

# Port Orchard Sound

## SUMMARY

While Port Orchard Sound is characterized by a high chlorophyll-a symptom expression, its dissolved oxygen, nuisance/toxic blooms and SAV symptoms are non-problematic. Together this leads to a moderate rating for overall eutrophic condition. It is not possible to determine changes 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.



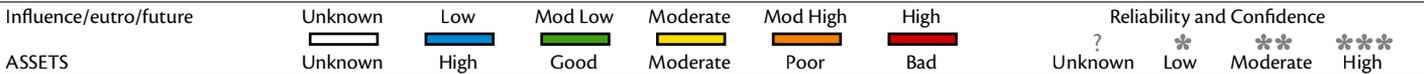
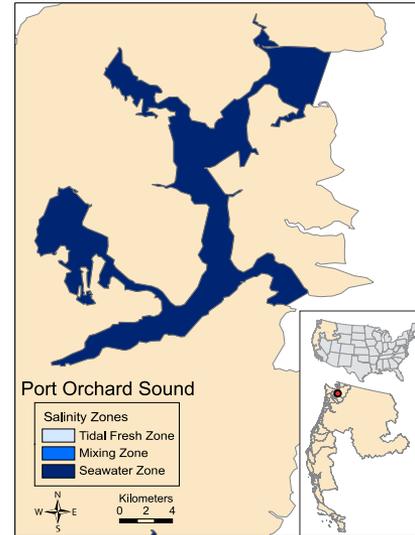
## Future Outlook

An Unknown Future Outlook expression will occur if the Expected Changes In Nutrient Load by 2020 is Unknown.

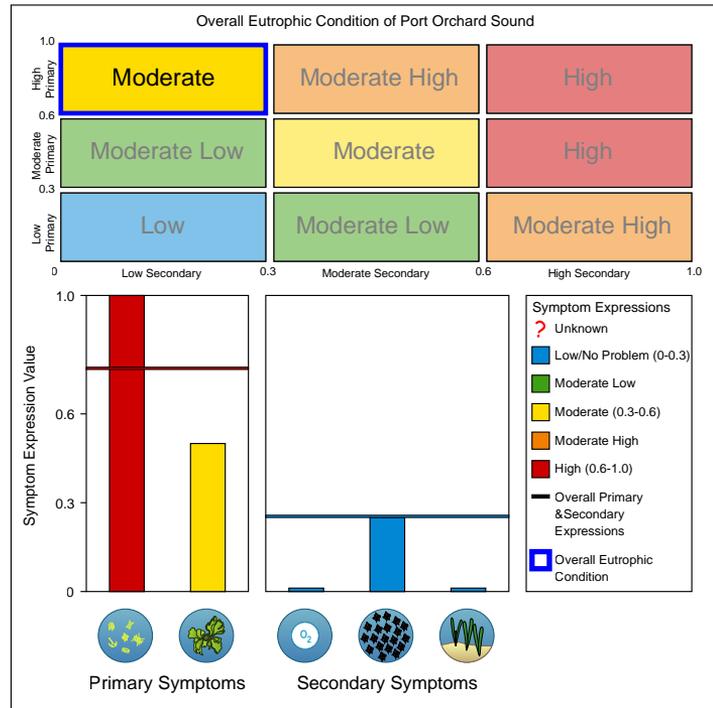
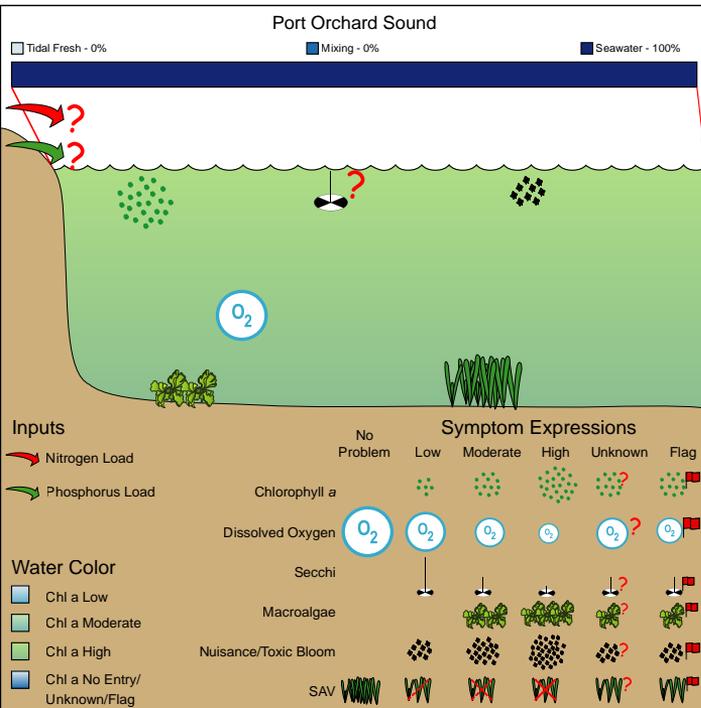


## ASSETS Rating

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 <sup>2</sup> )                  | 92                   | Urban (km <sup>2</sup> )       | 124 (28.2%) | Area (km <sup>2</sup> )                                 | 460     |
| Tidal fresh zone area (km <sup>2</sup> ) | 0                    | Agriculture (km <sup>2</sup> ) | 10 (2.4%)   | Mean elevation (m)                                      | 91      |
| Mixing zone area (km <sup>2</sup> )      | 0                    | Forest (km <sup>2</sup> )      | 303 (68.8%) | Max. elevation (m)                                      | 426     |
| Saltwater zone area (km <sup>2</sup> )   | 92                   | Wetland (km <sup>2</sup> )     | 0 (0%)      | Watershed: estuary ratio                                | 5.0     |
| Volume (1,000 x m <sup>3</sup> )         | 1,410,360            | Range (km <sup>2</sup> )       | 3 (0.6%)    | TSS (tonne y <sup>-1</sup> )                            | 5,680   |
| Depth (m)                                | 15.33                | Barren (km <sup>2</sup> )      | 0 (0%)      | DIN (kg y <sup>-1</sup> )                               | Unknown |
| Tide Height (m)                          | 2.44                 | Total (km <sup>2</sup> )       | 440 (0%)    | DIP (kg y <sup>-1</sup> )                               | Unknown |
| Residence Time (d)                       | 20                   | Population                     | 105,525     | TSS/est. area (tonne km <sup>-2</sup> y <sup>-1</sup> ) | 62      |
|  |                      | Popn: est. area ratio          | 1,147       | DIN/est. area (kg km <sup>-2</sup> y <sup>-1</sup> )    | Unknown |
|  |                      |                                |             | DIP/est. area (kg km <sup>-2</sup> y <sup>-1</sup> )    | Unknown |