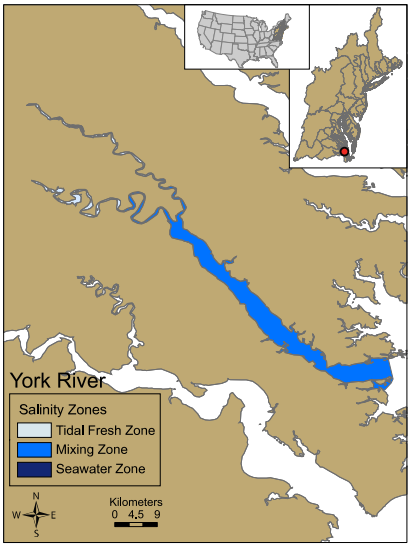
# York River

## SUMMARY

The York River is characterized by a high chlorophyll-a symptom expression and moderate macroalgal symptom expression, leading to some dissolved oxygen problems and moderate level problems with nuisance/toxic blooms. There is little loss of SAV. There is a high variability in conditoins among tidal fresh, mixing and seawater zones.

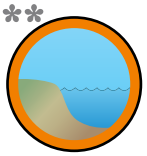



### Influencing Factors

Moderate to high nitrogen input and moderate to high susceptibility (low ability for dilution and flushing of nutrients).

### Eutrophic Conditions ***

Primary symptoms high and substantial secondary symptoms becoming more expressed, indicating potentially serious problems.



### Future Outlook

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

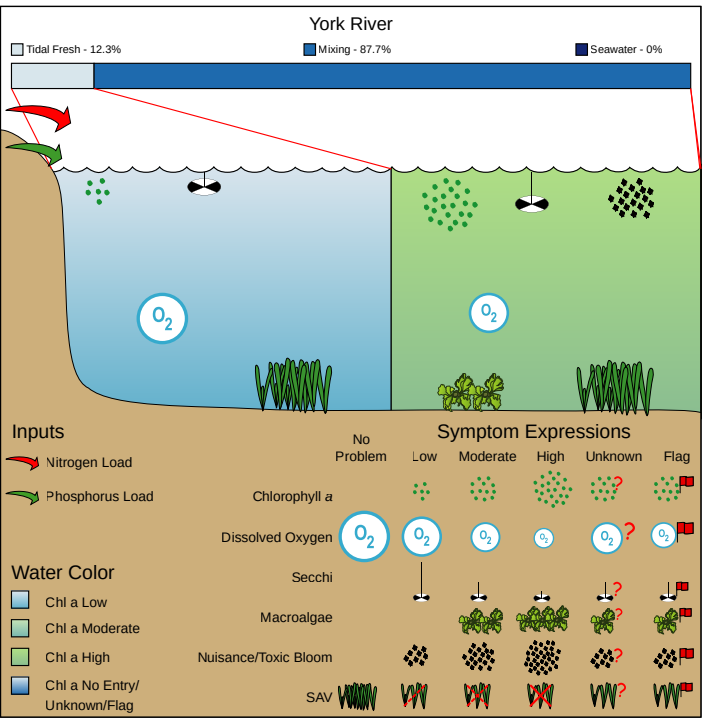
### ASSETS Rating

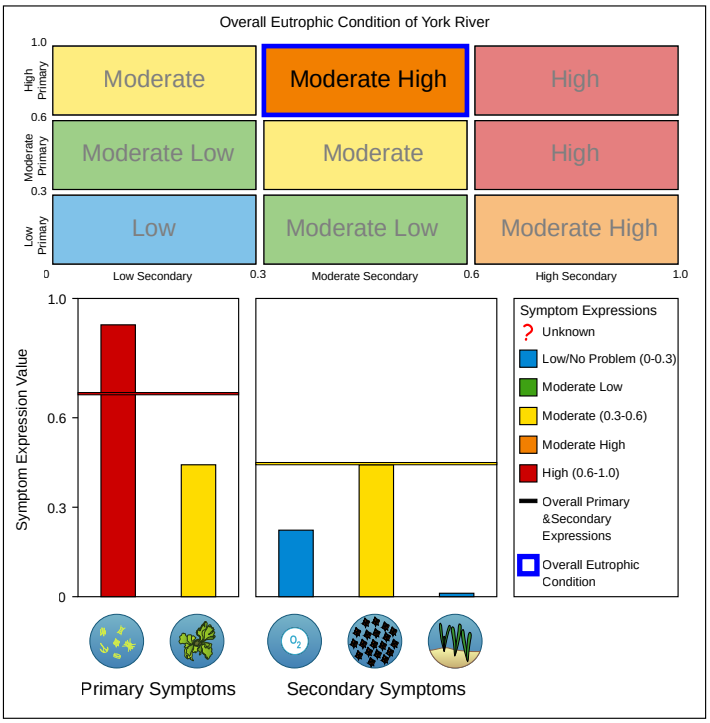
Assessment of Estuarine Trophic Status based on the three factors evaluated in NEEA.

| Influence/eutro/future | Unknown | Low | Mod Low | Moderate | Mod High | High |
|---|---|---|---|---|---|---|
| ASSETS | Unknown | High | Good | Moderate | Poor | Bad |

| Reliability and Confidence | | | |
|---|---|---|---|
| ? Unknown | * Low | ** Moderate | *** High |

## EUTROPHIC CONDITION




## WATERSHED AND ESTUARY CHARACTERISTICS

| Estuary | | Landuse / Population | | Watershed Details / Input Loads | |
|---|---|---|---|---|---|
| Area (km$^2$) | 206 | Urban (km$^2$) | 306 (4.6%) | Area (km$^2$) | 6,708 |
| Tidal fresh zone area (km$^2$) | 25 | Agriculture (km$^2$) | 1,595 (24.2%) | Mean elevation (m) | 65 |
| Mixing zone area (km$^2$) | 181 | Forest (km$^2$) | 4,512 (68.5%) | Max. elevation (m) | 392 |
| Saltwater zone area (km$^2$) | 0 | Wetland (km$^2$) | 171 (2.6%) | Watershed: estuary ratio | 32.6 |
| Volume (1,000 x m$^3$) | 786,920 | Range (km$^2$) | 0 (0%) | TSS (tonne y$^{-1}$) | 148,000 |
| Depth (m) | 3.82 | Barren (km$^2$) | 0 (0%) | DIN (kg y$^{-1}$) | 1,378,692 |
| Tide Height (m) | 0.82 | Total (km$^2$) | 6,584 (0%) | TP (kg y$^{-1}$) | 196,099 |
| Residence Time (d) | 11 | Population | 163,697 | TSS/est. area (tonne km$^{-2}$ y$^{-1}$) | 718 |
| | | Popn: est. area ratio | 795 | DIN/est. area (kg km$^{-2}$ y$^{-1}$) | 6,693 |
| | | | | TP/est. area (kg km$^{-2}$ y$^{-1}$) | 952 |