



# Experimental Lake Erie Harmful Algal Bloom Bulletin

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The cyanobacterial (*Microcystis*) bloom has been reduced to localized patches that appear with calm weather or in sheltered spots. These occasional patches are too small and short-lived to be detected by the current satellite. If scum is present in a patch, toxins are likely. A larger area of very low concentration bloom appeared offshore and east of Sandusky Bay yesterday (Thursday) morning for a few hours (shown in Figure 1), but disappeared by early afternoon. Strong winds have stirred up sediment in the western basin.

Winds will start mild today (Friday), with strong winds overnight and through Saturday. Milder winds are expected to return on Sunday and continue into next week. If winds drop below 6 knots, the bloom may collect near the surface in localized areas for short periods of time. The occasional scums have a toxin risk, but should be easily avoidable, as large areas of bloom are not expected. Water temperatures below 68° F (20° C) discourage cell growth.

The persistent cyanobacteria bloom continues in Sandusky Bay. Please check Ohio EPA's site on harmful algal blooms for safety information. <http://epa.ohio.gov/habalgae.aspx> With strong winds, be careful boating. --Stumpf, Dupuy.

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

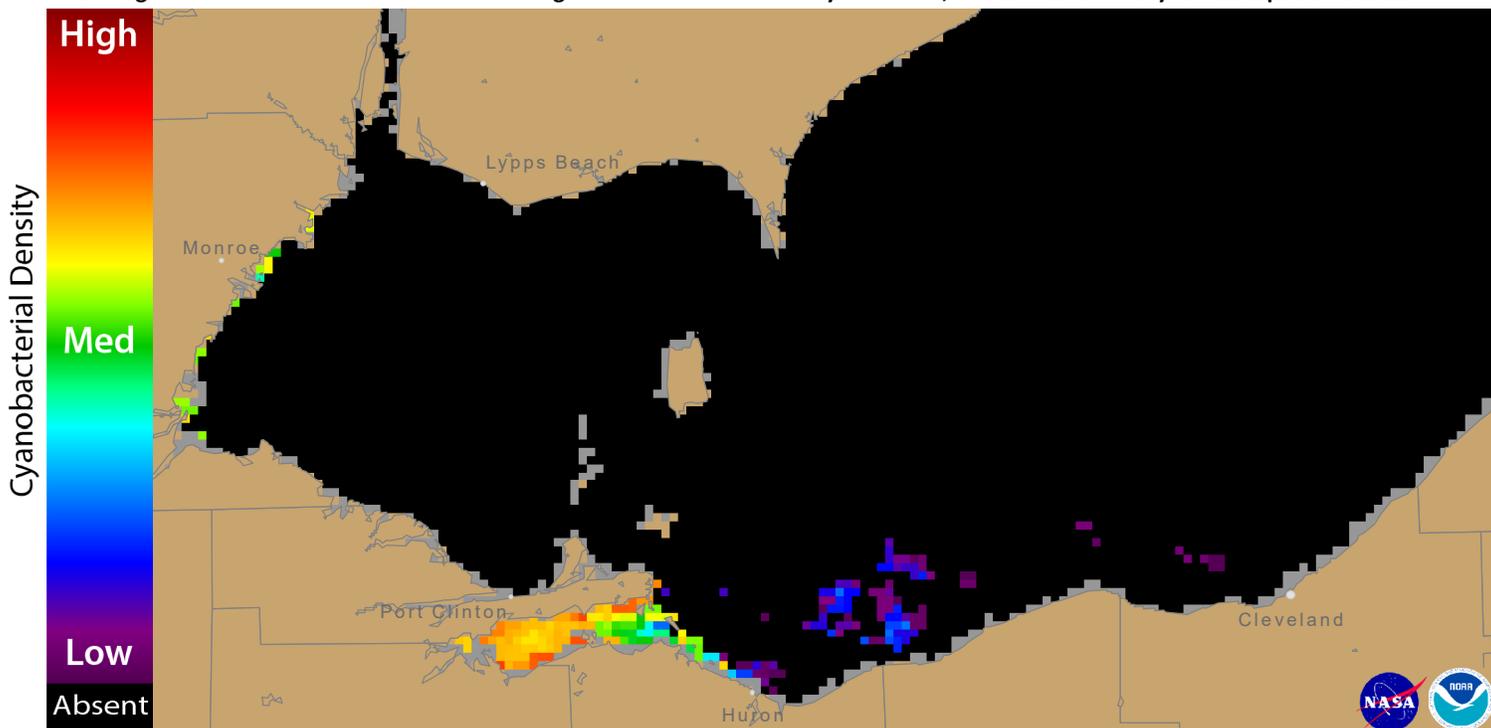
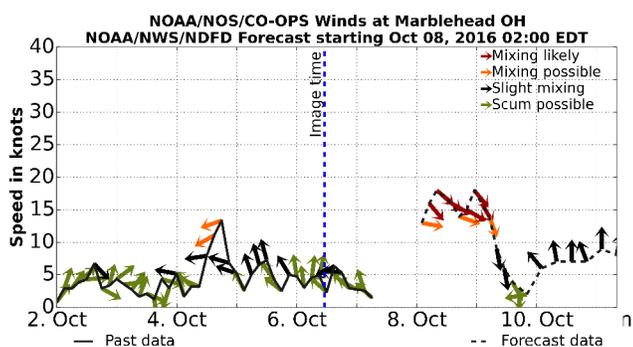
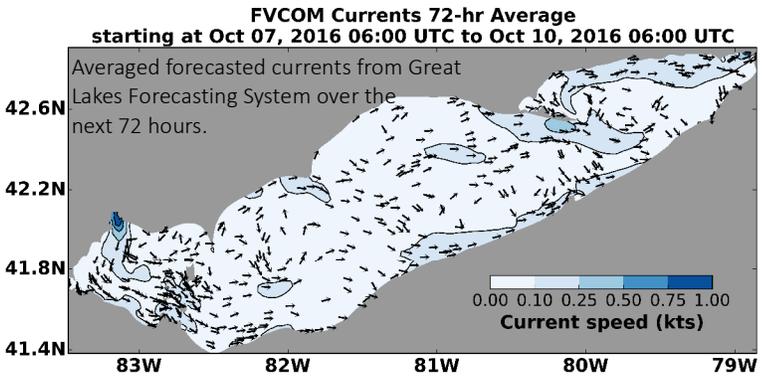


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 06 October, 2016 at 11:12 EDT. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



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).



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