

Cape Cod Bay

SUMMARY

Cape Cod Bay is characterized by a high chlorophyll-a symptom expression, an increase from the 1999 rating of moderate. The macroalgae symptom rating is moderate, while nuisance/toxic bloom symptom expression remains low. Dissolved oxygen levels have remained at healthy levels since the 1999 assessment.

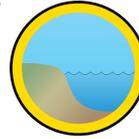
Influencing Factors

Nutrient load is unknown and influencing factors cannot be calculated.



Eutrophic Conditions *

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



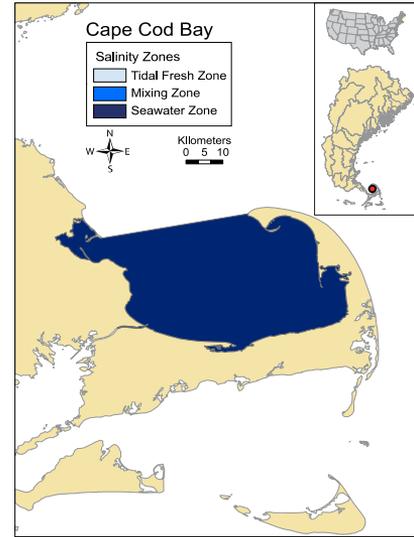
Future Outlook

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



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

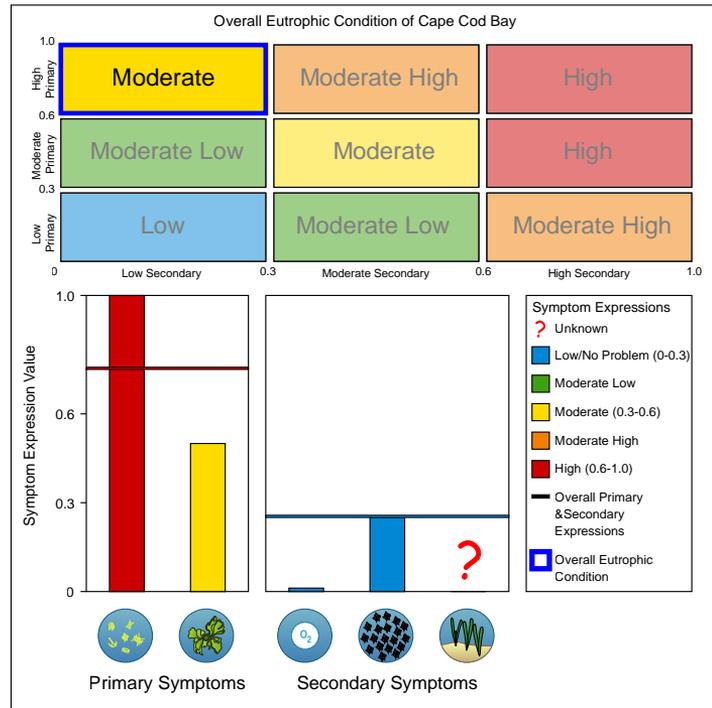
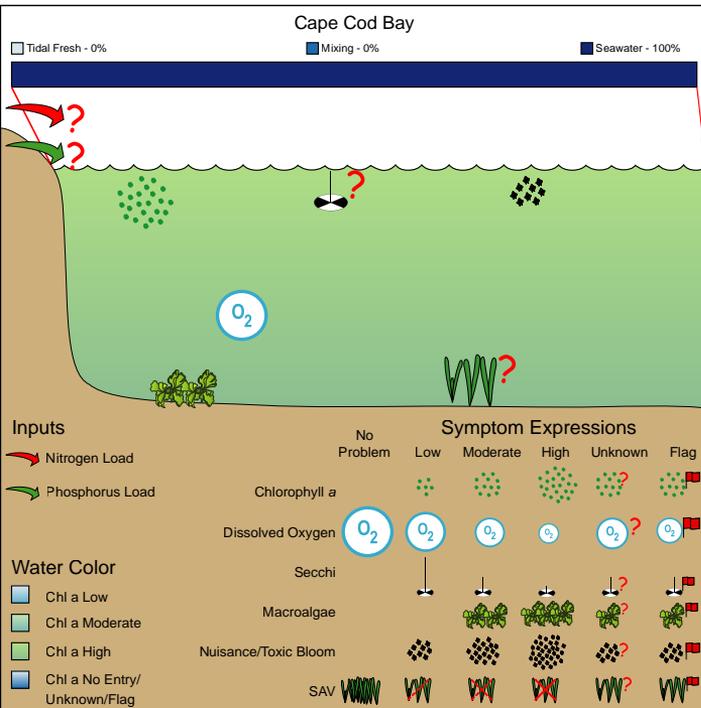
?

*

**

High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

| Estuary | Landuse / Population | Watershed Details / Input Loads |
|--|----------------------|--|
| Area (km ²) | 1,439 | Urban (km ²) 142 (27%) |
| Tidal fresh zone area (km ²) | 0 | Agriculture (km ²) 5 (1%) |
| Mixing zone area (km ²) | 0 | Forest (km ²) 319 (60.3%) |
| Saltwater zone area (km ²) | 1,439 | Wetland (km ²) 47 (8.8%) |
| Volume (1,000 x m ³) | 32,463,840 | Range (km ²) 16 (2.9%) |
| Depth (m) | 22.56 | Barren (km ²) 0 (0%) |
| Tide Height (m) | 2.78 | Total (km ²) 528 (0%) |
| Residence Time (d) | 34 | Population 83,727 |
| | | Popn: est. area ratio 58 |
| | | Area (km ²) 566 |
| | | Mean elevation (m) 20 |
| | | Max. elevation (m) 107 |
| | | Watershed: estuary ratio 0.4 |
| | | TSS (tonne y ⁻¹) 6,730 |
| | | DIN (kg y ⁻¹) Unknown |
| | | DIP (kg y ⁻¹) Unknown |
| | | TSS/est. area (tonne km ⁻² y ⁻¹) 5 |
| | | DIN/est. area (kg km ⁻² y ⁻¹) Unknown |
| | | DIP/est. area (kg km ⁻² y ⁻¹) Unknown |