

Lake Erie Hypoxia Forecast

2024-06-18

Summary

Welcome to the new home of the Lake Erie hypoxia forecast page (previously an experimental product at NOAA/GLERL). We will be doing some housekeeping in June, so the forecasts might differ somewhat from day to day. For now please refer to the legacy forecast hosted at GLERL: Lake Erie Hypoxia (GLERL) On June 8, an unprecedented hardware failure on our primary supercomputer prevented the forecast model from updating. We have developed contingency plans if this happens again, and will be prepared this summer. The forecast is restored as of June 12. ##--HAB forecast team 06/17/2024

Forecasted Temperatures and Oxygen Levels at Bottom

Wed 19 Jun 2024 11:00 EDT
2024-06-19 15 GMT

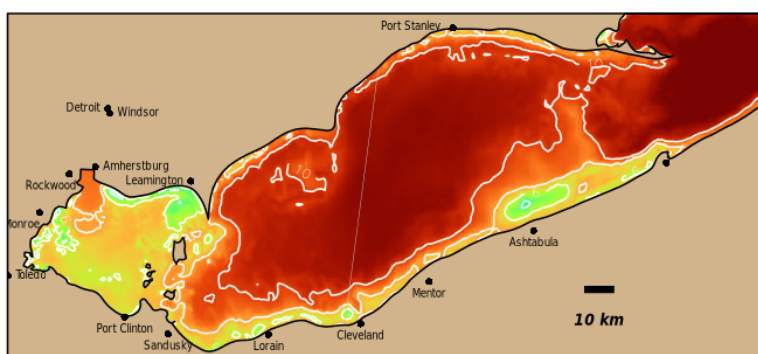
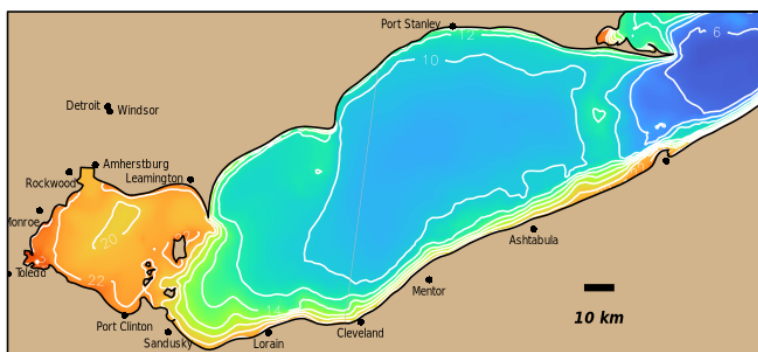


Image created on 2024-06-18

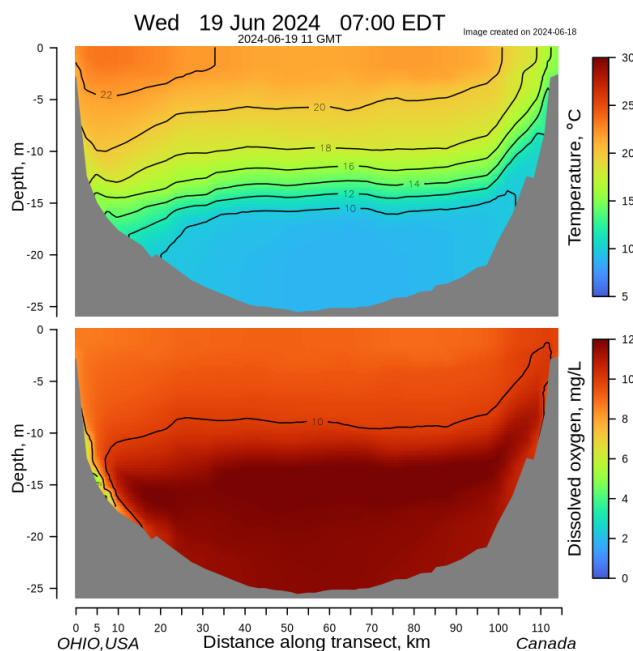
Model output includes near real-time estimated oxygen levels and temperatures in the bottom water across Lake Erie. In the top panel (temperatures), red colors indicate high temperatures (30 C) while blue colors indicate low temperatures (5 C). In the bottom panel (oxygen), red colors indicate high oxygen, while blue-green colors indicate hypoxic (< 2 mg/L) or anoxic (0 mg/L) conditions.

For more information visit: <http://coastalscience.noaa.gov/lake-erie-hypoxia-forecast>

For questions regarding the forecast contact the NCCOS HAB Forecasting Branch: hab@noaa.gov

Vertical transect of Forecasted Oxygen and Temperature

This transect, marked as a light line on the map of Lake Erie, extends from just west of Cleveland, OH to west of Port Stanley, ON. In this cross-sectional view you can see today's modeled distribution of temperatures (top) and oxygen (bottom) in the water column in the center of the lake. The color scales are the same as in the whole-lake images.



Lake Erie Hypoxia Forecast

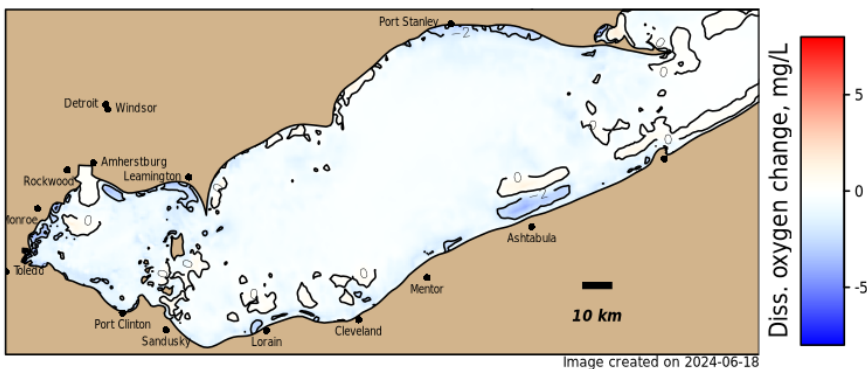
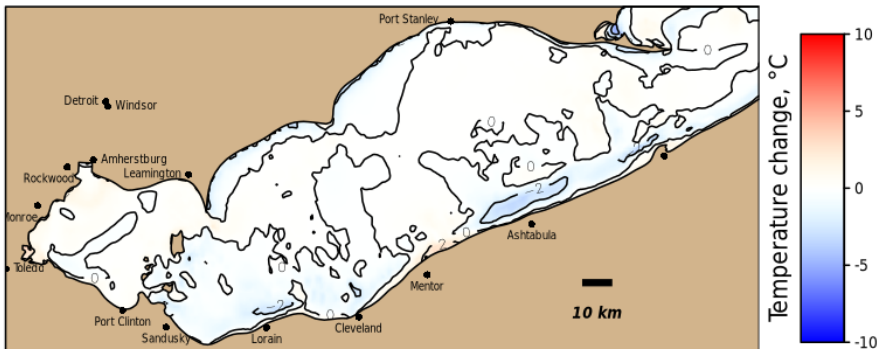
2024-06-18

Lake Erie Forecasted Changes in Bottom Water Temperature and Dissolved Oxygen

Change in Bottom Temperature and Dissolved Oxygen

Wed, 19 Jun 2024 12:00 with reference to Mon, 17 Jun 12:00 EDT

2024-06-19 16 with reference to 06-17 16 GMT



Changes in bottom water temperature and dissolved oxygen (mg/L)

Lake Erie Forecasted Winds Counts by Direction (Wind Rose Plot)

This panel depicts the frequency of occurrence of wind directions and speeds for yesterday, today, tomorrow, and the following 3 days. The length of each spoke indicates how frequently a wind blows from a particular direction. Wind speeds are indicated by color, as given by the color scale at the bottom of the plot. The data were sampled from the wind data used to drive the hydrodynamic model simulation at locations around the central basin of Lake Erie

Wind Rose, Lake Erie Central Basin

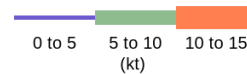
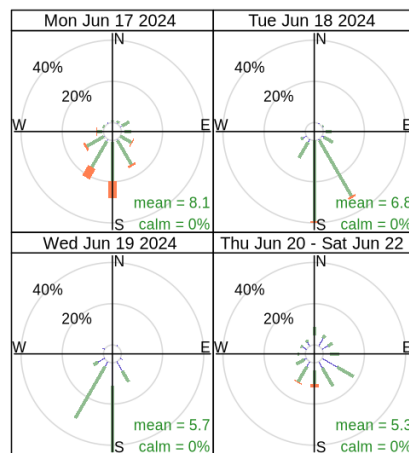


Image created on 2024-06-18

Frequency of counts by wind direction (%)

For more information visit: <http://coastalscience.noaa.gov/lake-erie-hypoxia-forecast>

For questions regarding the forecast contact the NCCOS HAB Forecasting Branch: hab@noaa.gov