

Casco Bay

SUMMARY

There were inadequate data to assess the eutrophic condition of Casco Bay. Seawater zone (99% of total area) SAV data show a slight gain since the 1999 study. Long-lasting toxic algae blooms affect the bay. These are likely due to coastal upwelling of nutrients, that typically begin offshore and advect into the bay, but they are an emerging problem.

Influencing Factors

Any level nitrogen input and low to moderate susceptibility (good ability to dilute and flush nutrients).



Future Outlook

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



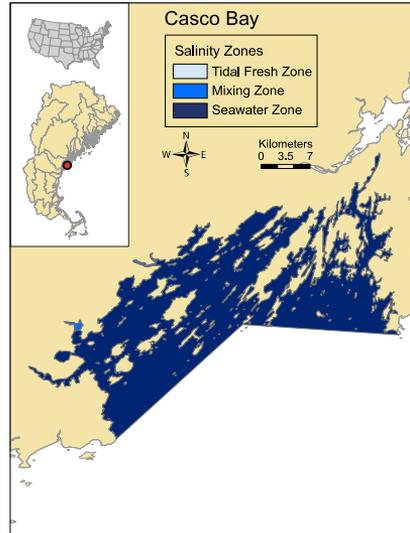
Eutrophic Conditions *

An Unknown Overall Eutrophic Condition expression will occur if either the Primary or Secondary overall symptom expression is Unknown.



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

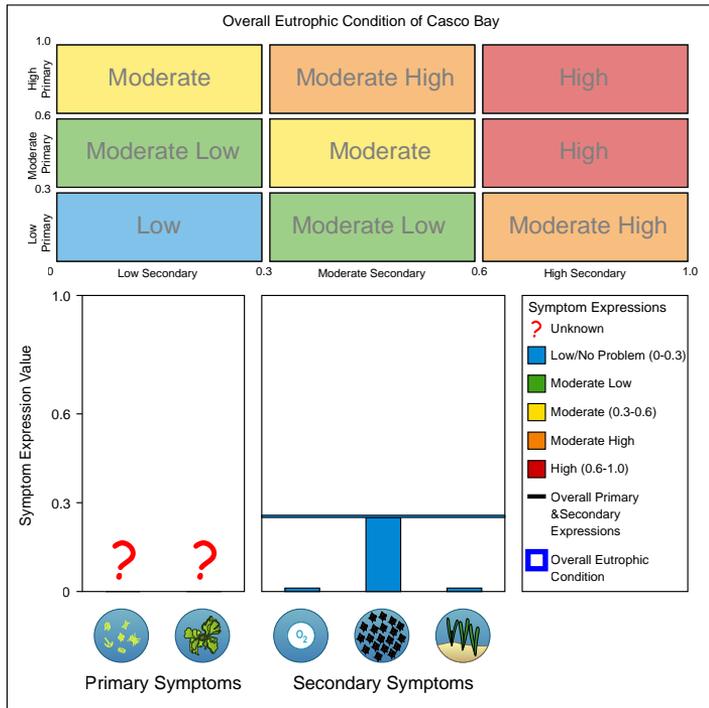
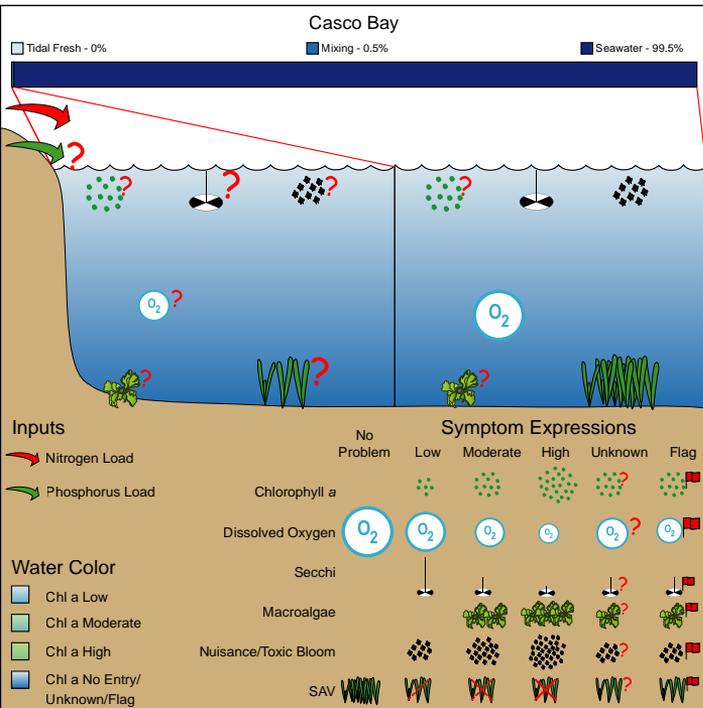
Bad

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EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary	Landuse / Population		Watershed Details / Input Loads		
Area (km ²)	427	Urban (km ²)	365 (16.6%)	Area (km ²)	2,561
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	249 (11.3%)	Mean elevation (m)	108
Mixing zone area (km ²)	2	Forest (km ²)	1,562 (70.9%)	Max. elevation (m)	584
Saltwater zone area (km ²)	425	Wetland (km ²)	26 (1.2%)	Watershed: estuary ratio	6.0
Volume (1,000 x m ³)	5,141,080	Range (km ²)	0 (0%)	TSS (tonne y ⁻¹)	65,700
Depth (m)	12.04	Barren (km ²)	0 (0%)	DIN (kg y ⁻¹)	990,000
Tide Height (m)	2.75	Total (km ²)	2,201 (0%)	DIP (kg y ⁻¹)	Unknown
Residence Time (d)	10	Population	193,458	TSS/est. area (tonne km ⁻² y ⁻¹)	154
		Popn: est. area ratio	453	DIN/est. area (kg km ⁻² y ⁻¹)	2,319
				DIP/est. area (kg km ⁻² y ⁻¹)	Unknown