

# Experimental Lake Erie Harmful Algal Bloom Bulletin

National Centers for Coastal Ocean Science and Great Lakes Environmental Research Laboratory

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The area of highest concentration remains in the western basin. Winds yesterday were strong enough to mix the bloom, keeping the concentration down in the central western basin.

Calm winds throughout the week will favor localized scum formation, especially in medium to high concentration areas in the southwest part of the lake. There is a slight risk of scum formation between Bass and Pelee Islands. The transport model is unavailable today. However, the calm winds will keep the bloom position relatively stable.

The imagery shows the persistent bloom in Sandusky Bay is present.

There are no reported harmful algal blooms or suspicious features in the Eastern Basin at this time.

-Dupuy, Stumpf

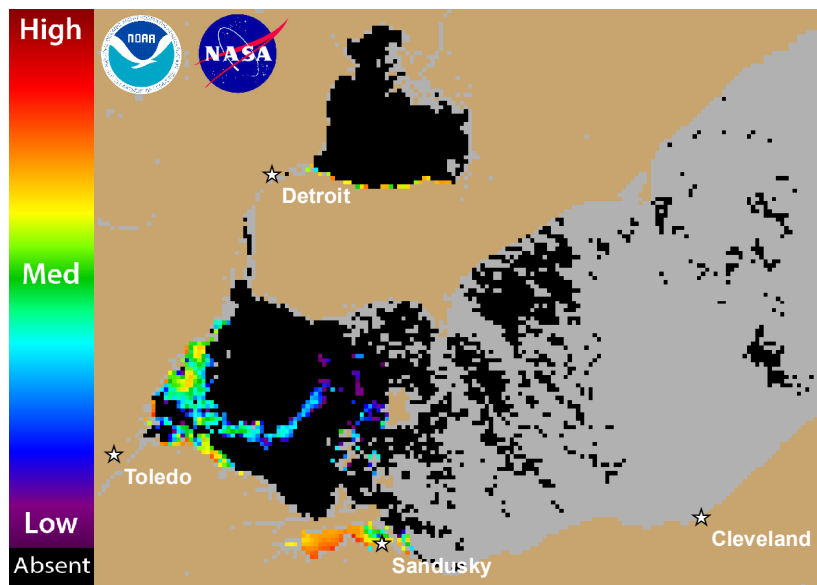
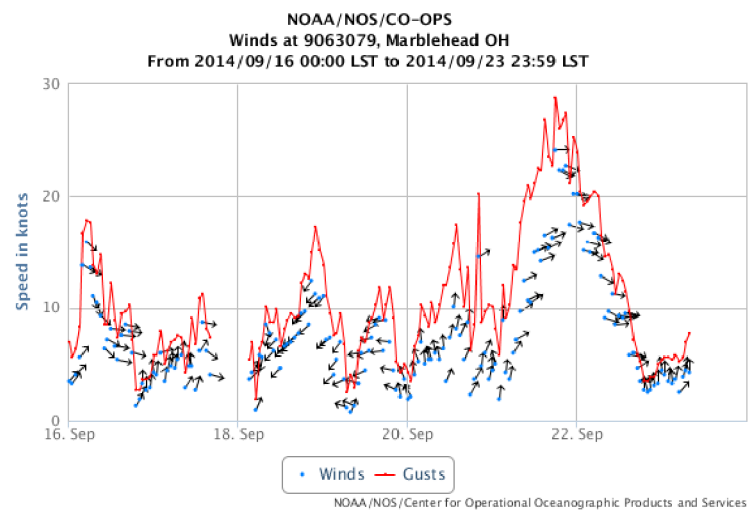
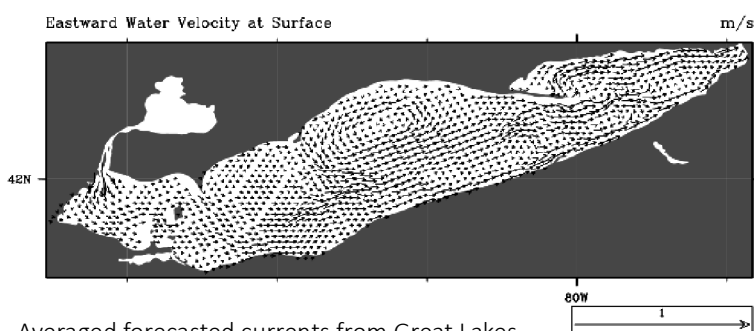


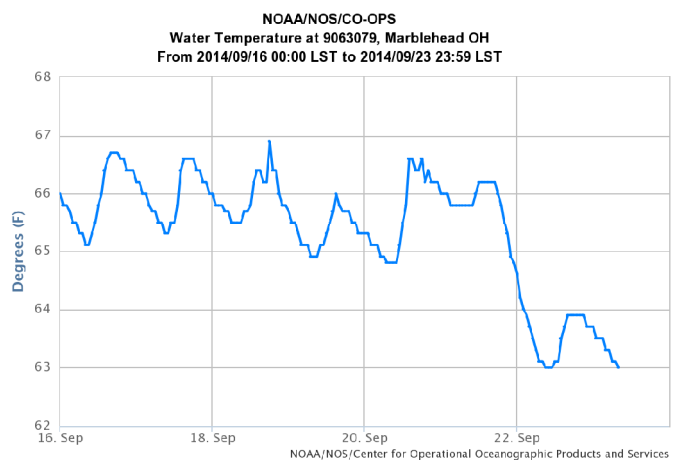
Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 22 September 2014 at 2:35 pm. Grey indicates clouds or missing data. Black represents no cyanobacteria detected. Colored pixels indicate the presence of cyanobacteria. Cooler colors (blue and purple) indicate low concentrations and warmer colors (red, orange, and yellow) indicate high concentrations. The estimated threshold for cyanobacteria detection is 35,000 cells/mL.



Wind Speed, Gusts and Direction from Marblehead, OH. From: NOAA/Center for Operational Oceanographic Products and Services (CO-OPS). Note: 1 knot = 0.51444 m/s. Blooms mix through the water column at wind speeds greater than 7.7 m/sec (~ 15 knots).



Averaged forecasted currents from Great Lakes Coastal Forecasting System over the next 72 hours.



Water Temperature from Marblehead, OH. From: NOAA/Center for Operational Oceanographic Products and Services (CO-OPS).

Supported by the NASA Applied Sciences Health and Air Quality Program. Wind forecasts derived from NOAA/National Weather Service in Cleveland.

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