



# Lake Erie Harmful Algal Bloom Bulletin

03 August, 2018, Bulletin 13

## Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin. Recent satellite imagery has been obscured by clouds throughout much of the bloom extent, limiting analysis. Satellite imagery from 8/3 indicates the bloom is present in Maumee Bay, extending 12 miles north along the Michigan coast, and eastward along the Ohio coast to the Ottawa Wildlife Refuge. Observed winds (8/1-2) reduced mixing and may have lead to scum formation. Measured toxin concentrations have increased since last week and have been detected as far east as Kelleys Island, but are still below the recreational threshold throughout the bloom extent. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

## Forecasts

Forecast winds (4-9 kn) today through Monday (8/3-6) may lead to scum formation and eastward transport of surface *Microcystis* concentrations. --Davis, Keeney

## 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](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.

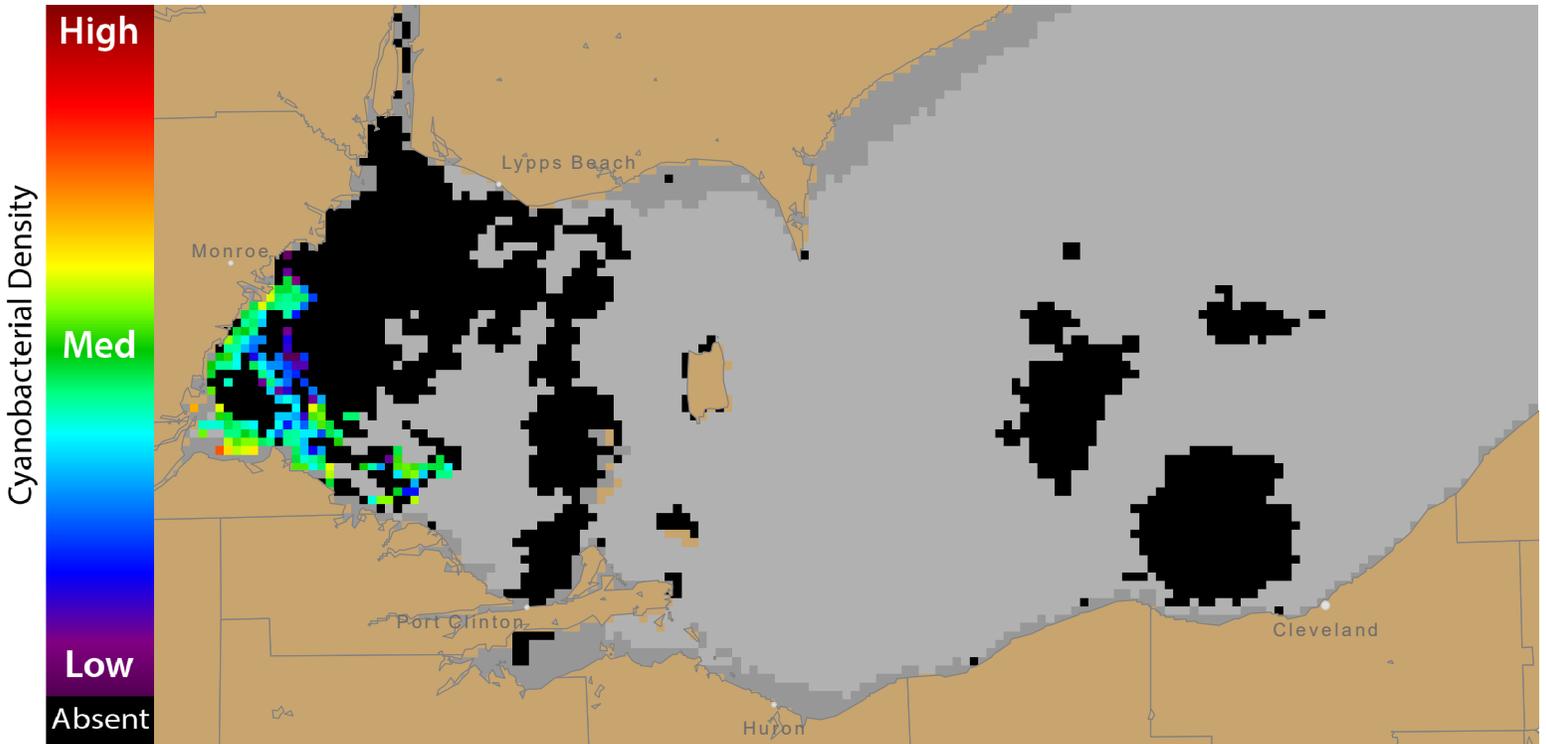
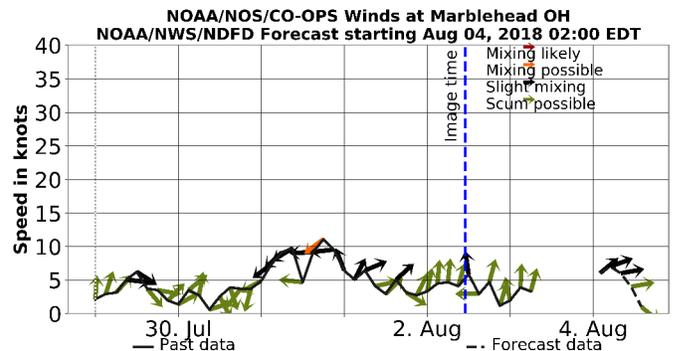


Figure 1. Cyanobacterial Index from NASA MODIS-Terra data collected 02 August, 2018 at 11:07 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



Figure 2. Cyanobacterial Index from NASA MODIS-Terra data collected 02 August, 2018 at 11:07.



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).



Figure 3. Nowcast position of bloom for 03 August, 2018 using LEOFS modelled currents to move the bloom from the 02 August, 2018

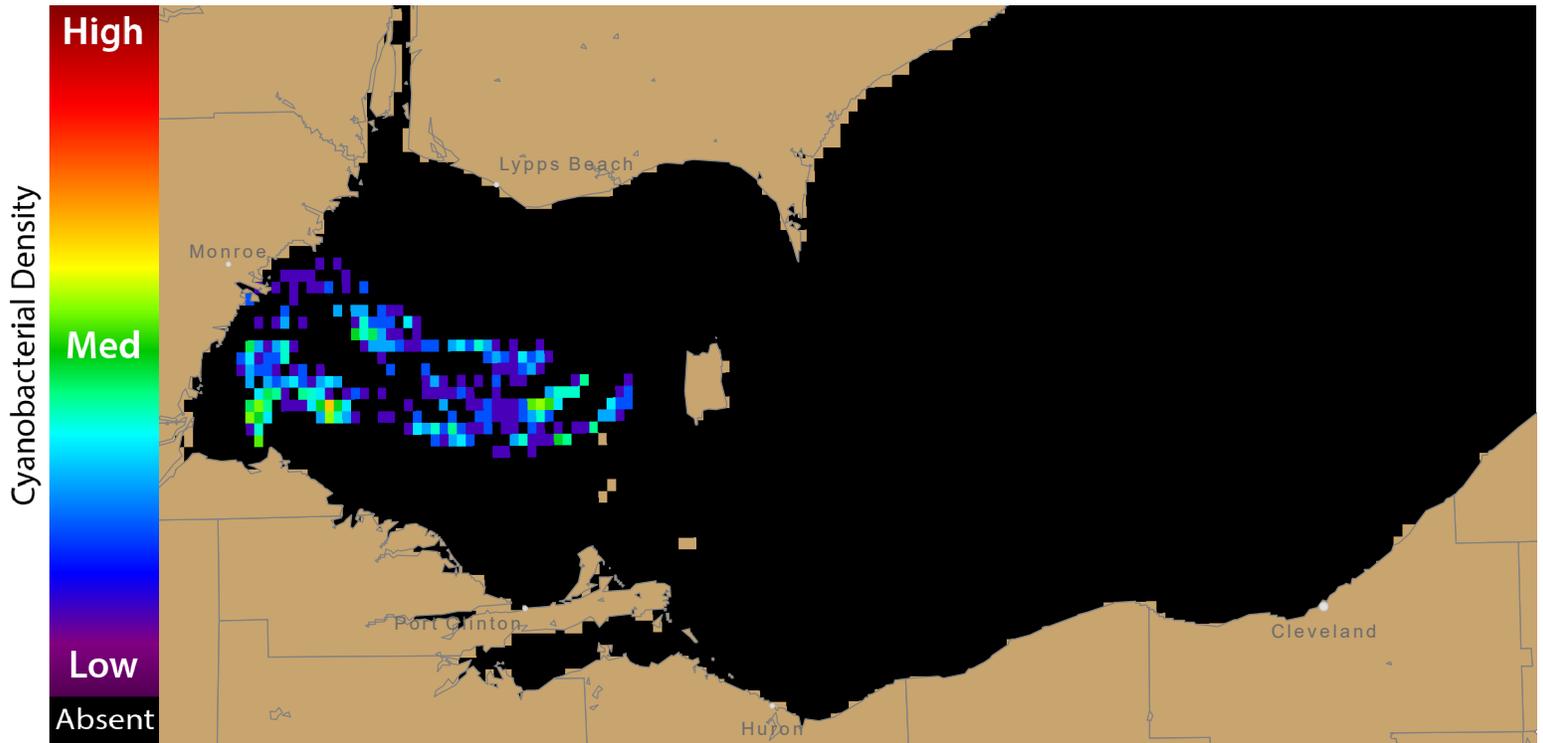
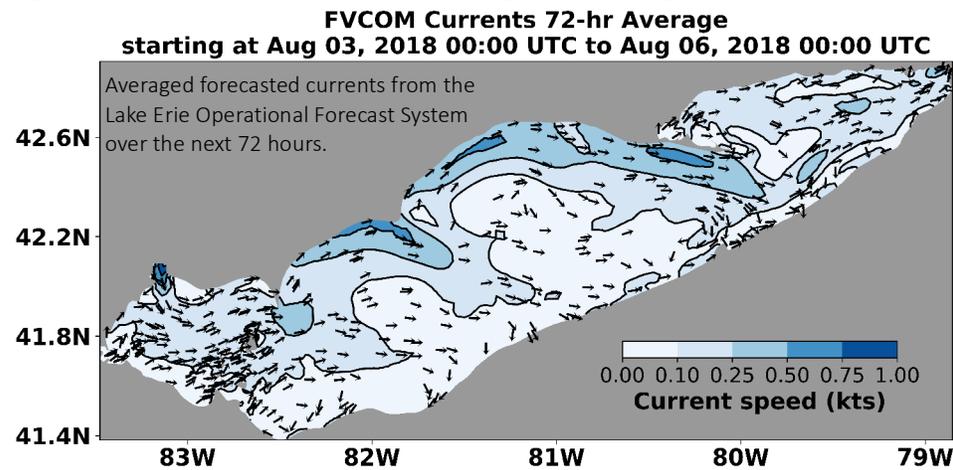


Figure 4. Forecast position of bloom for 06 August, 2018 using LEOFS modelled currents to move the bloom from the 02 August, 2018



For more information and to subscribe, please visit the NOAA HAB Forecast page: <https://tidesandcurrents.noaa.gov/hab/lakeerie.html>