

# Hood Canal

## SUMMARY

Hood Canal's DO concentrations are at their lowest in recorded history, have become more persistent and have increased in area, spreading northwards. Many factors may be involved, including ocean conditions, watershed changes, and nutrient loading. The Hood Canal Dissolved Oxygen Program is modeling the conditions and its drivers.

## Influencing Factors

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



## Eutrophic Conditions \*\*

High primary and secondary symptom levels indicate serious eutrophication problems.



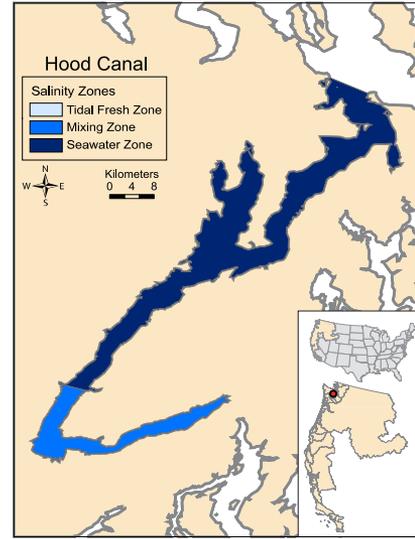
## Future Outlook

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

?

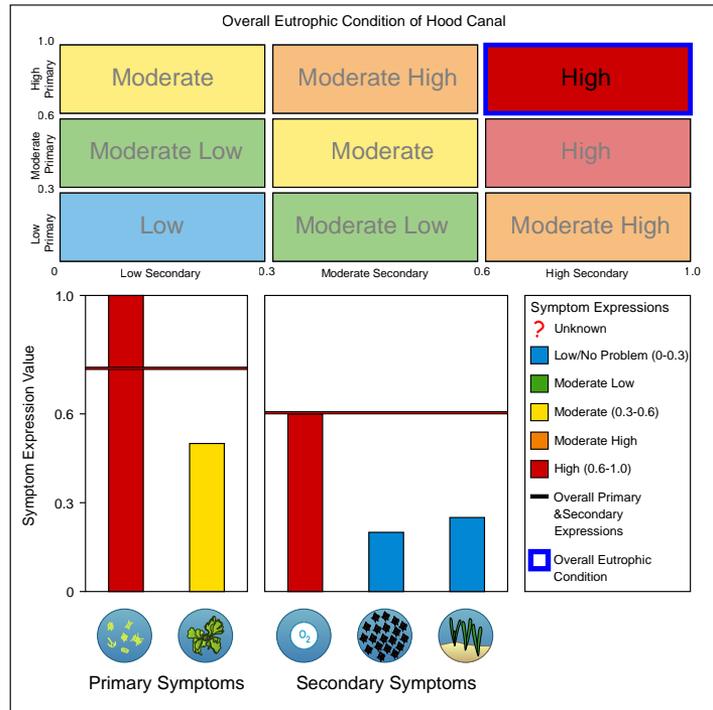
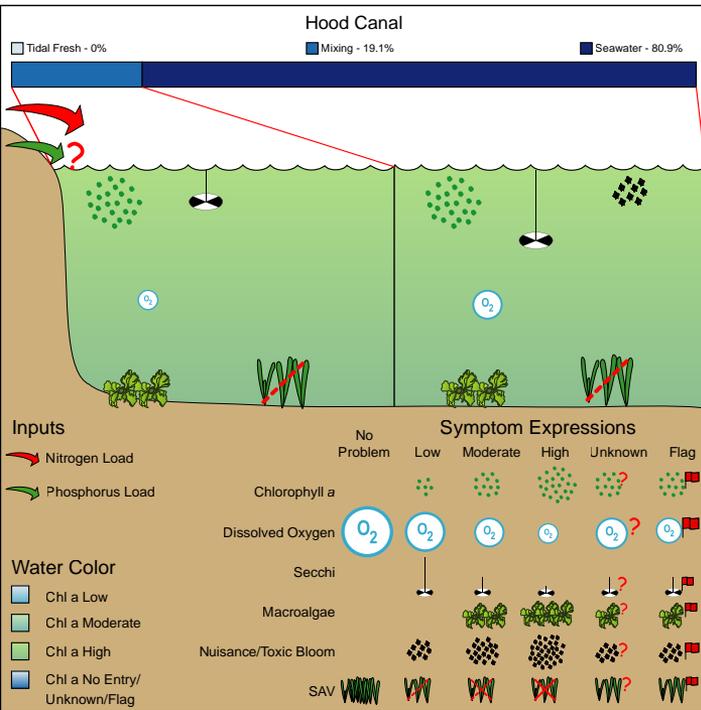
\*

\*\*

\*\*\*

High

## EUTROPHIC CONDITION



## WATERSHED AND ESTUARY CHARACTERISTICS

Estuary		Landuse / Population		Watershed Details / Input Loads	
Area (km <sup>2</sup> )	396	Urban (km <sup>2</sup> )	181 (6.7%)	Area (km <sup>2</sup> )	2,768
Tidal fresh zone area (km <sup>2</sup> )	0	Agriculture (km <sup>2</sup> )	10 (0.4%)	Mean elevation (m)	564
Mixing zone area (km <sup>2</sup> )	76	Forest (km <sup>2</sup> )	2,450 (90.8%)	Max. elevation (m)	2,193
Saltwater zone area (km <sup>2</sup> )	320	Wetland (km <sup>2</sup> )	31 (1.2%)	Watershed: estuary ratio	7.0
Volume (1,000 x m <sup>3</sup> )	26,912,160	Range (km <sup>2</sup> )	26 (1%)	TSS (tonne y <sup>-1</sup> )	271,000
Depth (m)	67.96	Barren (km <sup>2</sup> )	0 (0%)	DIN (kg y <sup>-1</sup> )	20,505,000
Tide Height (m)	2.24	Total (km <sup>2</sup> )	2,699 (0%)	DIP (kg y <sup>-1</sup> )	Unknown
Residence Time (d)	416	Population	34,910	TSS/est. area (tonne km <sup>-2</sup> y <sup>-1</sup> )	684
		Popn: est. area ratio	88	DIN/est. area (kg km <sup>-2</sup> y <sup>-1</sup> )	51,780
				DIP/est. area (kg km <sup>-2</sup> y <sup>-1</sup> )	Unknown