

Biscayne Bay

SUMMARY

Biscayne Bay is characterized by low levels of chlorophyll-a and has no macroalgal blooms. Bottom-water anoxia and hypoxia occur in localized, deepened areas. However, the geology of South Florida affects the surface water dissolved oxygen levels such that low DO is not necessarily a eutrophic symptom. SAV is widely distributed and stable.

Influencing Factors

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

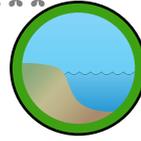
Future Outlook

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



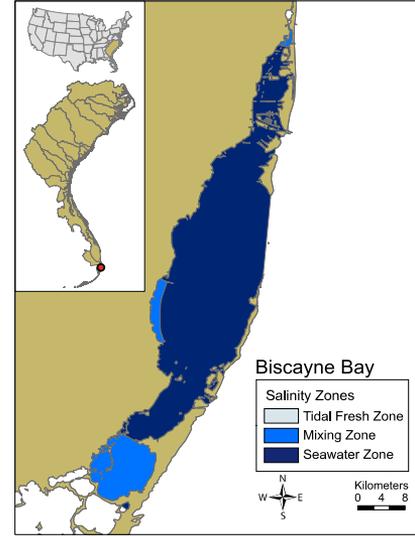
Eutrophic Conditions ***

Moderate secondary symptoms indicate substantial eutrophic conditions, but low primary indicates other factors may be involved in causing conditions.

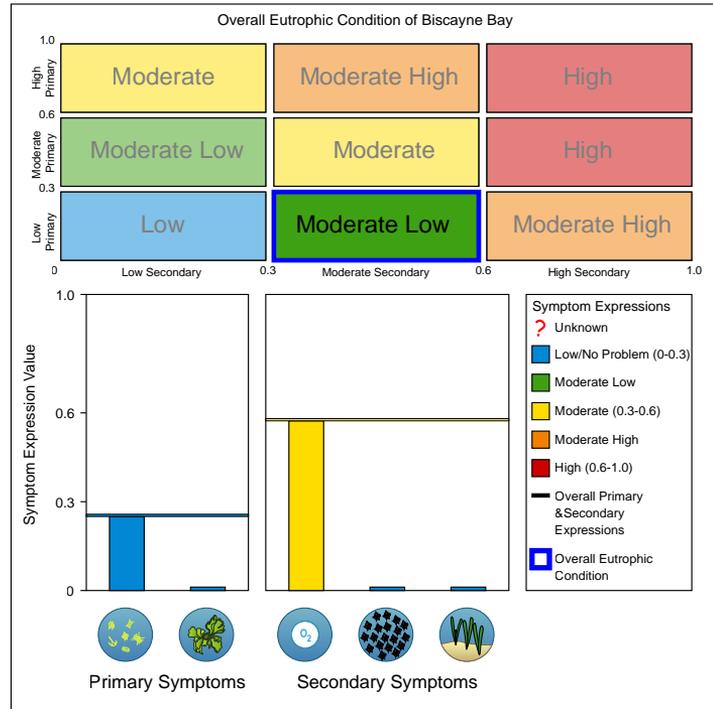
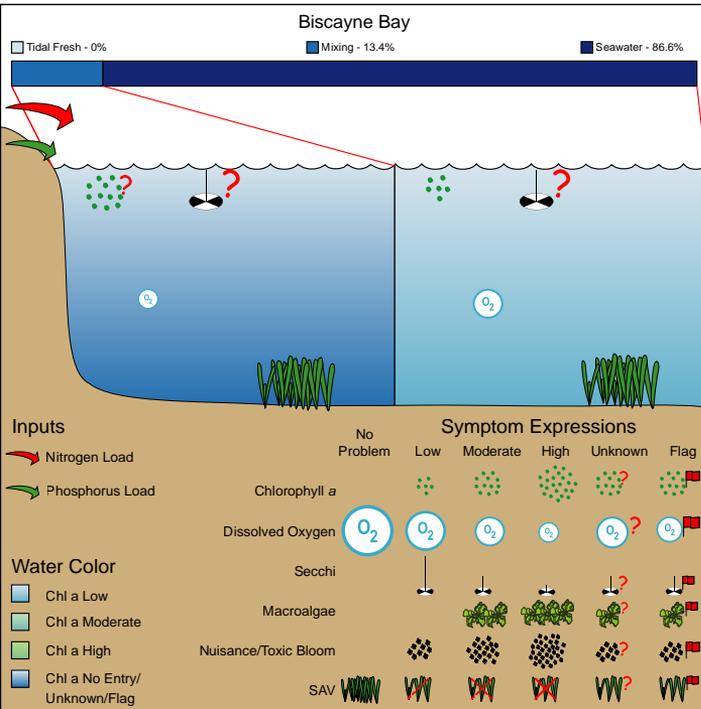


ASSETS Rating

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)	702	Urban (km ²)	873 (13.1%)	Area (km ²)	6,746
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	1,393 (20.9%)	Mean elevation (m)	4
Mixing zone area (km ²)	94	Forest (km ²)	404 (6%)	Max. elevation (m)	9
Saltwater zone area (km ²)	608	Wetland (km ²)	3,427 (51.3%)	Watershed: estuary ratio	9.6
Volume (1,000 x m ³)	863,460	Range (km ²)	583 (8.7%)	TSS (tonne y ⁻¹)	165,000
Depth (m)	1.23	Barren (km ²)	0 (0%)	DIN (kg y ⁻¹)	2,059,000
Tide Height (m)	0.46	Total (km ²)	6,680 (0%)	TP (kg y ⁻¹)	47,300
Residence Time (d)	4	Population	1,552,612	TSS/est. area (tonne km ⁻² y ⁻¹)	235
		Popn: est. area ratio	2,212	DIN/est. area (kg km ⁻² y ⁻¹)	2,933
				TP/est. area (kg km ⁻² y ⁻¹)	67