

Delaware Inland Bays

SUMMARY

The Delaware Inland Bays are characterized by moderate chlorophyll-a concentrations, high macroalgal abundances and a low frequency of nuisance/toxic blooms. Dissolved oxygen is low overall but in the mixing zone, concentrations reflect severe hypoxia. SAV does not occur in the mixing zone and macroalgae in the seawater zone prevents SAV growth.

Influencing Factors

Low to moderate nitrogen input and moderate to high susceptibility (moderate ability to dilute and flush nutrients).



Eutrophic Conditions ***

Primary symptoms high but problems with more serious secondary symptoms still not being expressed.



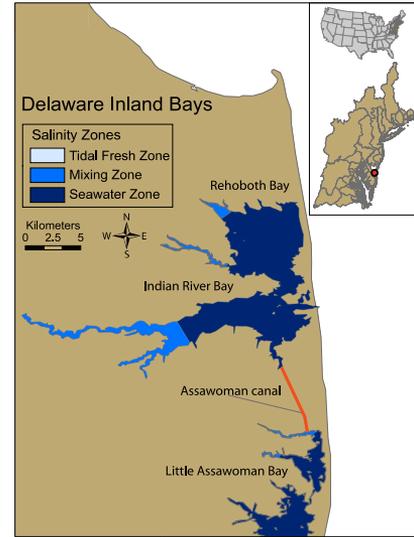
Future Outlook

Nutrient related symptoms observed in the estuary will most likely stay the same.

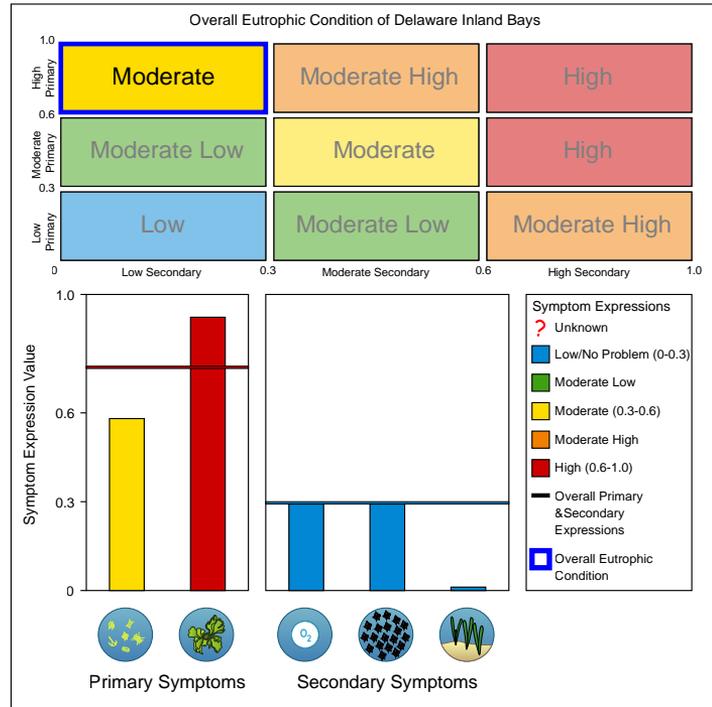
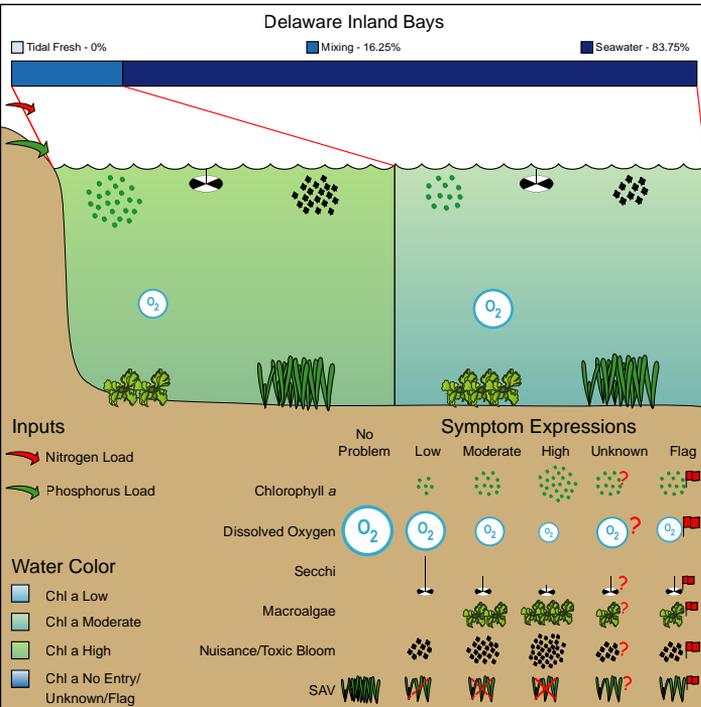


ASSETS Rating

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)	80	Urban (km ²)	145 (19.3%)	Area (km ²)	750
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	287 (38.3%)	Mean elevation (m)	22
Mixing zone area (km ²)	13	Forest (km ²)	152 (20.3%)	Max. elevation (m)	60
Saltwater zone area (km ²)	67	Wetland (km ²)	137 (18.3%)	Watershed: estuary ratio	9.4
Volume (1,000 x m ³)	160,000	Range (km ²)	17 (2.3%)	TSS (tonne y ⁻¹)	2,643
Depth (m)	2.00	Barren (km ²)	12 (1.6%)	TN (kg y ⁻¹)	486
Tide Height (m)	0.22	Total (km ²)	750 (1.6%)	TP (kg y ⁻¹)	10,011
Residence Time (d)	39	Population	68,992	TSS/est. area (tonne km ⁻² y ⁻¹)	33
		Popn: est. area ratio	862	TN/est. area (kg km ⁻² y ⁻¹)	6
				TP/est. area (kg km ⁻² y ⁻¹)	125