

2. Physiographic Data Sets

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Organize Discussion by Objective

- Flood Forecasting/Inundation Mapping
- Drought Forecasting
- Total Water Forecasting in Coastal Zones
- Water Quality
 - Point Source/Spills
 - Non-point Source

Potential Outcome

	Flood Forecasting	Drought Forecasting	Total Water	Water Quality-Point Source	Water Quality-NPS
NHD+/DEM					
Stream Geometry					
Soils Hydraulic Properties					
Soil Chemistry					
Aquifer Hydraulics					
Aquifer Geochemistry					

Overarching Challenge

- Surface Data Sets
 - Improved resolution (NHD+) vs. enhancements (3D)
 - Incorporating additional data (e.g., SMAP for ponding?)
- Subsurface Data Sets
 - Much more challenging
 - On-line vs off-line use (e.g., SSURGO and STATSGO)
 - Re-classification of underlying data (e.g, Soil Pedon Data)
 - Extrapolation of sparse observation