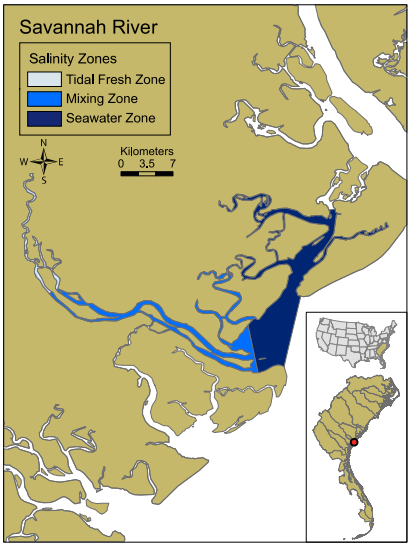
Savannah River

SUMMARY

The Savannah River is characterized by moderate chlorophyll-a and dissolved oxygen symptom expressions. Macroalgal and nuisance/toxic blooms are not a problem in this system and SAV is not found in the estuary. Conditions are expected to worsen in the future due to wastewater treatment, animal operations(chickens) and exurban development.

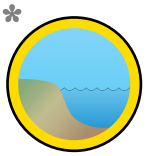


Influencing Factors

Moderate to high nitrogen input and moderate to high susceptibility (low ability for dilution and flushing of nutrients).

Eutrophic Conditions **

Level of expression of eutrophic conditions is substantial.



Future Outlook

Nutrient related symptoms observed in the estuary are likely to substantially worsen.

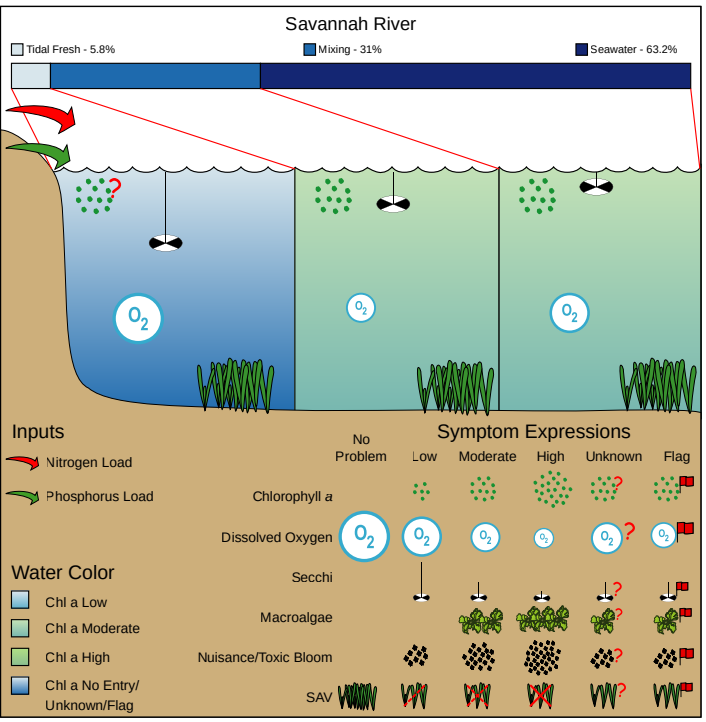
ASSETS Rating

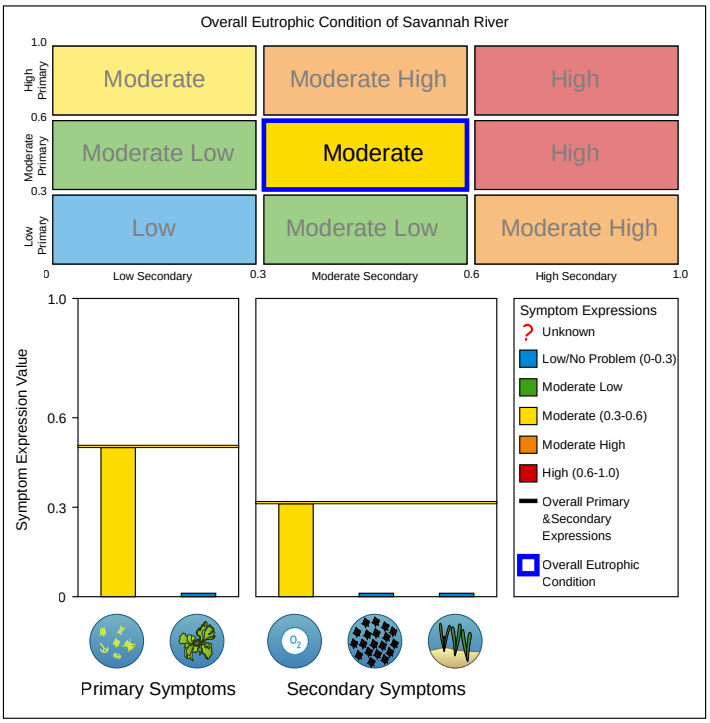
Assessment of Estuarine Trophic Status based on the three factors evaluated in NEEA.

Influence/eutro/future	Unknown	Low	Mod Low	Moderate	Mod High	High
ASSETS	Unknown	High	Good	Moderate	Poor	Bad

Reliability and Confidence			
? Unknown	* Low	** Moderate	*** High

EUTROPHIC CONDITION





WATERSHED AND ESTUARY CHARACTERISTICS

Estuary		Landuse / Population		Watershed Details / Input Loads	
Area (km^2)	121	Urban (km^2)	1,570 (5.8%)	Area (km^2)	28,023
Tidal fresh zone area (km^2)	7	Agriculture (km^2)	6,260 (22.9%)	Mean elevation (m)	184
Mixing zone area (km^2)	38	Forest (km^2)	17,493 (64.1%)	Max. elevation (m)	1,489
Saltwater zone area (km^2)	76	Wetland (km^2)	1,911 (7%)	Watershed: estuary ratio	231.6
Volume (1,000 x m^3)	372,680	Range (km^2)	47 (0.2%)	TSS (tonne y^{-1})	25,400
Depth (m)	3.08	Barren (km^2)	0 (0%)	DIN (kg y^{-1})	3,519,037
Tide Height (m)	2.06	Total (km^2)	27,280 (0%)	TP (kg y^{-1})	1,185,777
Residence Time (d)	1	Population	988,620	TSS/est. area (tonne km^{-2} y^{-1})	210
		Popn: est. area ratio	8,170	DIN/est. area (kg km^{-2} y^{-1})	29,083
				TP/est. area (kg km^{-2} y^{-1})	9,800