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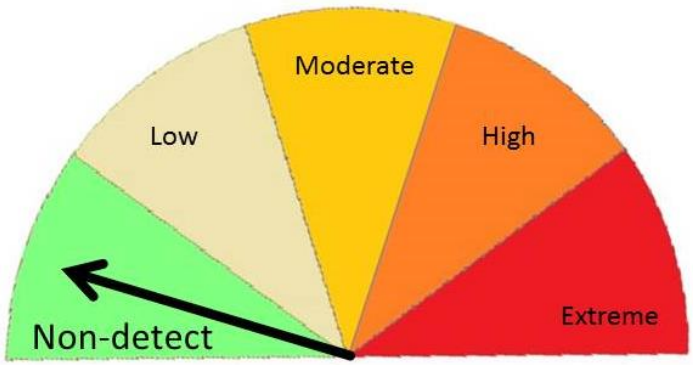
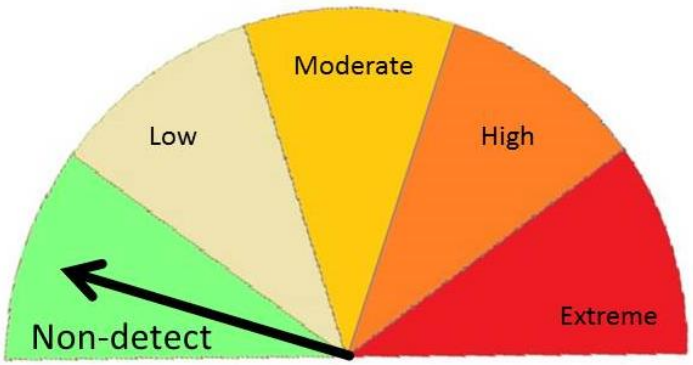


Blue- Green Algal Abundance



Blue-Green Algal Toxins

Sodus Bay Water Quality Report and Blue Green Algal Abundance:

ESF ID #	Lake Name	Lake Code/site	Collection Date	Water Clarity (m)[1]	Temp (°C)	FluoroProbe Total algae[2]	Green algae (µg/L)	Diatoms µg/L)	Blue-green algae (µg/L)	% BGA
17-203	Sodus Bay	Oak Park	6/14/2017	1.8	22.8	5.8	2.8	0.0	0.6	10%
17-204	Sodus Bay	Katlynn Marina	6/14/2017	bottom	20.9	2.8	0.5	0.0	0.3	11%
17-205	Sodus Bay	Sodus Point	6/14/2017	bottom	20.6	3.9	0.8	0.3	0.0	0%

Sodus Bay Toxicity Report:

ESF ID #	Lake Name	Lake Code/site	Collection Date	Flag (BGA)	Sample Type	Source	Microcystin toxin analysis Concentration (µg/L)(n)	Status[3]	Other Toxins Type	Status
17-203	Sodus Bay	Oak Park	6/14/2017		filter	ESF	< 0.1 (1)	Not Detected	-	-
17-204	Sodus Bay	Katlynn Marina	6/14/2017		filter	ESF	< 0.1 (1)	Not Detected	-	-
17-205	Sodus Bay	Sodus Point	6/14/2017		filter	ESF	< 0.1 (1)	Not Detected	-	-

Comments: Algal abundance is typical of early season with a low abundance of blue-green algae in the water. No toxins were detected.

[1] Water clarity is estimated from the Secchi Depth (z) – the distance that an 8 inch black and white disc can be seen when lowered down in the water column.

[2] Algal abundance is measured as ug chlorophyll-a per liter. DEC guideline values for chlorophyll are anything greater than 20-30 ug/L with a high percentage of BGA chlorophyll are cause for concern and the BGA flag = yes. Other common members of the algal flora which contribute to the total chlorophyll include green algae and diatoms. These algae are generally considered beneficial as they provide food for fish and zooplankton.

[3] Guidelines for interpretation of the results based on the presence or absence of known cyanobacteria toxins. Specific numbers are reported here for the most common class of toxins – the liver toxin microcystins. However blue-green algae may pose a risk from compounds other than the measured toxins and therefore all blooms should be avoided.

0.0-0.3 µg/L	Little to no presence of blue-green algal toxins: Minimal Toxicity. No detected toxin is shown with the "<" and the detection limit.
0.3-1.6 µg/L	Toxin detected but below the US EPA 10-day drinking water guidelines for adults, Exceeds the guideline values for drinking water for Children: Low Toxicity
1.6 – 20 µg/L	Toxin levels are above the EPA drinking water guidelines but generally below the limits for recreational contact: Moderate Toxicity
20-100 µg/L	Toxin levels are above suggested values for recreational contact: High Toxicity
>100 µg/L	Toxin levels are at levels where animal fatalities have been observed: Extreme Toxicity. Users should avoid contact with the blooms.