

## **Experimental Lake Erie Harmful Algal Bloom Bulletin**

18 July 2016, Bulletin 03

Cyanobacteria has appeared in far western Lake Erie at relatively low concentrations. Some *Microcystis* is present in the Maumee Bay area, and low concentrations may have moved along the Michigan coast. This is typical for this time of year. There is not a large bloom, but patchy clouds have obscured any small areas along the coast of the western basin. The central basin (or eastern basin) does not have detectable cyanobacteria, suggesting weakening or ending of the mild bloom of the cyanobacteria *Dolichospermum* reported last week.

Winds are shifting direction over the next several days as weak cold fronts pass over the lake.

The persistent cyanobacteria bloom continues in Sandusky Bay. Dupuy, Stumpf

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

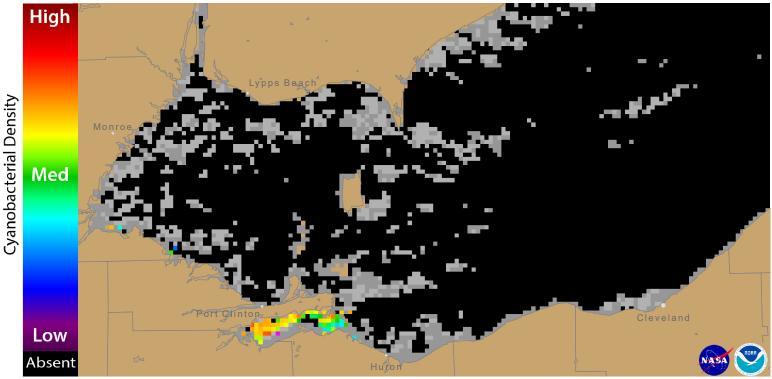
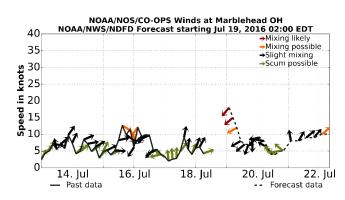
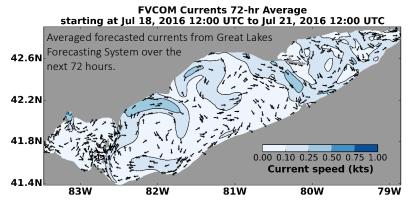


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 15 July 2016 at 11:20 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



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



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 Ohio State University, Stone Laboratory