



Experimental Lake Erie Harmful Algal Bloom Bulletin

11 October, 2016, Bulletin 27

Cyanobacteria (*Microcystis*) has persisted in extremely localized patches that appear with calm weather or in sheltered spots. Patches of scum occurred south of West Sister Island at least twice in the last week, one identified by satellite on Sunday afternoon (Oct 9). Under similar winds on Oct 7 and 10, no patches were detectable by satellite. Little movement is expected. If scum is present in a patch, toxins are likely. Fronts moving across the lake have led to strong winds that have stirred up sediment.

Mild winds occur today (Tuesday), with winds increasing in strength through Thursday. Milder winds should return for the weekend. If winds drop below 6 knots, cyanobacteria may collect near the surface in localized areas in the western basin for short periods of time. The occasional scums have a toxin risk, but should be easily avoidable, as they are small. Water temperatures below 68 ° F (20° C) discourage cell growth. Bulletins will continue until (*Microcystis*) is not apparent in satellite or field reports.

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

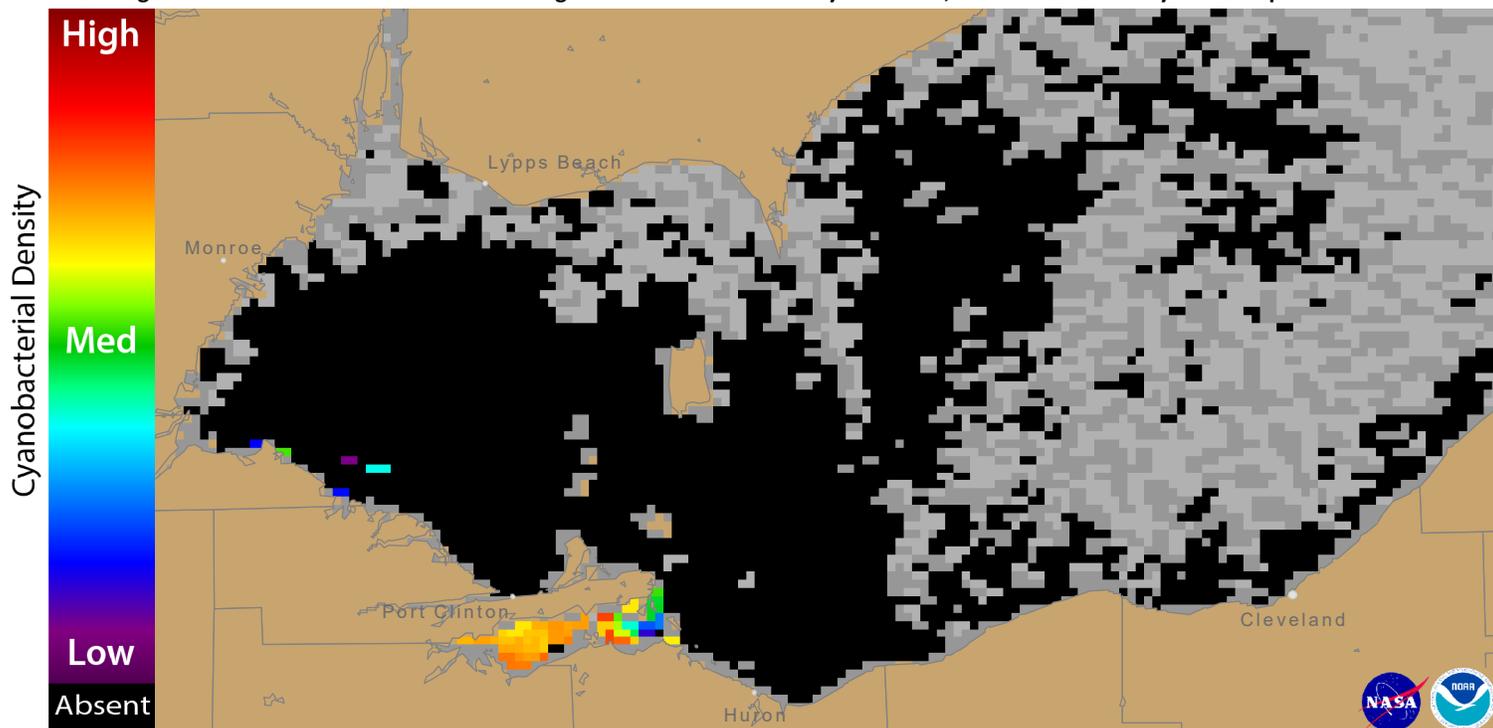
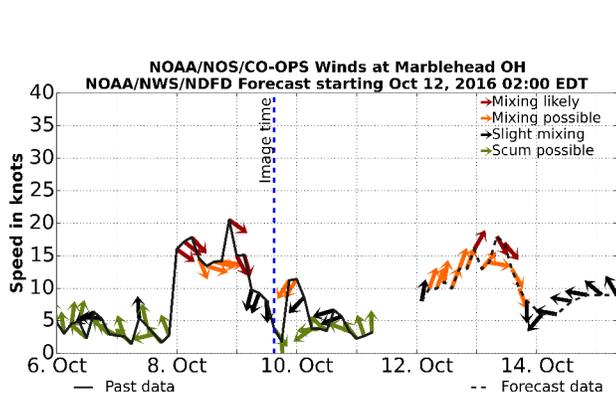
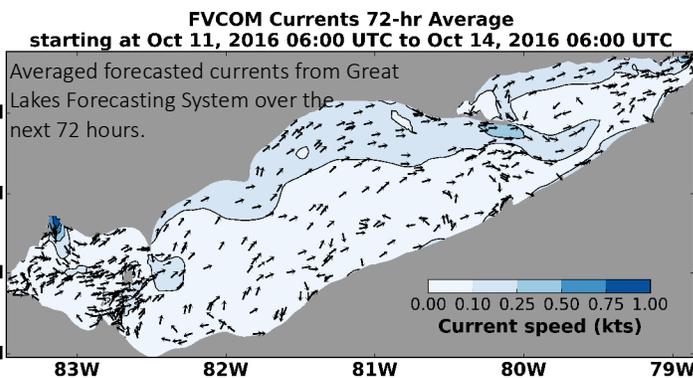


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 09 October, 2016 at 15:05 EDT. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



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