Experimental Lake Erie Harmful Algal Bloom Bulletin

25 August, 2016, Bulletin 14

With calm winds, the cyanobacterial (*Microcystis*) bloom has reformed along the coast in the western basin. Moderate to high concentrations continue in Maumee Bay and extend up the Michigan coast and eastward from Maumee Bay along the Ohio coast. Pockets of low concentrations extend further east along the Ohio coast of the western basin. Areas of scum are present in Maumee Bay. Low concentrations continue in the center of the western Basin, north and west of West Sister Island; and also east of Pelee Island in the central basin. Toxin concentrations are above recreational risk thresholds in Maumee Bay.

Some mixing today with only light mixing through the weekend. Southerly winds will favor northward transport toward Ontario well east of the Detroit River. Toxin concentrations may be a risk for recreational exposure in areas shown as orange in the Figure 1 (around Maumee Bay), but especially in scums.

The persistent cyanobacteria bloom continues in Sandusky Bay. No other blooms have been detected in the central basin or the eastern basin.

Keep yourself and your pets out of scums. Please check Ohio EPA's site on harmful algal blooms for safety information. http://epa.ohio.gov/habalgae.aspx Thunderstorms remain a greater risk. --Stumpf, Dupuy

The images below are "GeoPDF". To see the longitude and latitude under your cursor, select "Tools > Analyze > Geospatial Location



Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 23 August, 2016 at 12:26 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



Figure 2. Cyanobacterial Index from NASA's MODIS-Terra data collected 23 August, 2016 at 12:26.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

For more information and to subscribe to this bulletin, go to: http://coastalscience.noaa.gov/research/habs/forecasting



Figure 3. Nowcast position of bloom for 25 August, 2016 using GLFS modelled currents to move the bloom from the 23 August, 2016 image.



Figure 4. Forecast position of bloom for 28 August, 2016 using GLFS modelled currents to move the bloom from the 23 August, 2016 image.



Produced with Information from NOAA's: National Centers for Coastal Ocean Science Great Lakes Environmental Research Laboratory National Weather Service, Cleveland Center for Operational Oceanographic Products and Services

Additional information from: Great Lakes Observing System Ohio Environmental Protection Agency

For more information and to subscribe, go to: http://coastalscience.noaa.gov/research/habs/forecasting