NOAA Western Lake Erie Harmful Algal Bloom Seasonal Forecast

09 July 2020

NOAA and our research partners forecast that western Lake Erie will experience a harmful algal bloom (HAB) of cyanobacteria this summer that is smaller than in 2019 but larger than the relatively moderate bloom in 2018.

We expect this year’s bloom to have a severity index of 4.5, but this could range between 4 and 5.5. The severity index is based on the quantity (biomass) of the bloom over a sustained period. The largest blooms, 2011 and 2015, were 10 and 10.5, respectively. The 2019 bloom had a severity of 7.3. The size of a bloom does not necessarily indicate how toxic it is. The toxins in a large bloom may not be as concentrated as in a smaller bloom. However, the typical cyanobacteria, Microcystis, forms scums that will pose a toxin risk, and people and pets should not swim in areas with scum.

The bloom varies in size and location through the summer and early fall. Winds are a key factor in determining where the bloom will go. Many areas of the lake will be safe to enjoy through the summer. NOAA's daily satellite imagery for Lake Erie (go.usa.gov/xfC8q) and the twice-weekly bulletins will give current information on the bloom.

Nutrient load data for the forecast came from Heidelberg University, with additional input from NOAA’s Ohio River Forecast Center. The forecast models are run by NOAA’s National Centers for Coastal Ocean Science, the University of Michigan, North Carolina State University, Stanford University, and the Carnegie Institution for Science. For additional information for safe recreation, check Ohio EPA’s site on harmful algal blooms: epa.ohio.gov/HAB-Algae.

For more information visit: http://www.ncwqr.org/ or http://coastalscience.noaa.gov/research/habs/forecasting/