

S.MD Coastal Bays (Chincoteague/ Sinepuxent)

SUMMARY

The Southern Maryland Coastal Bays are characterized by low flushing and dilution capability, high chlorophyll-a expression, moderate macroalgal abundance, and frequent nuisance/toxic algal blooms. Daytime oxygen concentrations do not indicate severe problems. However, diel analyses are needed in non-stratified systems.

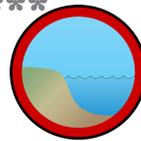
Influencing Factors

Nutrient load is unknown and influencing factors cannot be calculated.



Eutrophic Conditions ***

High primary and secondary symptom levels indicate serious eutrophication problems.



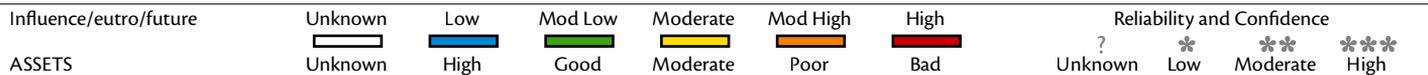
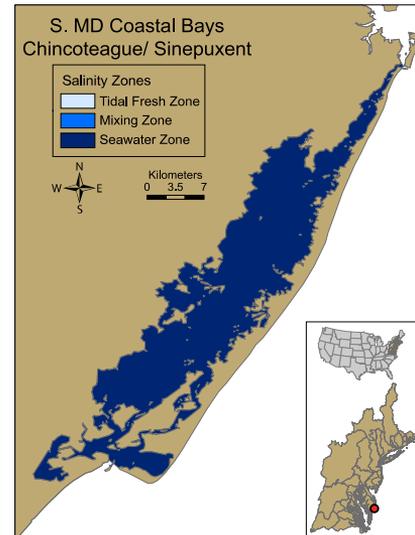
Future Outlook

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

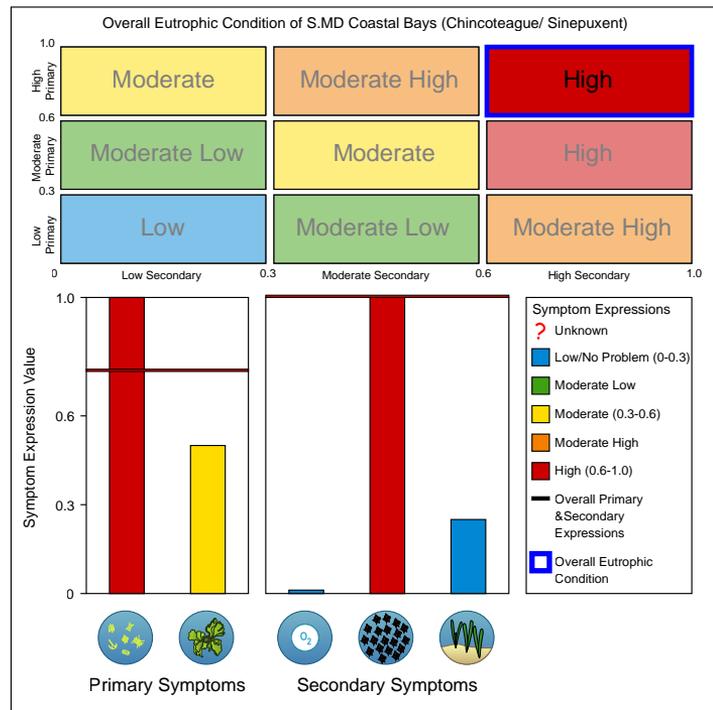
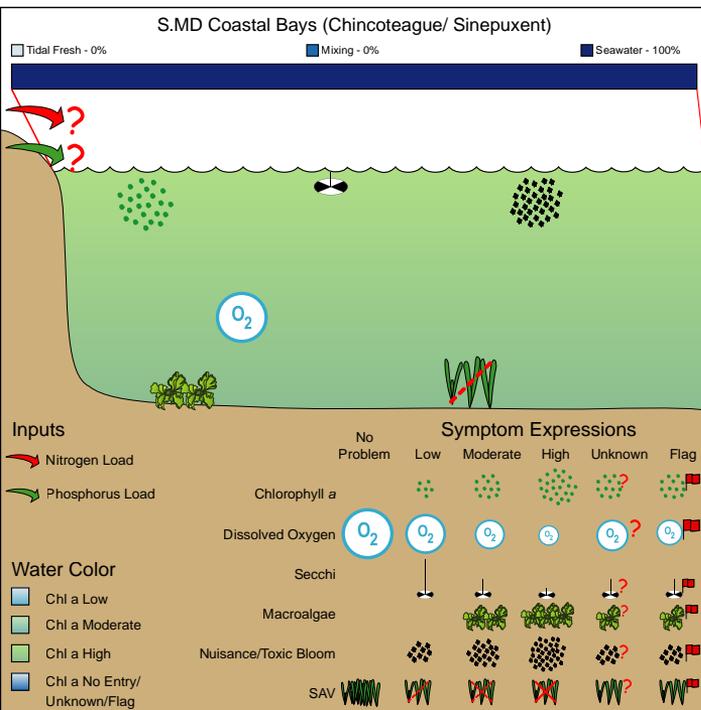


ASSETS Rating

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



EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary	Landuse / Population			Watershed Details / Input Loads	
Area (km ²)	335	Urban (km ²)	36 (8.1%)	Area (km ²)	487
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	140 (31.4%)	Mean elevation (m)	5
Mixing zone area (km ²)	0	Forest (km ²)	158 (35.5%)	Max. elevation (m)	13
Saltwater zone area (km ²)	335	Wetland (km ²)	111 (25%)	Watershed: estuary ratio	1.5
Volume (1,000 x m ³)	649,900	Range (km ²)	0 (0%)	TSS (tonne y ⁻¹)	6,070
Depth (m)	1.94	Barren (km ²)	0 (0%)	DIN (kg y ⁻¹)	Unknown
Tide Height (m)	0.50	Total (km ²)	445 (0%)	DIP (kg y ⁻¹)	Unknown
Residence Time (d)	8	Population	5,706	TSS/est. area (tonne km ⁻² y ⁻¹)	18
		Popn: est. area ratio	17	DIN/est. area (kg km ⁻² y ⁻¹)	Unknown
				DIP/est. area (kg km ⁻² y ⁻¹)	Unknown