



# Lake Erie Harmful Algal Bloom Bulletin

07 October, 2019, Bulletin 29

## Analysis

*Microcystis* cyanobacteria in the western basin of Lake Erie continues to decrease in concentration and extent. Observed winds (10/3-6) caused mixing that may have reduced any remaining surface concentrations. Recent satellite imagery has been partially obscured by clouds, limiting analysis. Satellite imagery from yesterday (10/6) indicates some chlorophyll is still present within Maumee Bay, but is absent elsewhere within the western basin. The persistent cyanobacteria bloom in Sandusky Bay continues.

## Forecasts

Forecast winds (5-12 kn) today through Thursday (10/7-10) will promote mixing of any remaining surface *Microcystis* concentrations. The water temperature has dropped below 68°F (20°C) and an increase in bloom concentrations is no longer possible. -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.

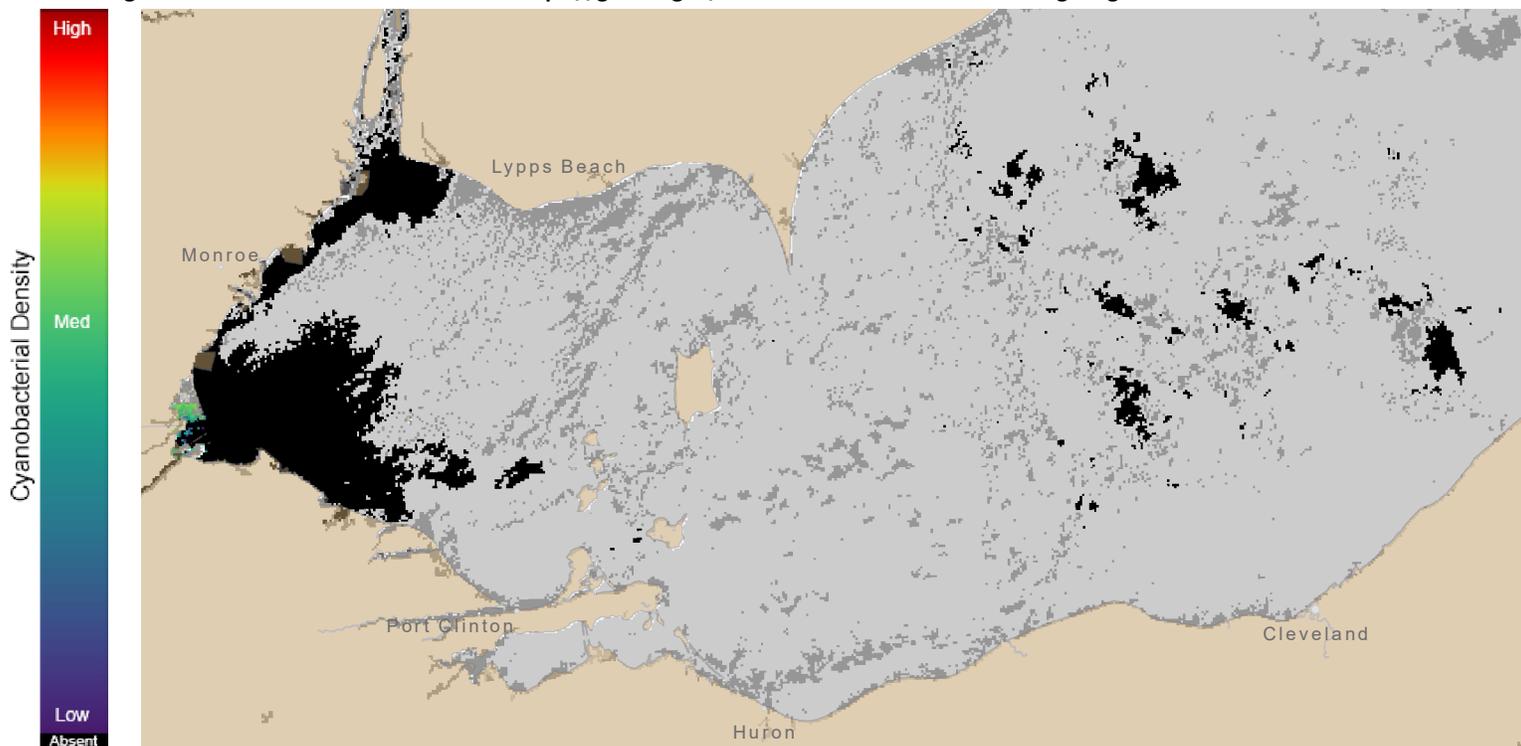
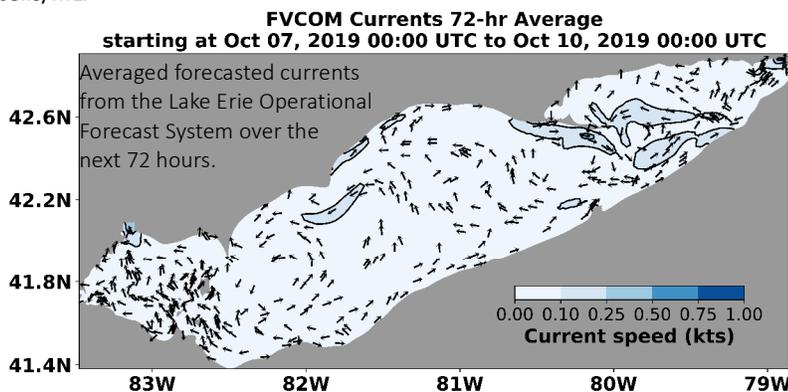
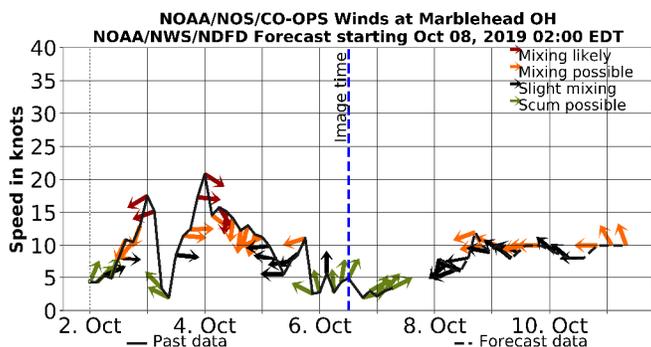


Figure 1. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 06 October, 2019 at 12:08 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



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).

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