Summary of Thursday

- The first thing we noted was an update water quality modeling lecture with better explanation of the conversion factors using EMC grid values.
- Using statistical analysis we examined if the weights from the groups of the class could be combined into one overall weight set.
- The non parametric Chi square test examined the Ho that the data was from the same population or not (if from the same population then we could combine the group weights into one overall weight).
- The compromise programming algorithm was run with the combined weights to rank order all of the 12 digit hucs in the watershed. After we ran the algorithm in Excel we exported the identifier for the watersheds with the final rank out to ArcMap to be joined to the shapefile.
- Mark showed us how to create a KML file for use in Google Earth by using Xtools, it could also be done with the conversion tool form ArcToolBox.
- The terrain analysis input can NOT be the filled dem2 which had the burned in streams. We used fildem effectively.
- Moisture indices and concavity/convexity can be run in ArcMap to show where in the watershed has more or less complexity than others.
- Soils data viewer using ESRI map server is a great way to access soils data.
- Geomorphology and terrain metrics toolbar from Jeff Evans at Spatial Ecology provides varied tools for better understanding terrain differences.
- One of the tools we ran from class was the roughness index. All of his tools have appropriate legends.
- Interpolation allows us to model cell values where we don't have values.
- Exploring data for trends, normality, outliers and spatial autocorrelation should be done to find create better interpolated surfaces.
- The upside down U indicates a need for a second order polynomial model.
- Use models that have Adjusted Mean Square Errors of .8 or higher (range up to 1.0).