

Potomac River

SUMMARY

The Potomac River has a high overall eutrophic condition expression and has not changed since the 1999 assessment. High chlorophyll-a symptom expression and frequent nuisance/toxic algal blooms have led to some low dissolved oxygen events. SAV has increased since the last survey but macroalgal abundance is unknown.

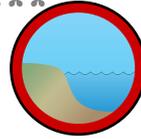
Influencing Factors

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



Eutrophic Conditions ***

High primary and secondary symptom levels indicate serious eutrophication problems.



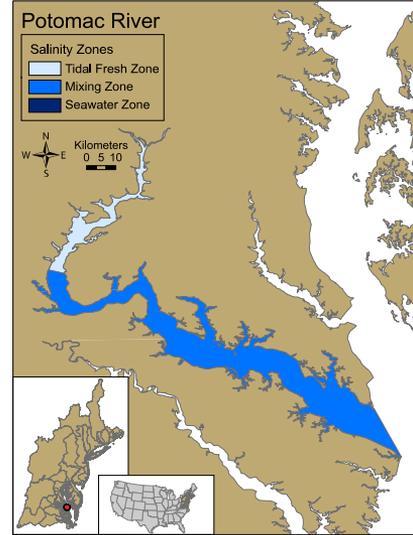
Future Outlook

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

Reliability and Confidence

ASSETS

Unknown

High

Good

Moderate

Poor

Bad

?

*

**

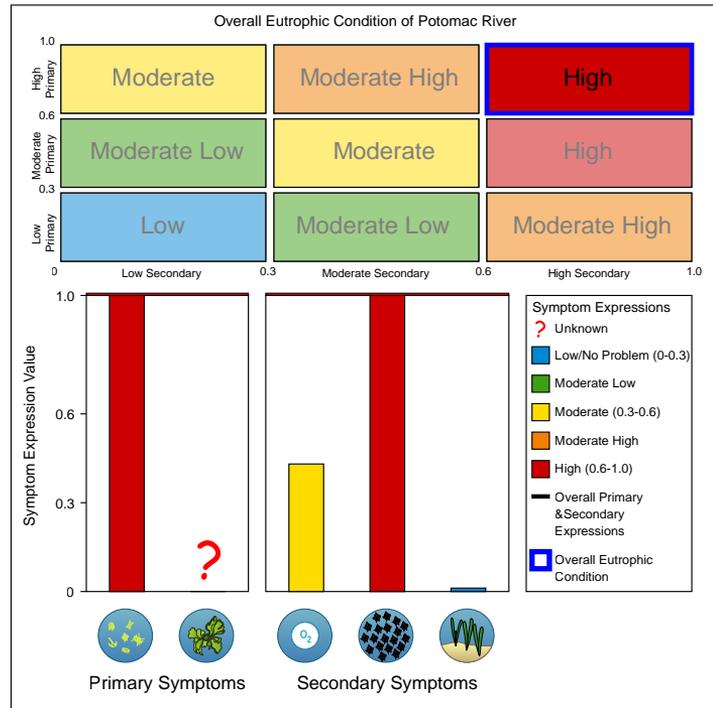
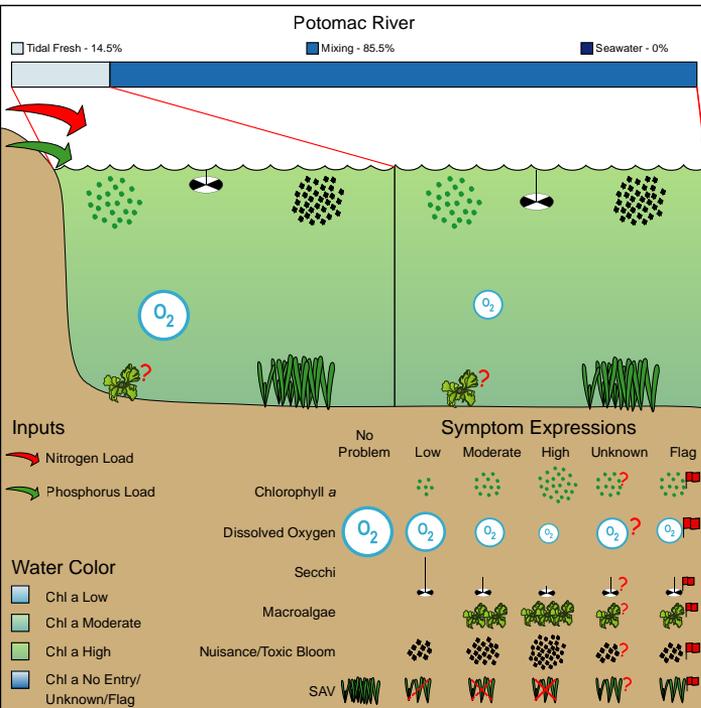
Unknown

Low

Moderate

High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary	Landuse / Population		Watershed Details / Input Loads		
Area (km ²)	1,260	Urban (km ²)	4,206 (11.5%)	Area (km ²)	36,804
Tidal fresh zone area (km ²)	183	Agriculture (km ²)	13,248 (36.3%)	Mean elevation (m)	330
Mixing zone area (km ²)	1,077	Forest (km ²)	18,992 (52%)	Max. elevation (m)	1,433
Saltwater zone area (km ²)	0	Wetland (km ²)	93 (0.3%)	Watershed: estuary ratio	29.2
Volume (1,000 x m ³)	6,463,800	Range (km ²)	3 (0%)	TSS (tonne y ⁻¹)	305,000
Depth (m)	5.13	Barren (km ²)	0 (0%)	TN (kg y ⁻¹)	33,773,781
Tide Height (m)	0.55	Total (km ²)	36,542 (0%)	TP (kg y ⁻¹)	1,474,445
Residence Time (d)	36	Population	4,560,273	TSS/est. area (tonne km ⁻² y ⁻¹)	242
		Popn: est. area ratio	3,619	TN/est. area (kg km ⁻² y ⁻¹)	26,805
				TP/est. area (kg km ⁻² y ⁻¹)	1,170