

# South Puget Sound

## SUMMARY

South Puget Sound is characterized by high chlorophyll-a and moderate macroalgal symptoms expressions. The secondary indicators all have low symptom expression ratings leading to an overall eutrophic condition of moderate. It is not possible to determine changes since the 1999 assessment. Conditions are expected to worsen in the future.

## 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.



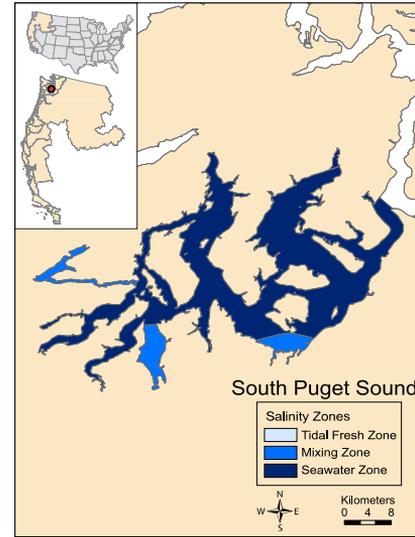
## Future Outlook

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

?

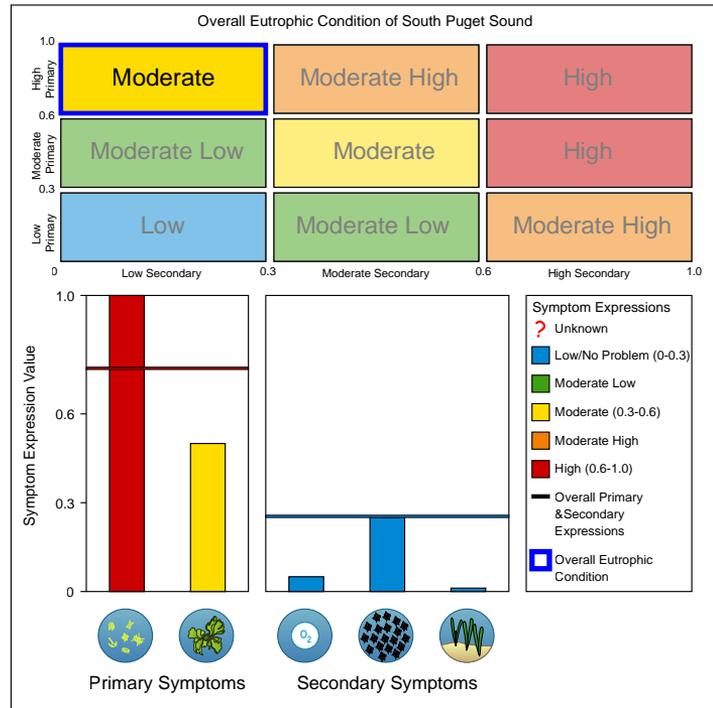
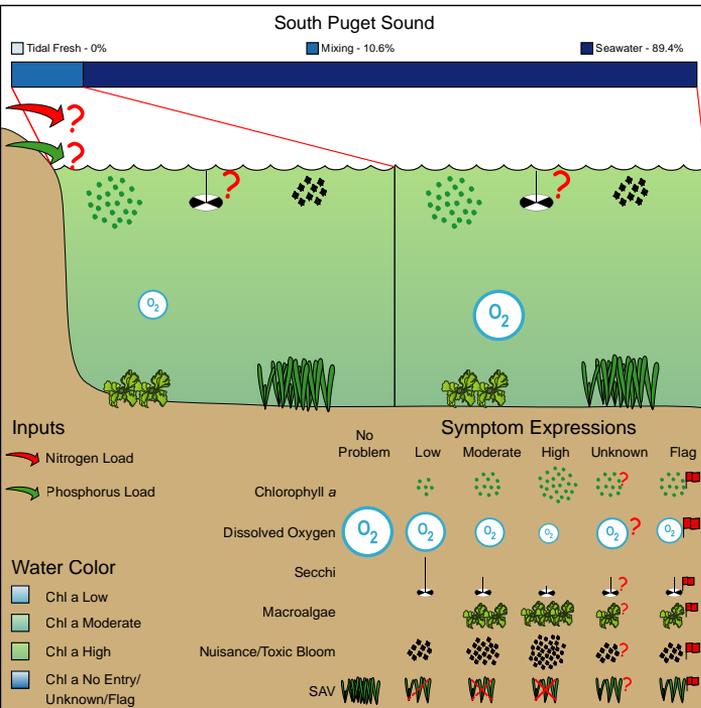
\*

\*\*

\*\*\*

High

## EUTROPHIC CONDITION



## WATERSHED AND ESTUARY CHARACTERISTICS

Estuary		Landuse / Population		Watershed Details / Input Loads	
Area (km <sup>2</sup> )	449	Urban (km <sup>2</sup> )	272 (7%)	Area (km <sup>2</sup> )	3,900
Tidal fresh zone area (km <sup>2</sup> )	0	Agriculture (km <sup>2</sup> )	161 (4.1%)	Mean elevation (m)	332
Mixing zone area (km <sup>2</sup> )	48	Forest (km <sup>2</sup> )	3,354 (86.7%)	Max. elevation (m)	4,120
Saltwater zone area (km <sup>2</sup> )	401	Wetland (km <sup>2</sup> )	26 (0.7%)	Watershed: estuary ratio	8.7
Volume (1,000 x m <sup>3</sup> )	17,645,700	Range (km <sup>2</sup> )	57 (1.5%)	TSS (tonne y <sup>-1</sup> )	130,000
Depth (m)	39.30	Barren (km <sup>2</sup> )	0 (0%)	DIN (kg y <sup>-1</sup> )	Unknown
Tide Height (m)	3.02	Total (km <sup>2</sup> )	3,869 (0%)	DIP (kg y <sup>-1</sup> )	Unknown
Residence Time (d)	85	Population	259,808	TSS/est. area (tonne km <sup>-2</sup> y <sup>-1</sup> )	290
		Popn: est. area ratio	579	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