



Lake Erie Harmful Algal Bloom Bulletin

30 August, 2018, Bulletin 21

Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. Recent satellite imagery (8/28) shows the bloom extending north along the Michigan coast to Point Mouillee State Game Area, east along the Ohio coast to Sandusky Bay, up to 10 miles offshore from Magee Marsh Wildlife Area, and is still present in low concentrations throughout the Bass Islands. Winds observed this week (8/27-29) promoted mixing of surface *Microcystis* concentrations. Toxin concentrations are detectable at most sampling sites but have decreased below the recreational threshold throughout all sampling sites. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

Forecasts

Winds (6-13 kn) forecast today through Monday (8/30-9/3) will promote mixing of surface *Microcystis* concentrations. Winds will promote the northeastward transport of *Microcystis* today through Monday (8/30-9/3) towards the central basin. --Keeney, Ludema

Additional Resources

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: <http://publicapps.odh.ohio.gov/beachguardpublic/>
Ohio EPA's site on harmful algal blooms: <http://epa.ohio.gov/HAB-Algae>
NOAA's GLERL provides additional HAB data here: http://www.glerl.noaa.gov/res/HABs_and_Hypoxia

The images below are "GeoPDF". Please visit <https://go.usa.gov/xReTC> for instructions on viewing longitude and latitude.

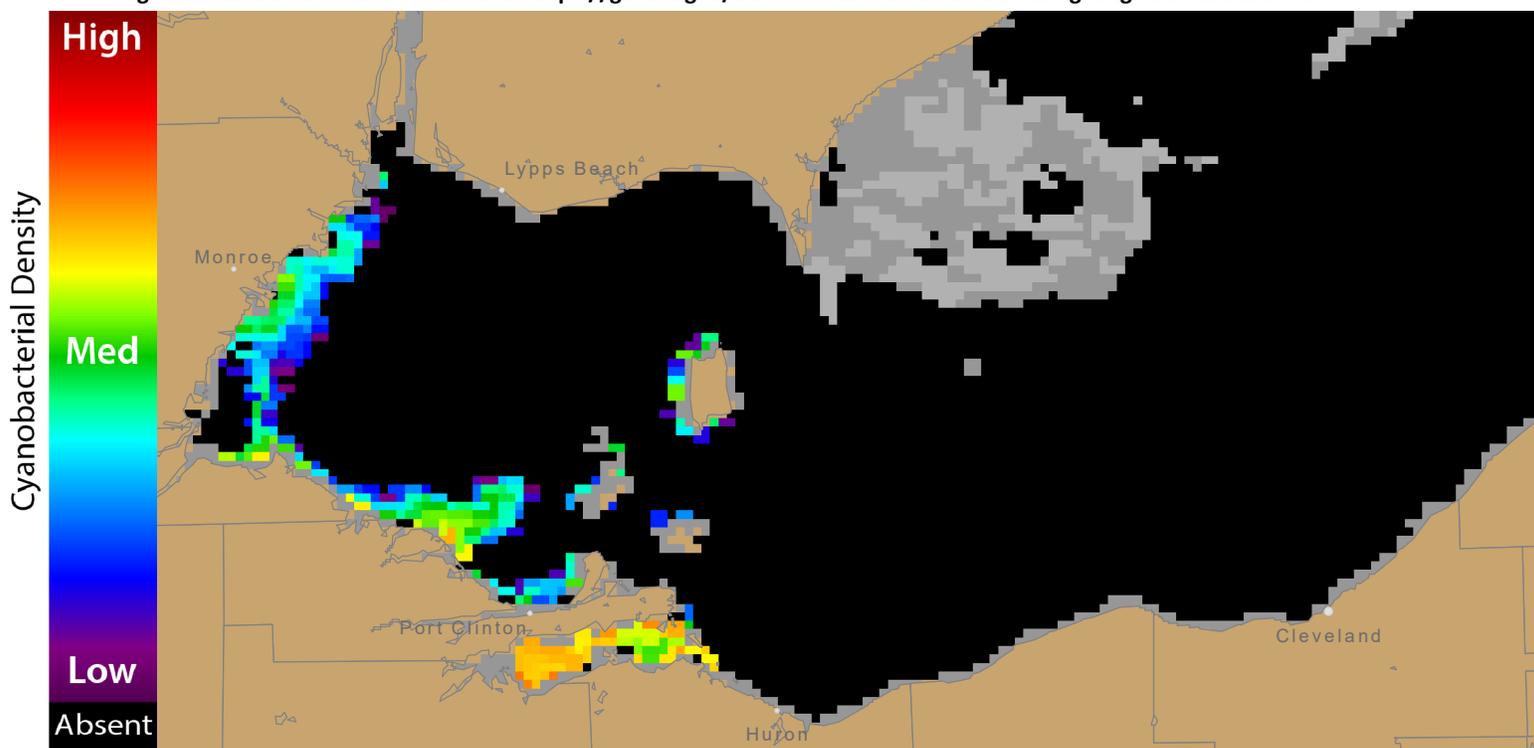


Figure 1. Cyanobacterial Index from NASA MODIS-Aqua data collected 28 August, 2018 at 13:26 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

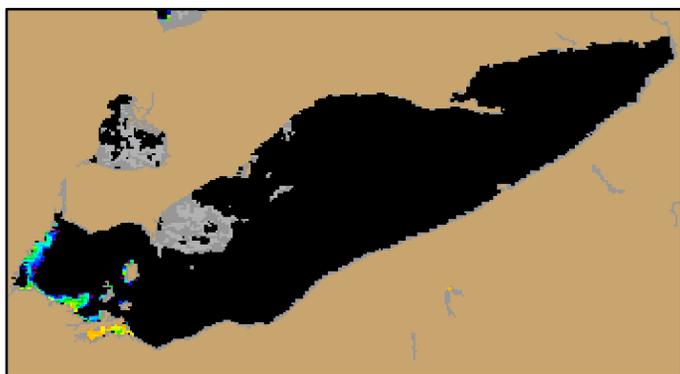
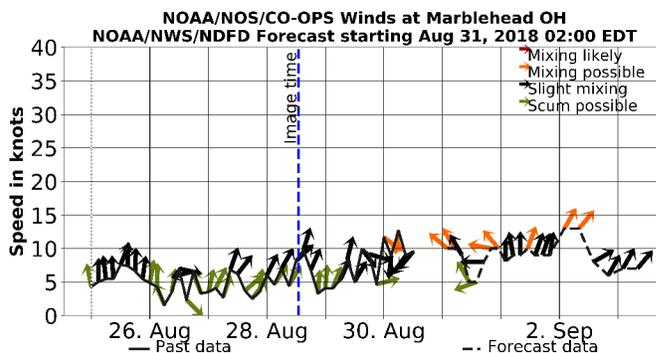


Figure 2. Cyanobacterial Index from NASA MODIS-Aqua data collected 28 August, 2018 at 13:26.



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: <https://tidesandcurrents.noaa.gov/hab/lakeerie.html>

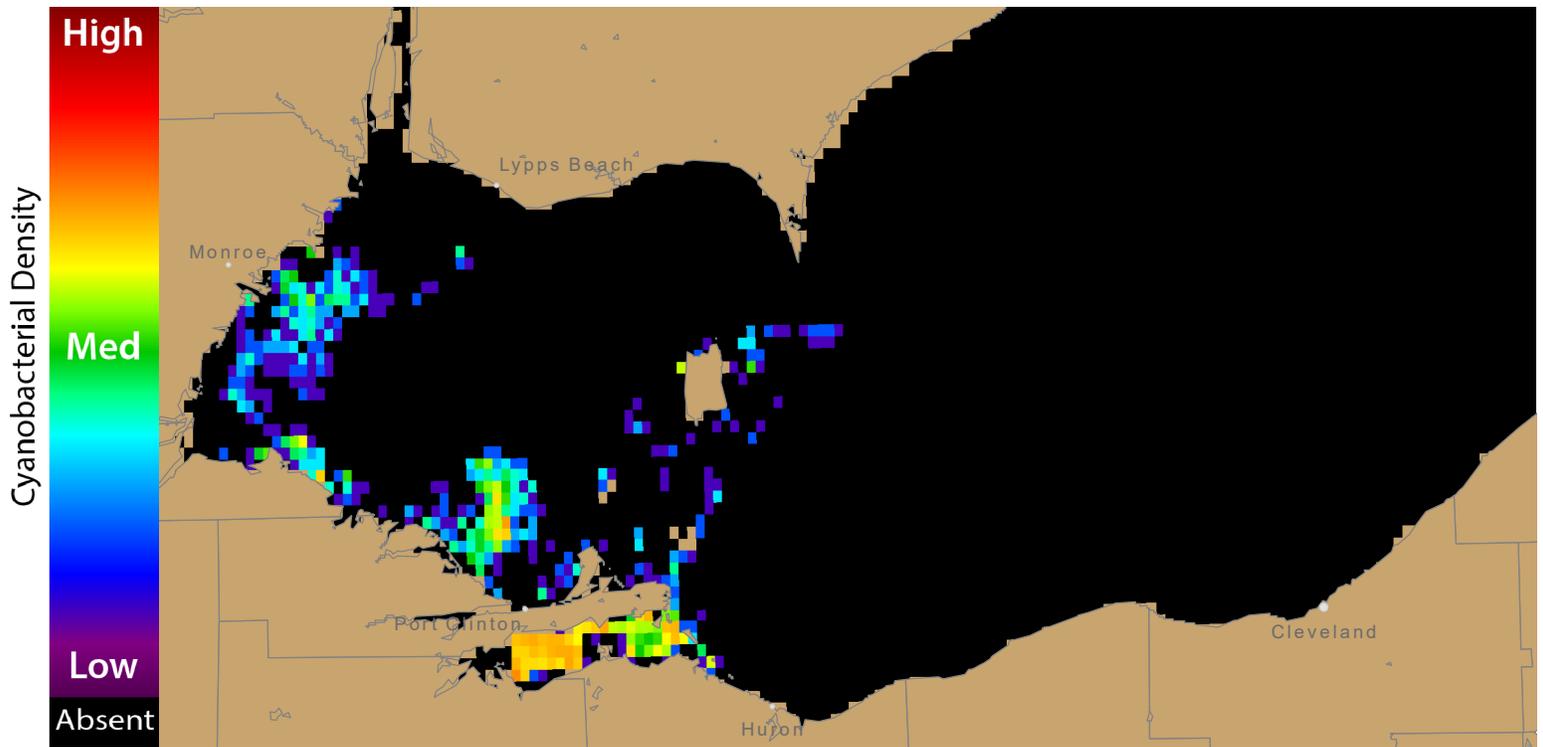


Figure 3. Nowcast position of bloom for 30 August, 2018 using LEOFS modelled currents to move the bloom from the 28 August, 2018

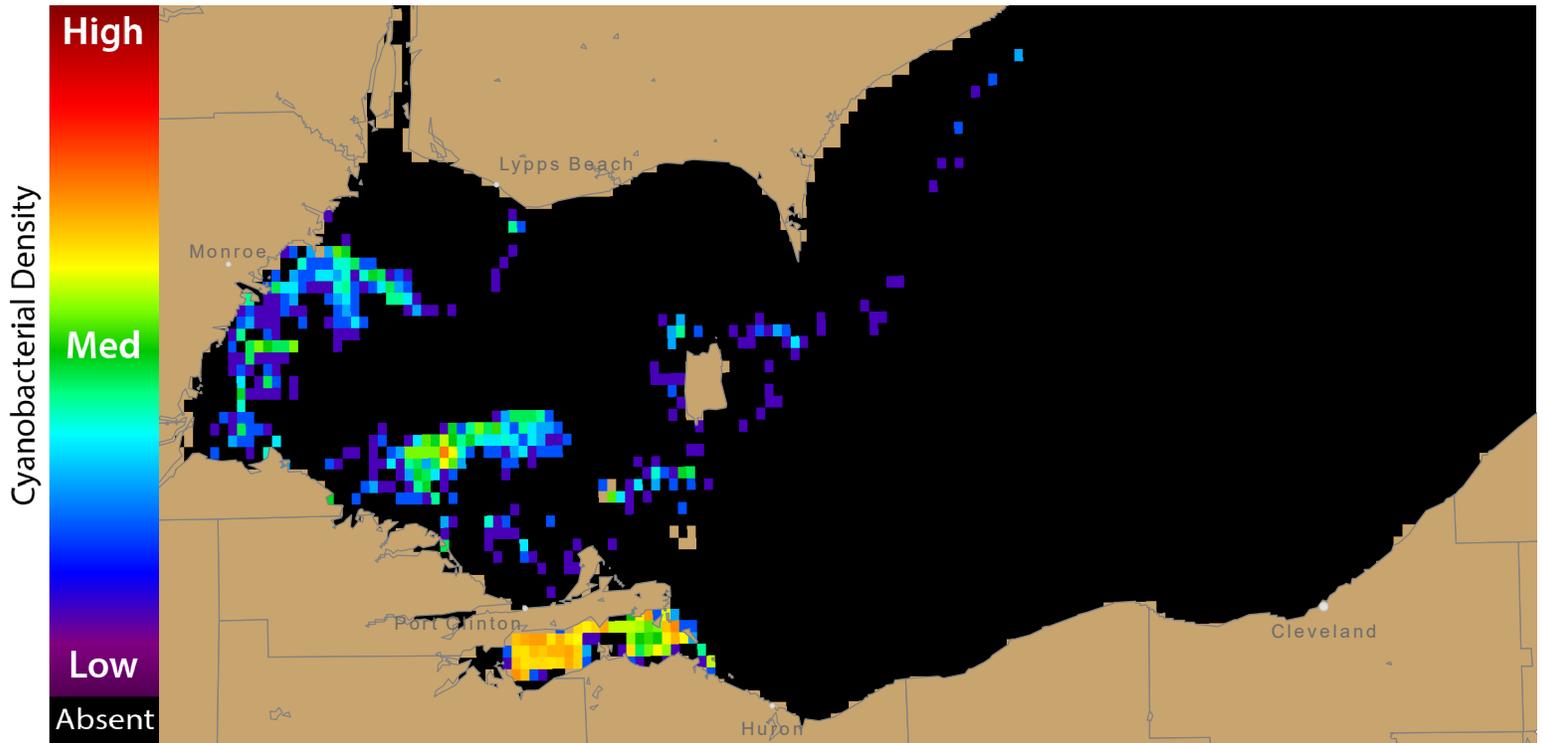
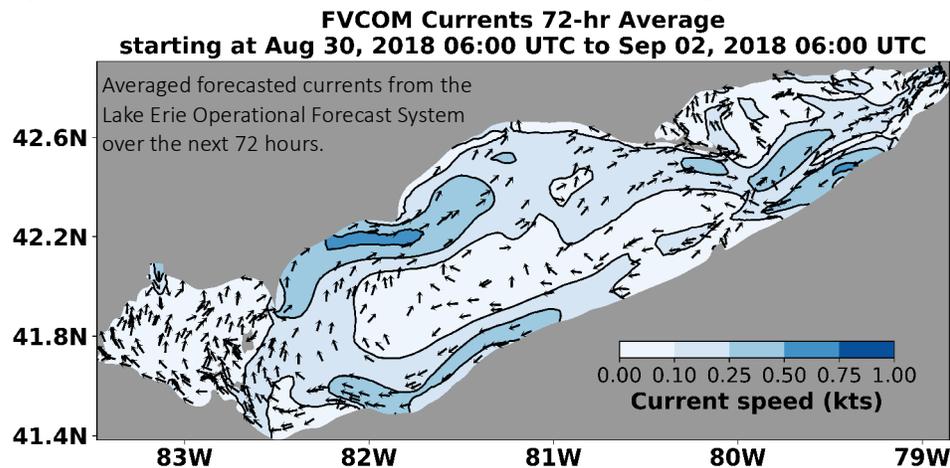


Figure 4. Forecast position of bloom for 02 September, 2018 using LEOFS modelled currents to move the bloom from the 28 August, 2018



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