**DSP Hub**

**Library Item SHAPE SOC:** *currently these are in chronological order as I would do this on my desktop*

* **Input SOC value and location**
  + Initially use LDM surface only
    - Ignore organic layers for now

– also grab texture class and any classification data

* **Gather data to assign peer groups**
  + Layers with value
    - MAT
    - MAP
  + From SSURGO – dominant and all components
    - Surface texture classes
      * Clean and reclassify
    - Suborder
      * Clean and reclassify
* **Develop Curve: Prep Statistical Algorithm** 
  + Open R script
  + Load packages
    - Load background data??? May have to develop from full dataset …….. still working on this
  + Run script to develop CDF (curve)
* **Produce Score: Apply Statistical Algorithm**
  + Use CDF (curve) to go from SOC value to score (0 to 1)
  + Repeat for each input combination
    - Initially have multiple outputs to test use of SSURGO
      * Texture – sample vs. SSURGO dominant vs. SSURGO multiple components
      * Suborder – pedon assigned vs. SSURGO dominant vs. SSURGO multiple components
        + Future work: consider something like LandPKS to assign likely component (in the future this would likely require linking back to the full pedon description)
  + Produce visualization for each score
* Analyze: Use scores for Aggregation and Outcomes
  + Internal: classes from initial data source (like CIG categories)
  + External: classifications from other datasets
    - Spatial joins to admin units
    - Tabular joins to other categories
      * OF-SHDT input to conservation practice