Summary of Tuesday

- Stream flow estimation with the drainage area ratio method is a quick and easy application once you have drainage area FAC grid and a known gauge site with flow.
- Applications to areas 1.5 to .3 of the known gauge
- Statistical analysis of hydrological data, R code for retrieving and analyzing USGS gauge data.
- We created a spatially explicit runoff grid from PRISM 30yr annual average precipitation in mm/yr.
- The relationship was developed using flow in mm/yr on an annual basis.
- 65% of the rainfall annually flows off the cell and can be accumulated throughout the watershed providing for us annual average streamflow.
- We were within 11% or were 89% correct in predicting our value of 479 cfs to 421 for the Big Sandy Gauge. This made us feel good about potential work in using the cumulative runoff grid for WQ modeling.
- Mapping potentially affected streams is done with the weight grid in the FAC command. The weight can be any overland flow disturbance you want to show the path across the landscape.