

Buzzards Bay

SUMMARY

Buzzards Bay is characterized by low chlorophyll-a and moderate macroalgal symptom expressions. The system experiences some low dissolved oxygen events, moderately frequent nuisance/toxic algal blooms, and some loss of SAV. The overall eutrophic condition expression is moderate.

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 substantially worsen.



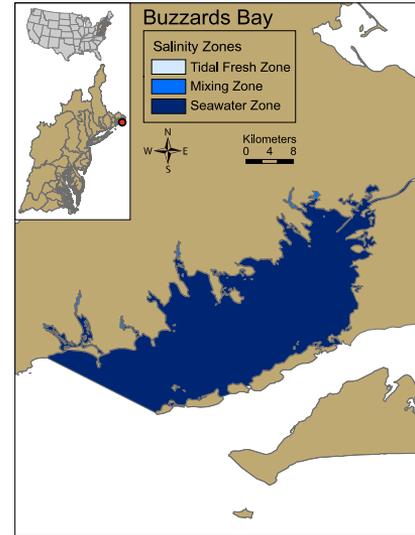
Eutrophic Conditions **

Level of expression of eutrophic conditions is substantial.



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

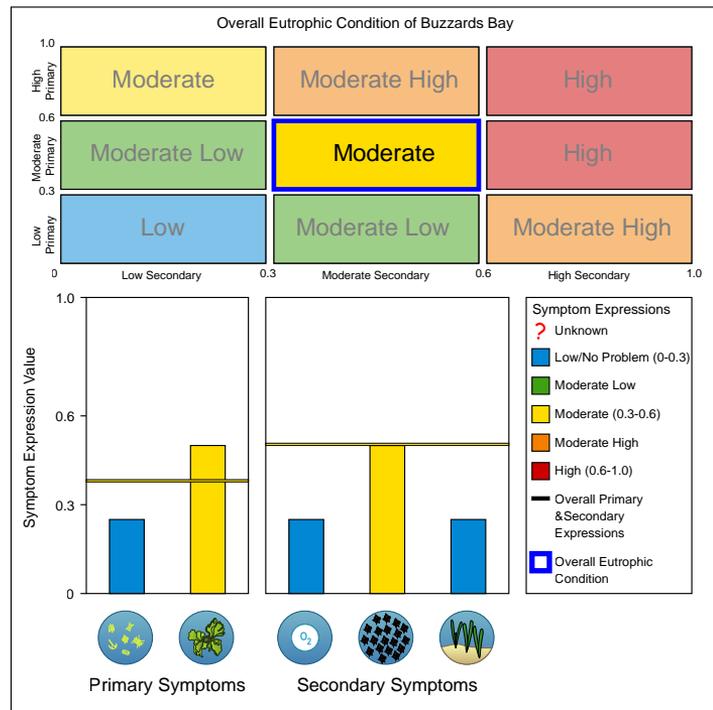
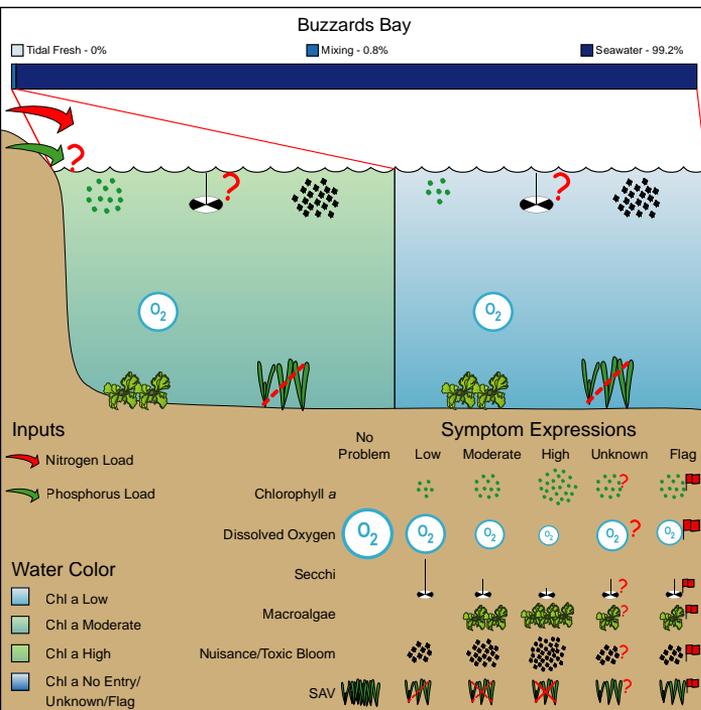
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High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary		Landuse / Population		Watershed Details / Input Loads	
Area (km ²)	639	Urban (km ²)	264 (22.6%)	Area (km ²)	1,257
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	88 (7.5%)	Mean elevation (m)	28
Mixing zone area (km ²)	5	Forest (km ²)	754 (64.5%)	Max. elevation (m)	91
Saltwater zone area (km ²)	634	Wetland (km ²)	52 (4.4%)	Watershed: estuary ratio	2.0
Volume (1,000 x m ³)	6,421,950	Range (km ²)	10 (0.9%)	TSS (tonne y ⁻¹)	34,400
Depth (m)	10.05	Barren (km ²)	0 (0%)	TN (kg y ⁻¹)	2,180,000
Tide Height (m)	1.11	Total (km ²)	1,168 (0%)	DIP (kg y ⁻¹)	Unknown
Residence Time (d)	42	Population	246,157	TSS/est. area (tonne km ⁻² y ⁻¹)	54
		Popn: est. area ratio	385	TN/est. area (kg km ⁻² y ⁻¹)	3,412
				DIP/est. area (kg km ⁻² y ⁻¹)	Unknown