

Columbia River

SUMMARY

No data were available to assess the eutrophic condition of the Columbia River. In the 1999 assessment, the river was characterized by high levels of chlorophyll-a, healthy levels of dissolved oxygen, low frequency of nuisance/toxic blooms, leading to a moderate low overall eutrophic condition.

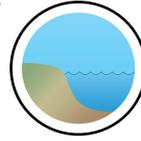
Influencing Factors

Nutrient load is unknown and influencing factors cannot be calculated.



Eutrophic Conditions *

An Unknown Overall Eutrophic Condition expression will occur if either the Primary or Secondary overall symptom expression is Unknown.



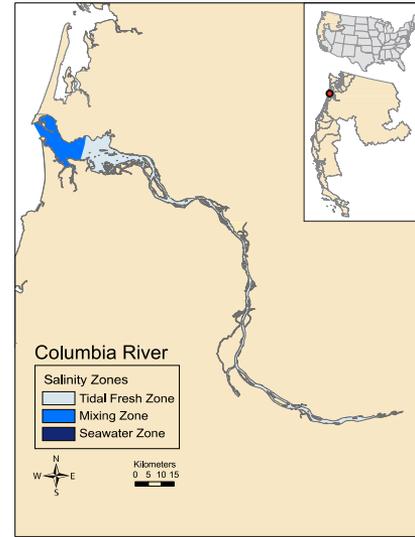
Future Outlook

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.



Influence/eutro/future

Unknown

Low

Mod Low

Moderate

Mod High

High

Reliability and Confidence

ASSETS

Unknown

High

Good

Moderate

Poor

Bad

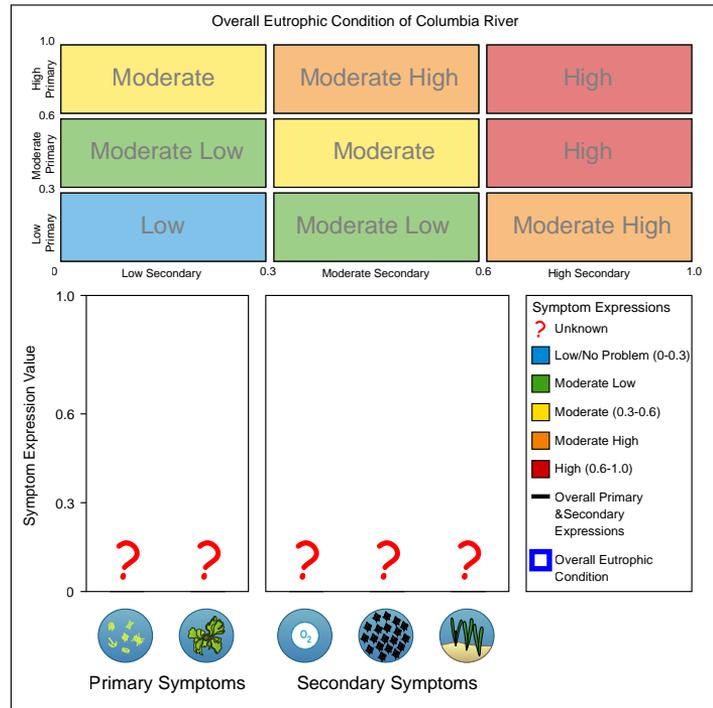
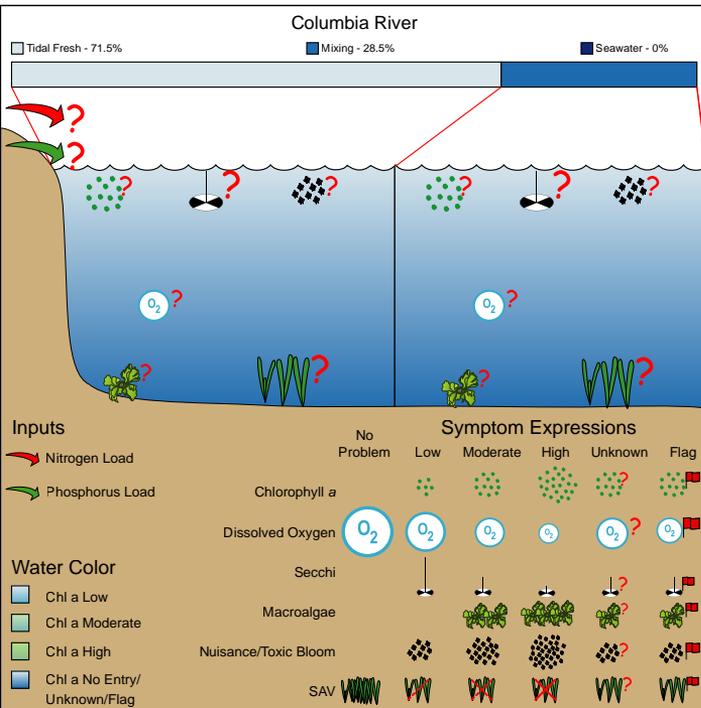
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High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary	Landuse / Population		Watershed Details / Input Loads		
Area (km ²)	615	Urban (km ²)	12,877 (2.3%)	Area (km ²)	658,726
Tidal fresh zone area (km ²)	440	Agriculture (km ²)	87,834 (16%)	Mean elevation (m)	1,316
Mixing zone area (km ²)	175	Forest (km ²)	274,842 (50.1%)	Max. elevation (m)	4,295
Saltwater zone area (km ²)	0	Wetland (km ²)	1,761 (0.3%)	Watershed: estuary ratio	1,071.1
Volume (1,000 x m ³)	2,847,450	Range (km ²)	171,563 (31.3%)	TSS (tonne y ⁻¹)	1,180,000
Depth (m)	4.63	Barren (km ²)	5 (0%)	DIN (kg y ⁻¹)	Unknown
Tide Height (m)	1.32	Total (km ²)	548,883 (0%)	DIP (kg y ⁻¹)	Unknown
Residence Time (d)	3	Population	6,597,793	TSS/est. area (tonne km ⁻² y ⁻¹)	1,919
		Popn: est. area ratio	10,728	DIN/est. area (kg km ⁻² y ⁻¹)	Unknown
				DIP/est. area (kg km ⁻² y ⁻¹)	Unknown