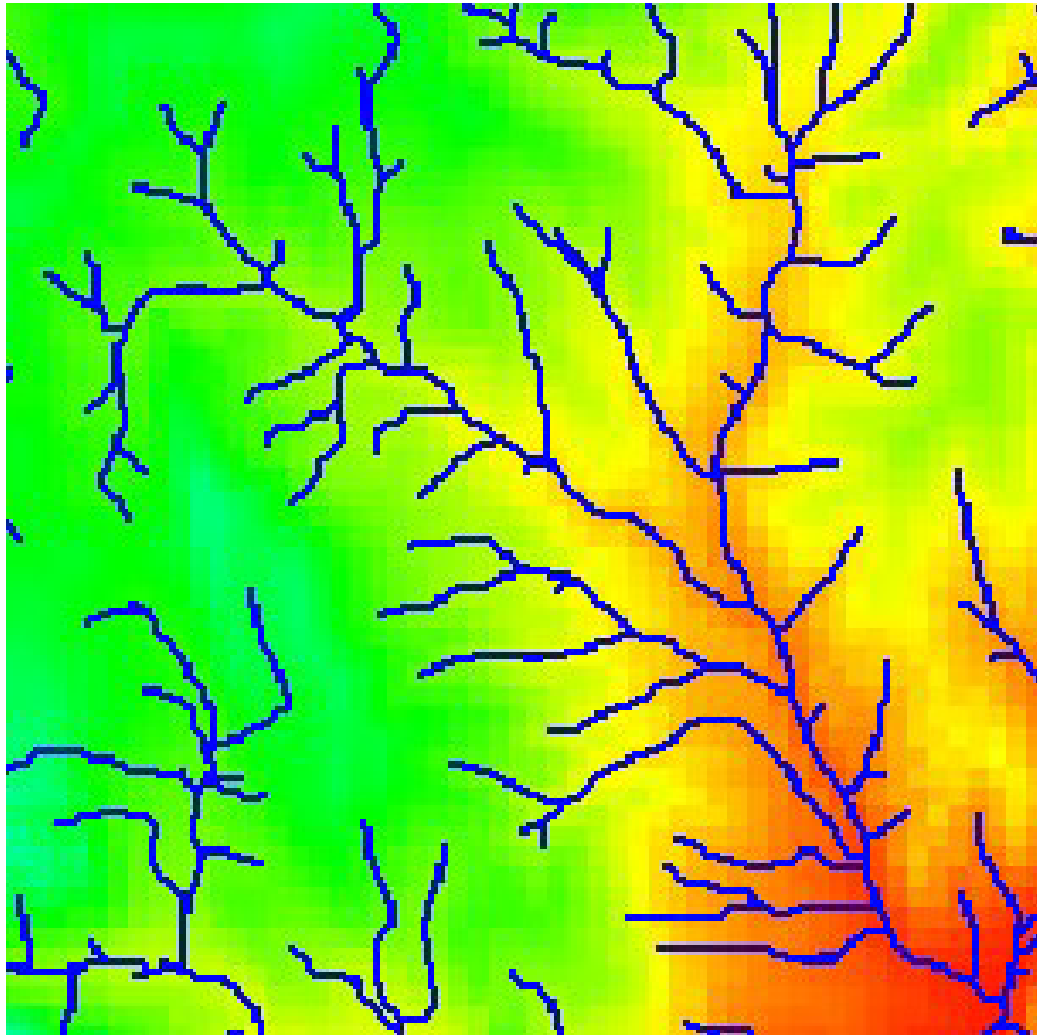
- 1. Read Elevations**
- 2. Compute Flow Directions and Accumulations with TOPAZ**
- 3. Define Watershed Outlet**
- 4. Convert DEM Streams to Feature Objects**
- 5. Add Interior Sub-basin Outlets**
- 6. Define Basin(s)**
- 7. Convert Boundaries to Polygons**
- 8. Compute Basin Parameters**

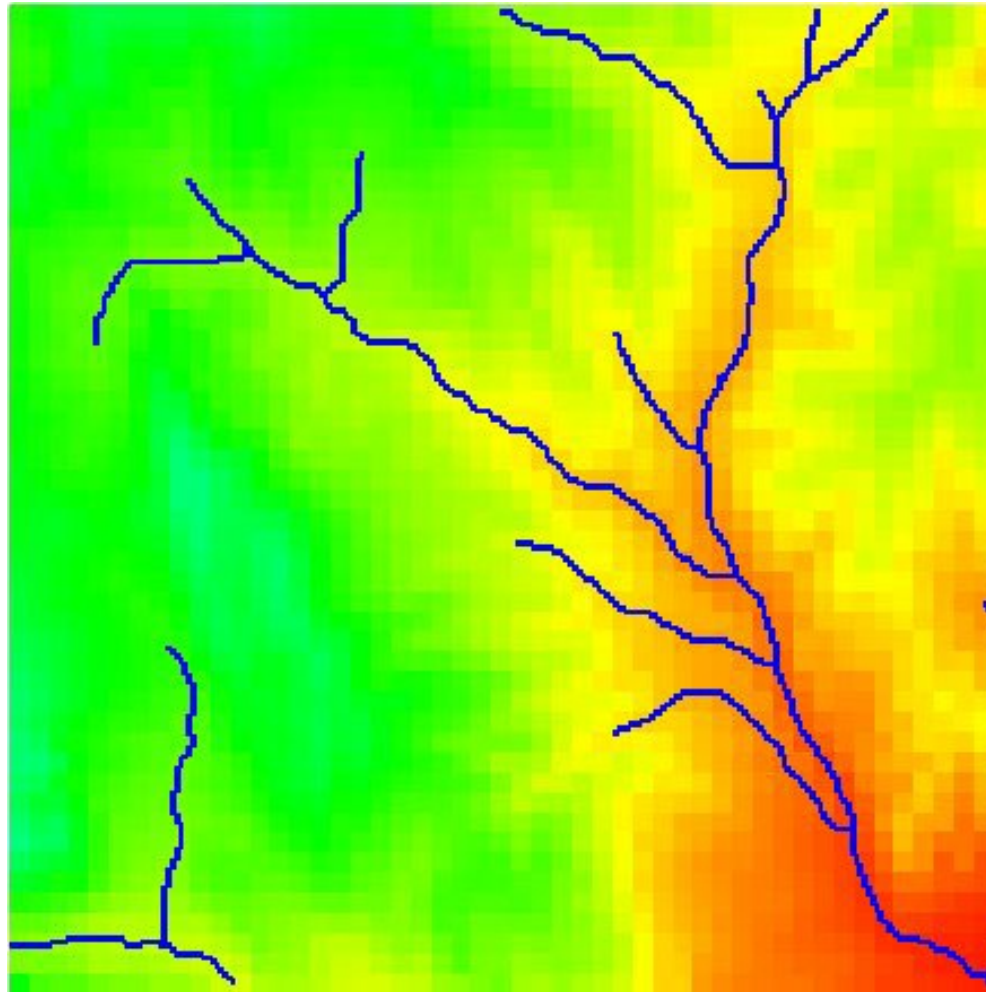


NED, USGS, ARC/INFO, or any supported format









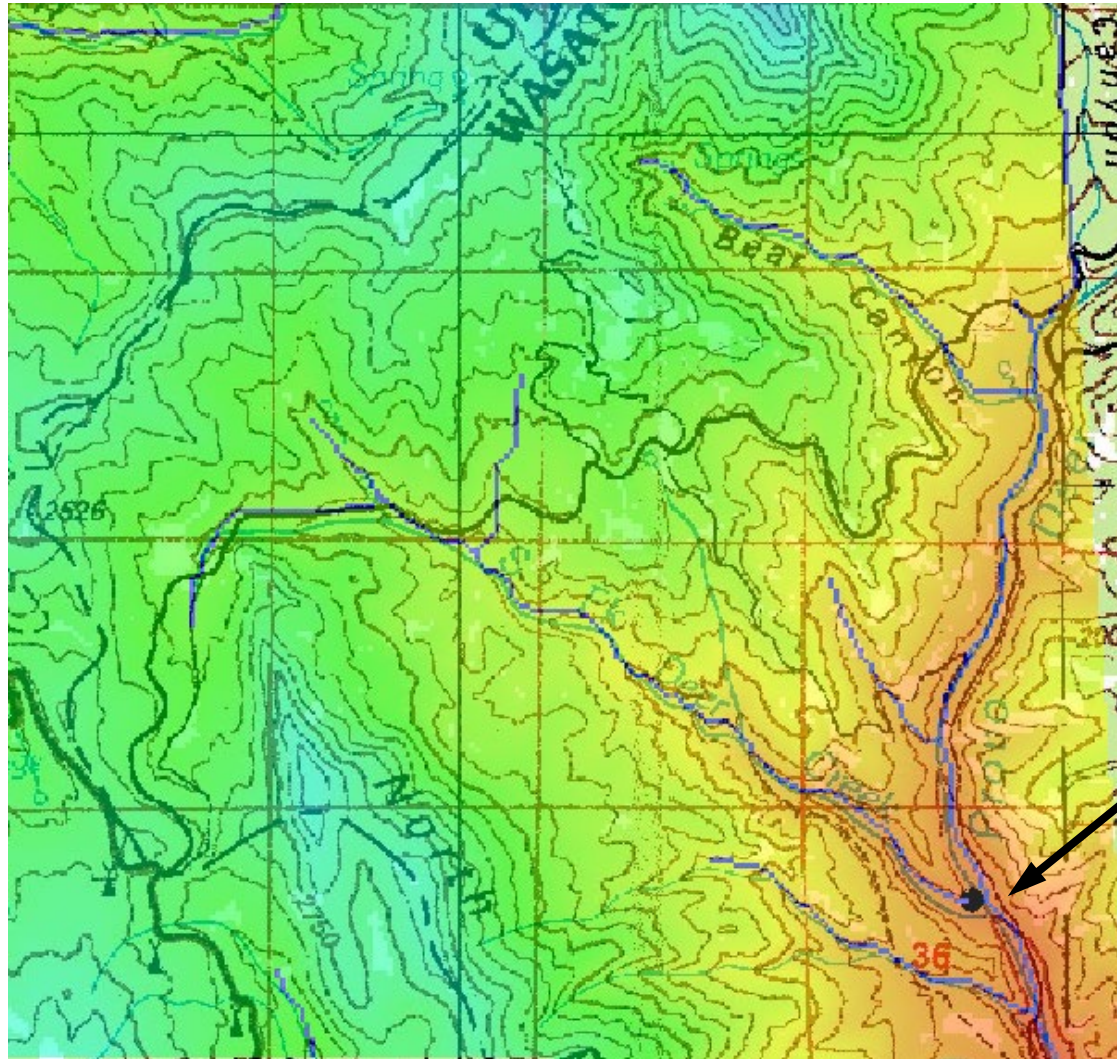
.5

.25

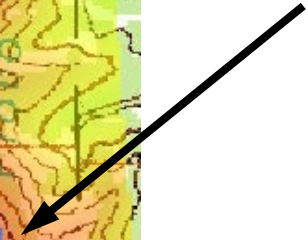
.05

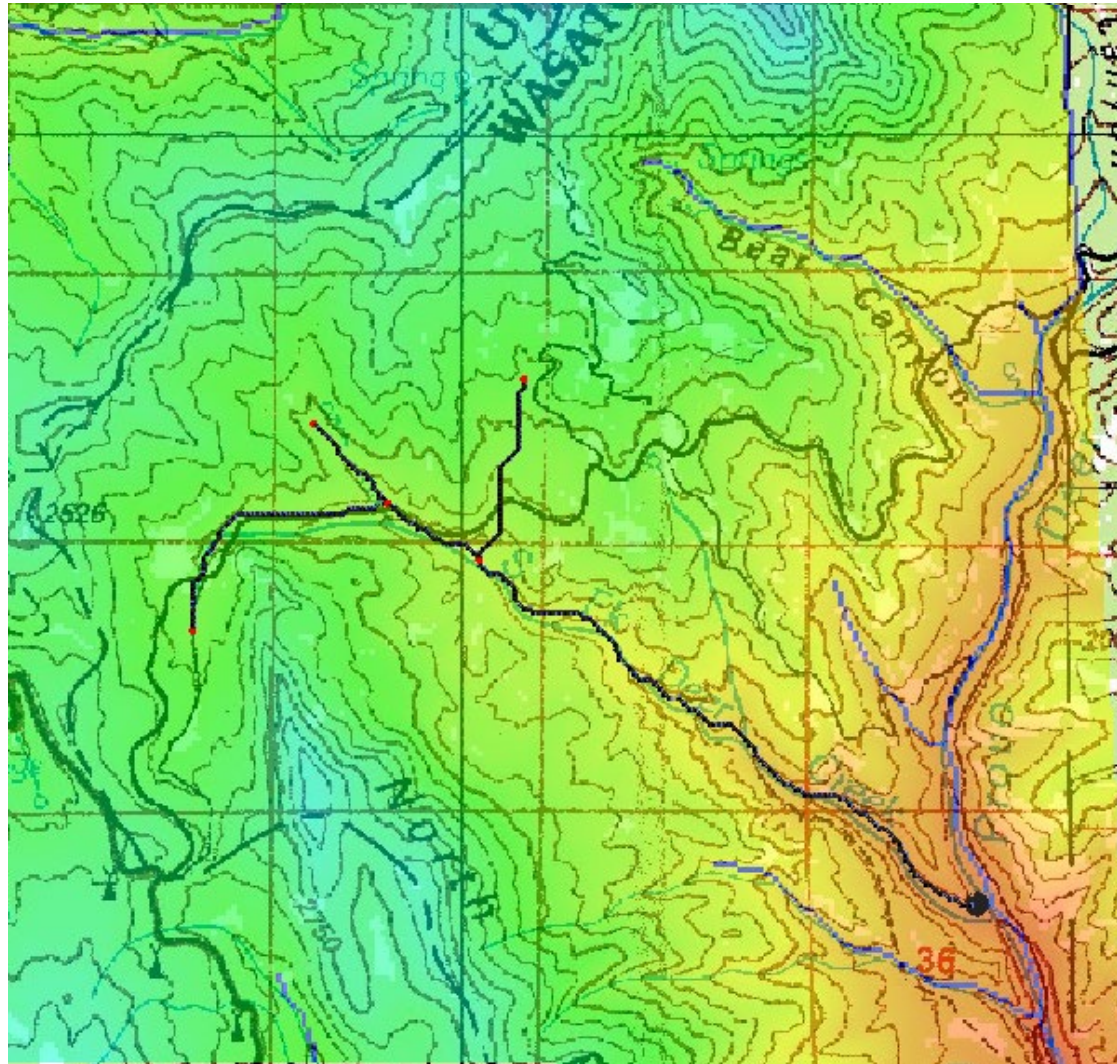


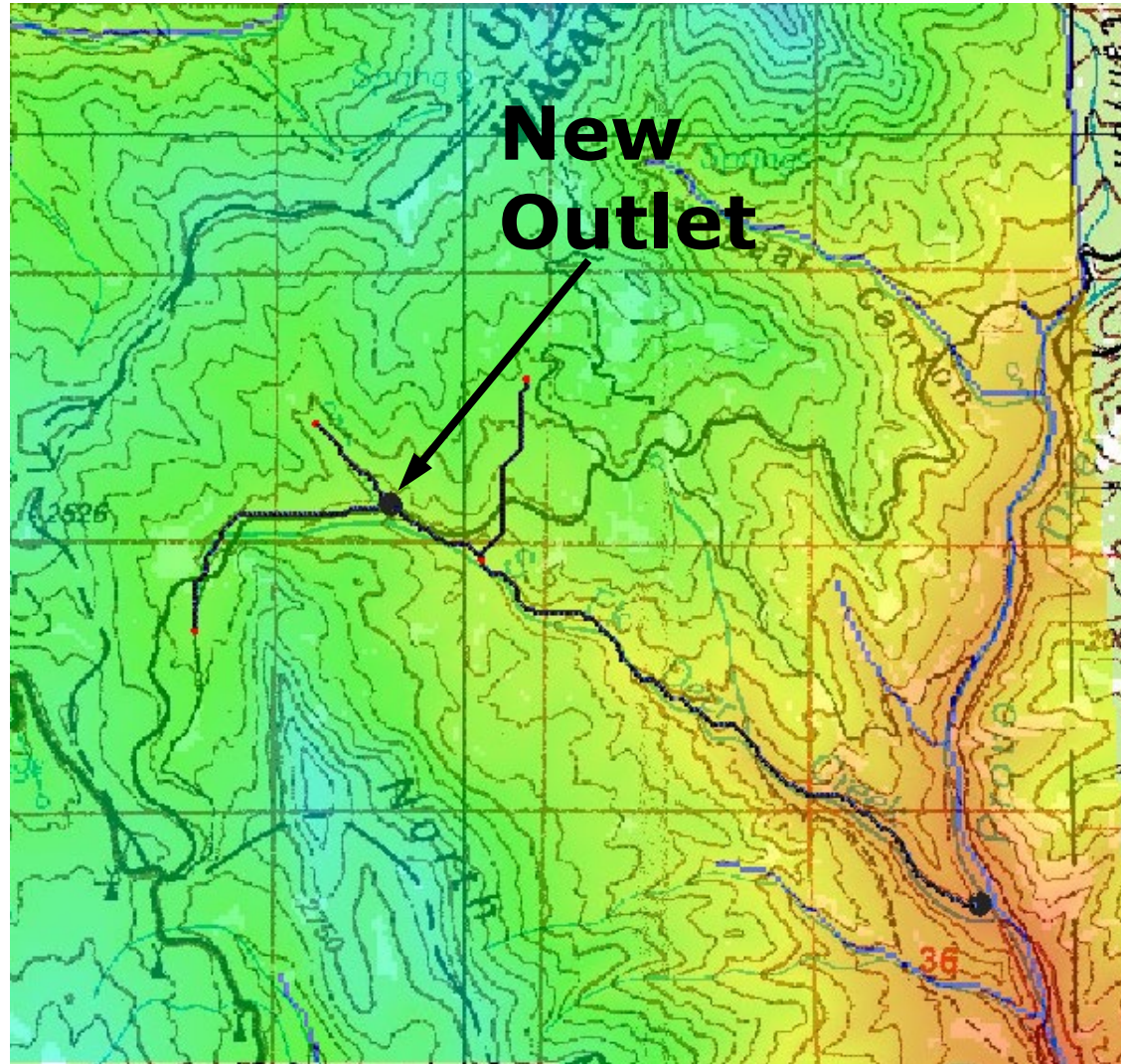
3. Define Watershed Outlet

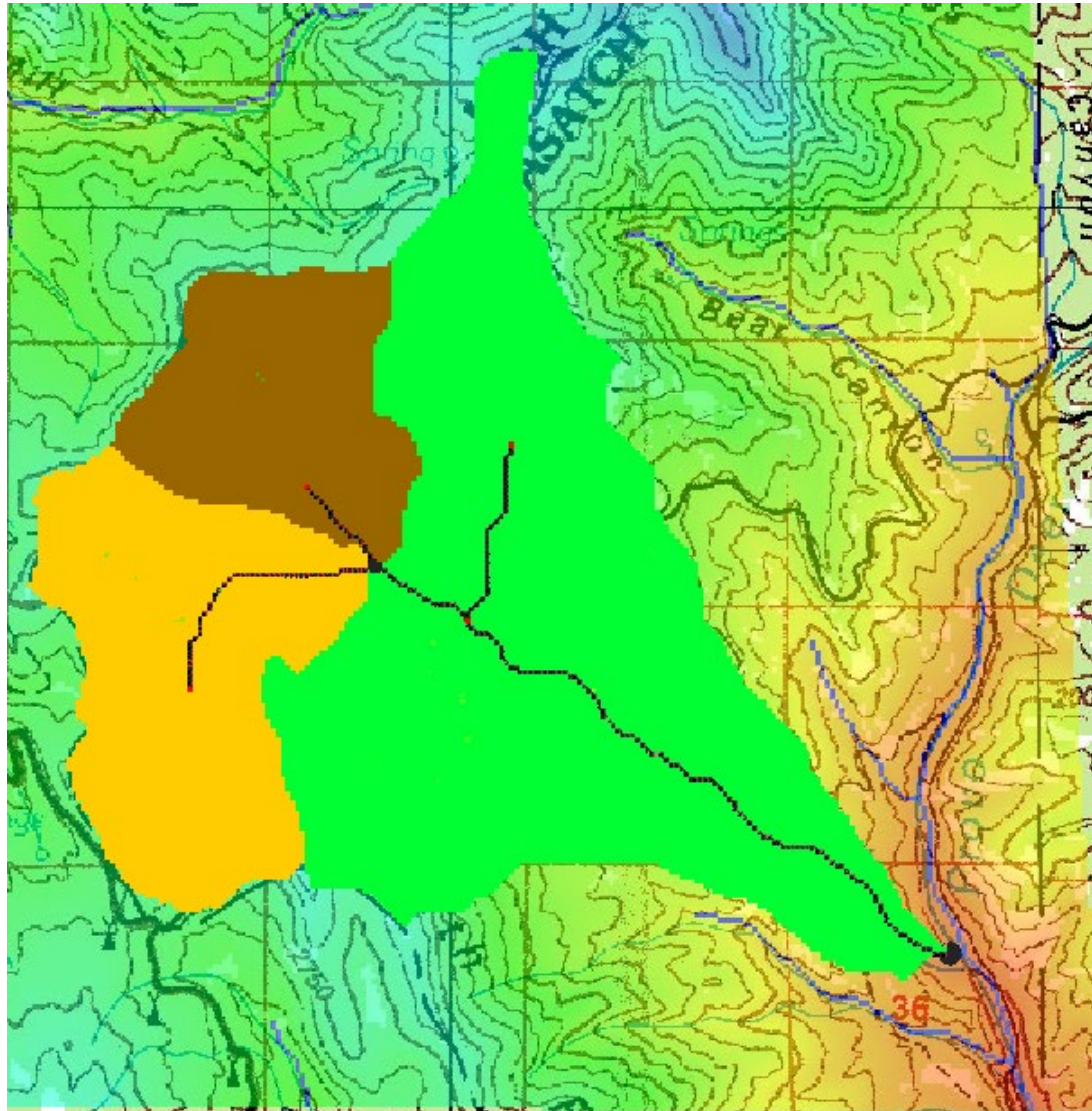


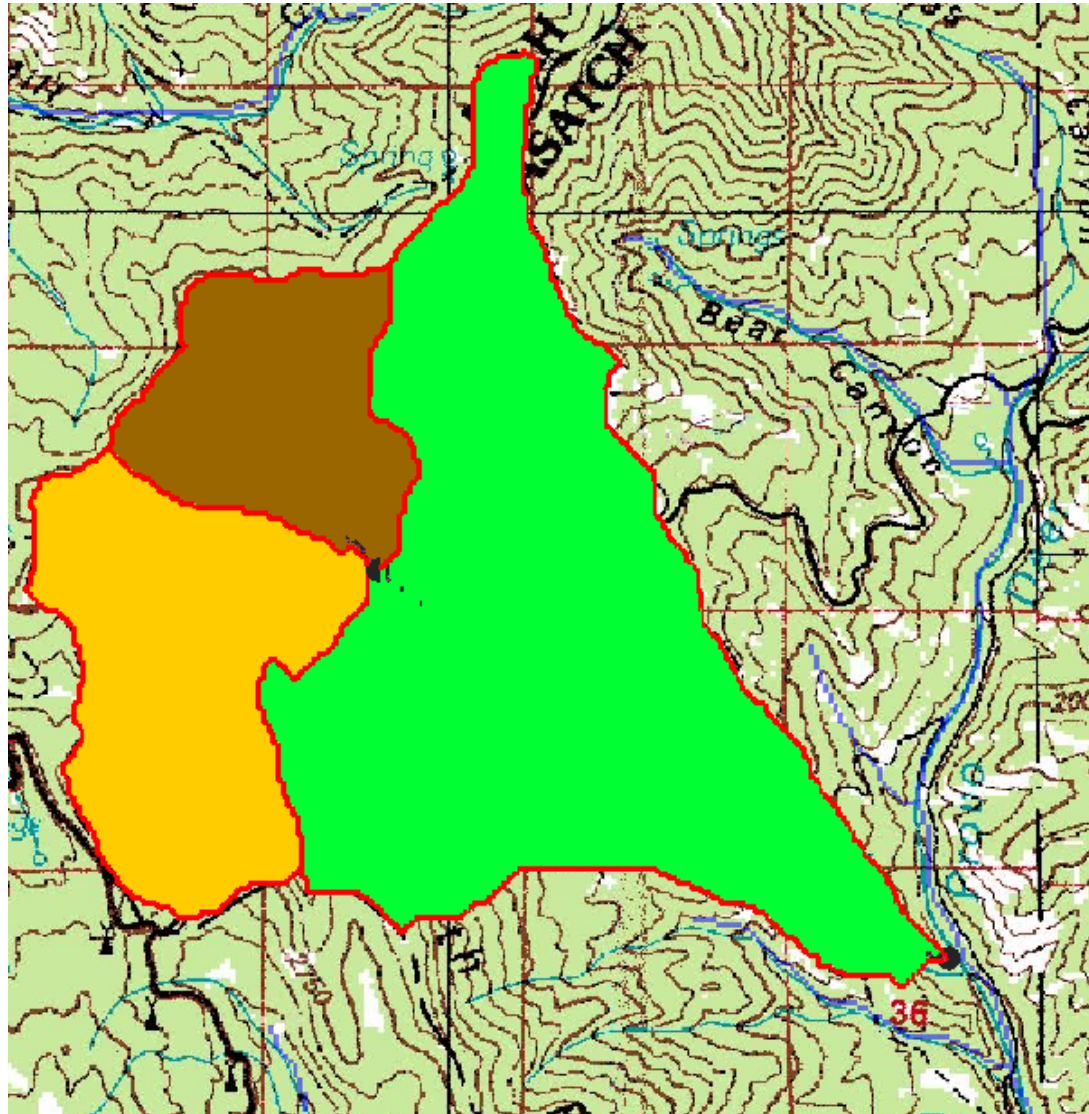
**New
Outlet**

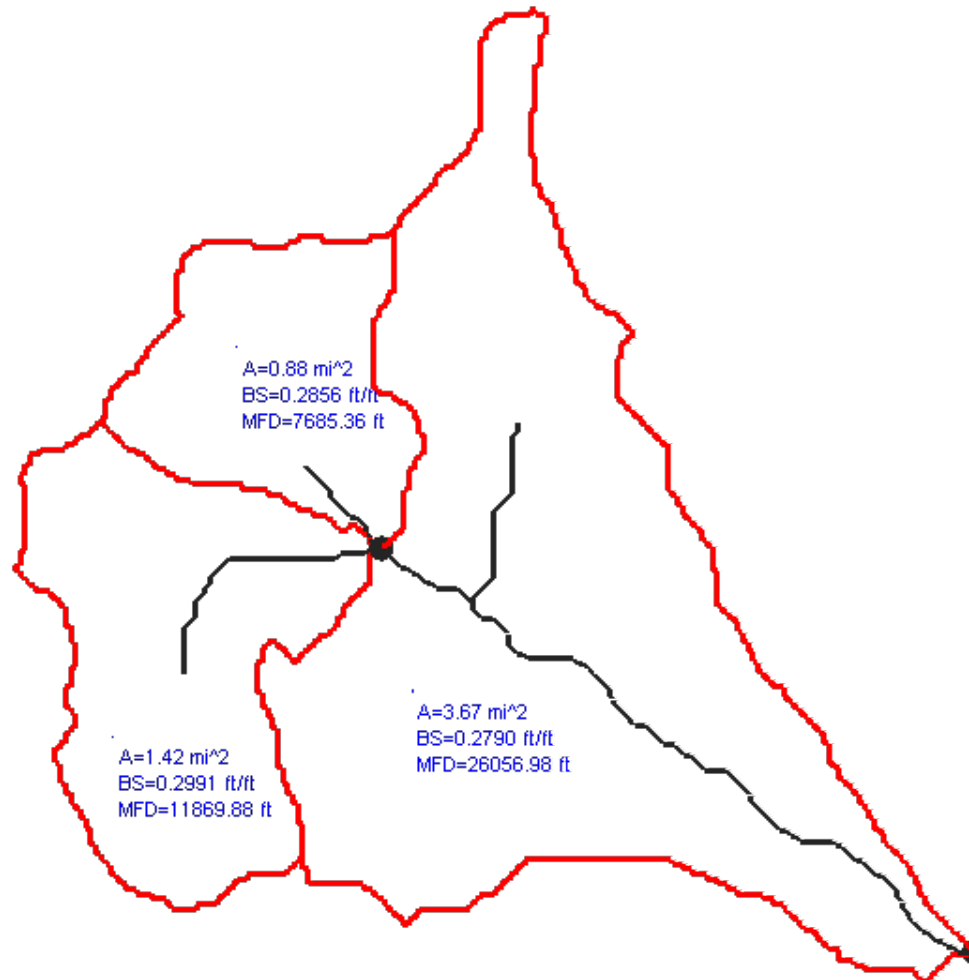




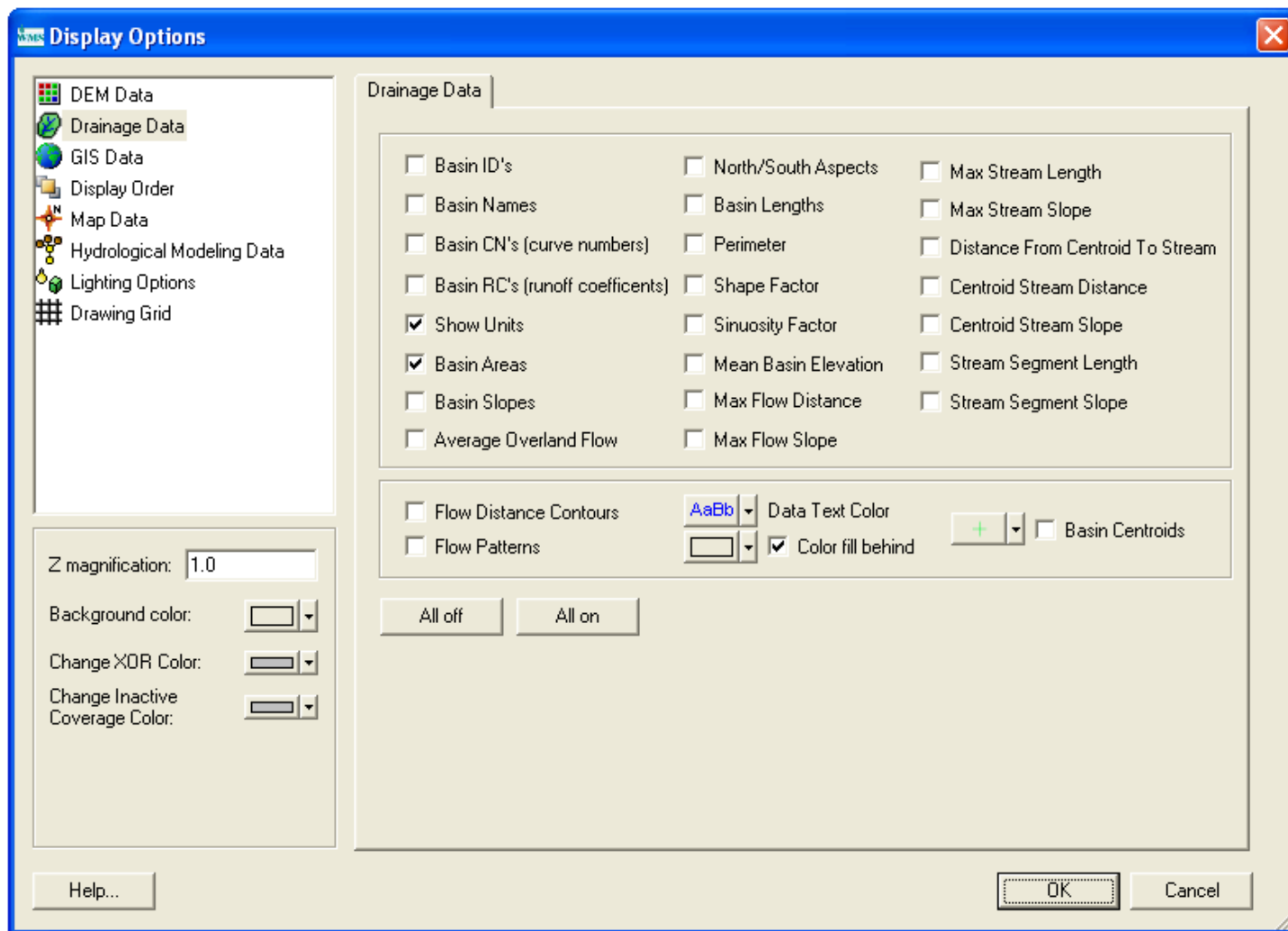


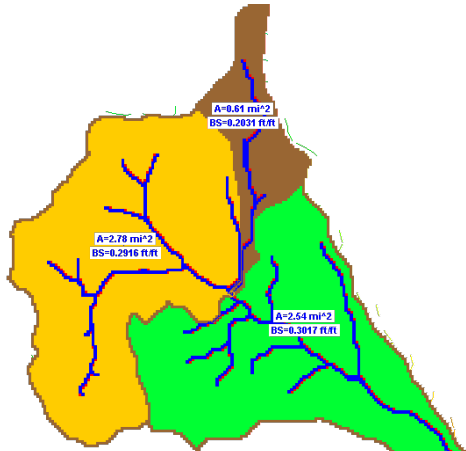






If outlet changes are made, basins must be redefined!



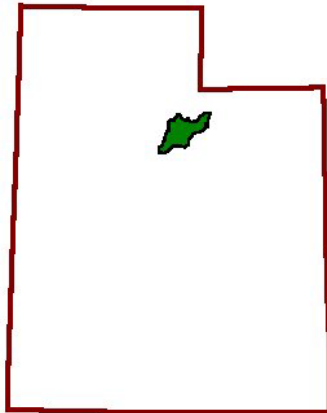


Automated

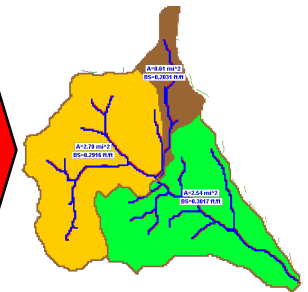
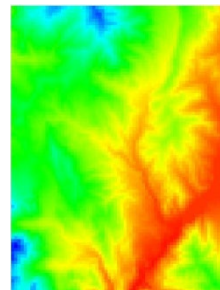
US GeoData



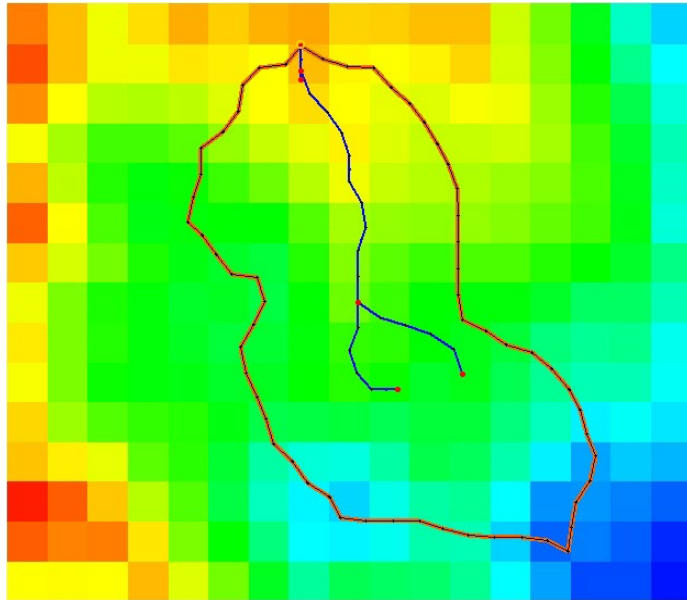
Abundant Data



Large Areas



"Black Box"



Small Areas



"Black Box"
May not produce
what you expect