

Flow-Ecology Relationships




Saluda RBC, October 18th, 2023

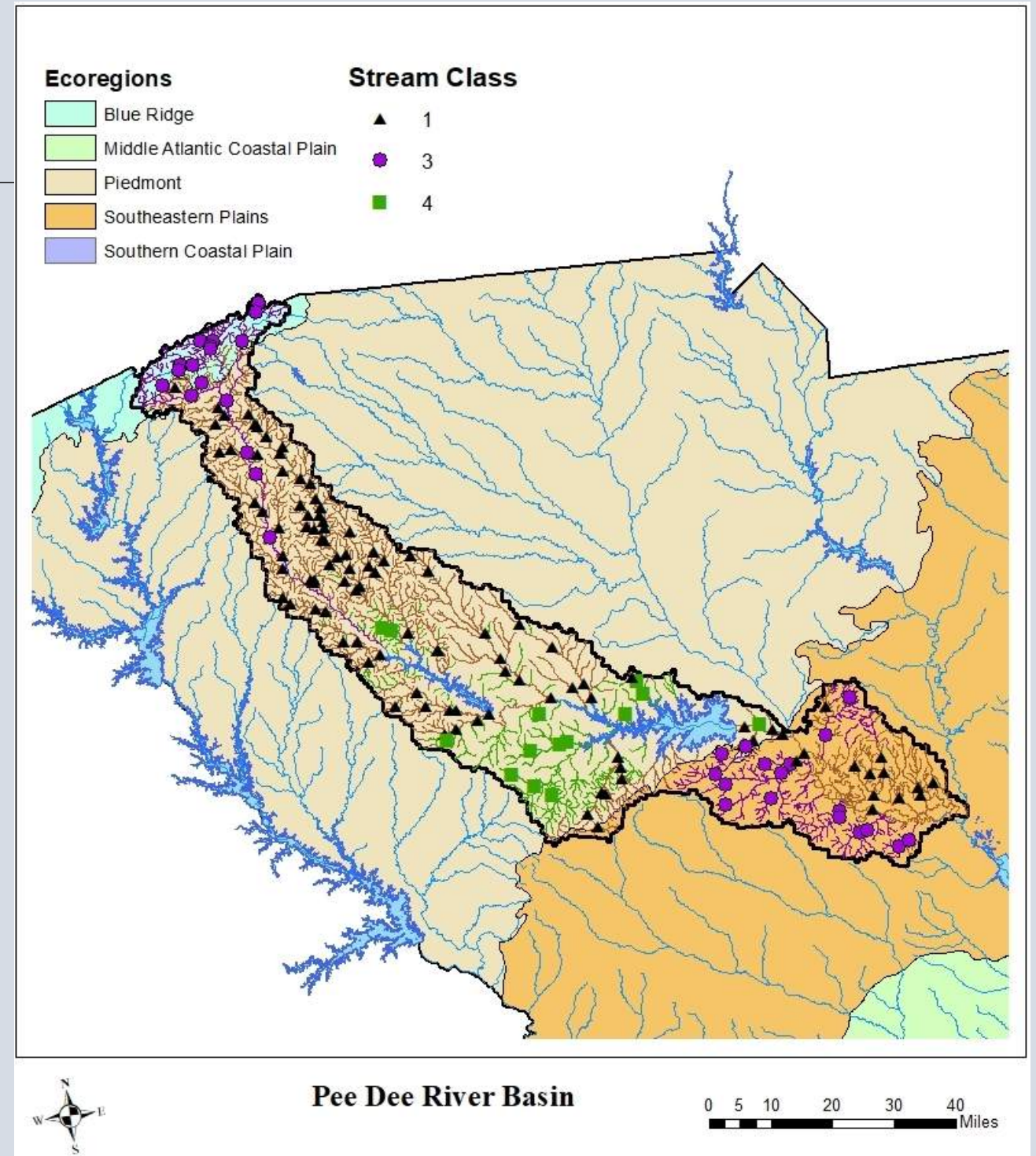


Drs. Luke Bower, Joe Mruzek, and Brandon Peoples

Agenda Item 3

Ecoregions

-  • ~~Blue Ridge: Mountainous~~
-  • Piedmont: Rolling hills
-  • ~~Southeastern plains: Flatter, well drained sandy soils~~

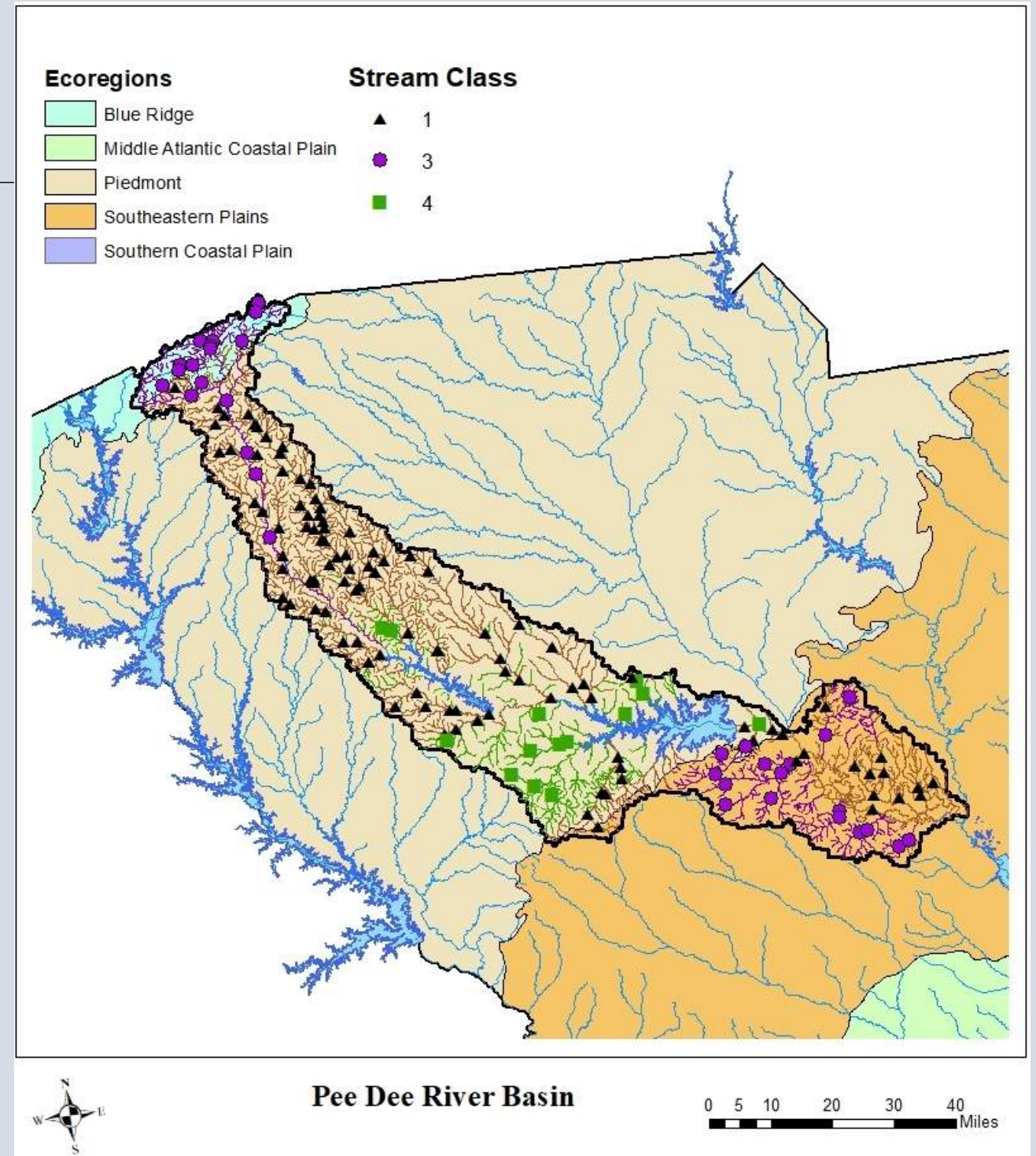


Stream Classes

▲ • 1: Perennial runoff:
moderately stable flow and
distinct seasonal extremes

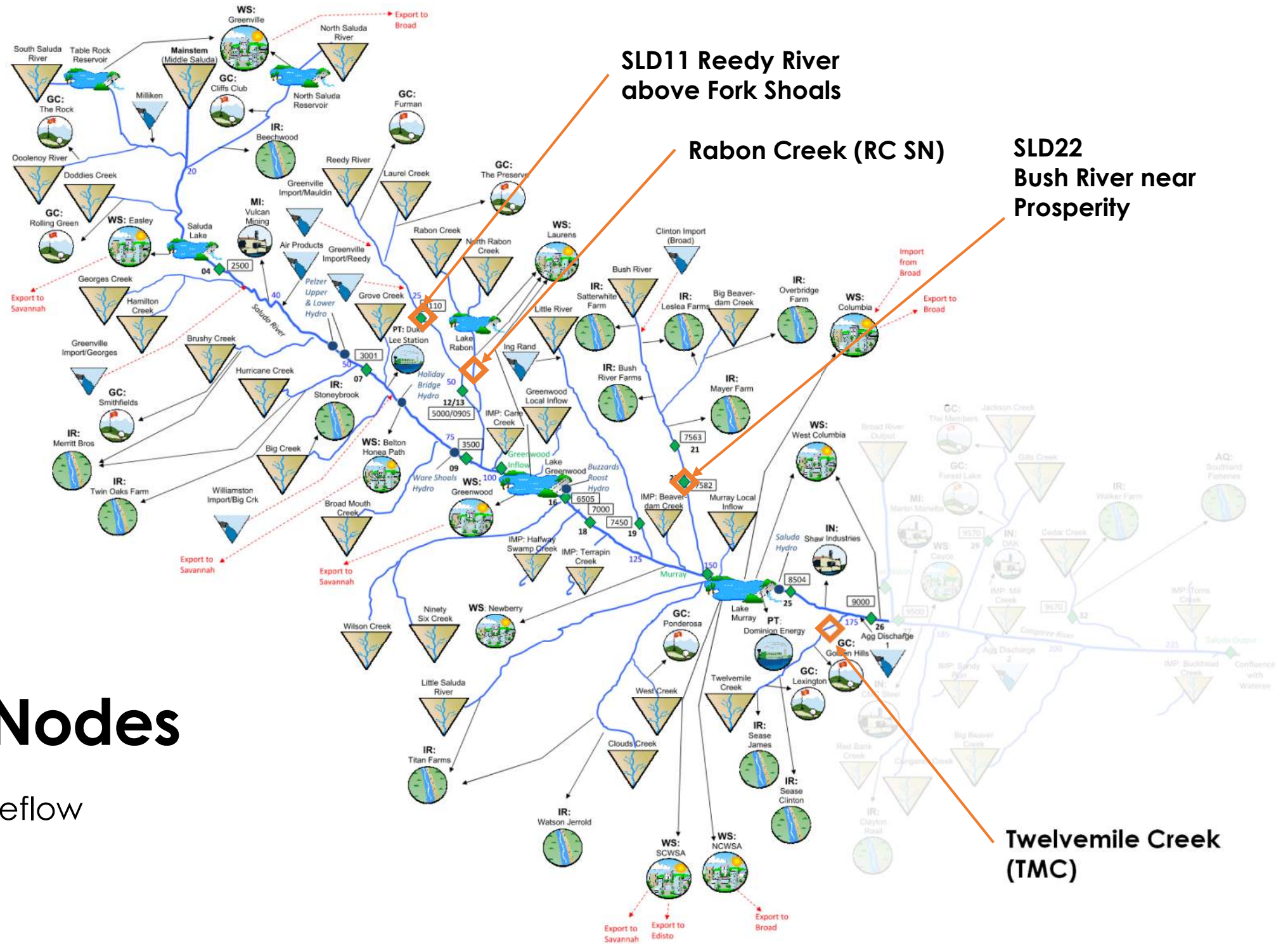
● • ~~3: Stable baseflow: high
precipitation, sustained high
baseflows, and moderately
high run-off~~

■ • ~~4: Perennial flashy:
moderately stable flow with
high flow variability~~



Strategic Nodes

— ◆ Stable Baseflow



Selected Metrics

	Instream Flow Performance Recommendations and Risk Ranges		
Stream Type:	Piedmont Perennial Runnoff		
	<i>Risk Ranges</i>		
	Low	Med	High
Flow Metric			
Mean Daily Flow (FR)	>0.78	0.64-0.78	<0.64
Calendar Day of Lowest Flow (BHF)	>327		

FR=Fish Species Richness: The number of fish species found in a stream or river reach
BHF=Brood hiding fishes. Brood hidiers bury of place their eggs in a concealed location, but do not guard or provide any parental care.