

# Lake Erie Hypoxia Forecast

2024-07-16

## Summary

Welcome to the new home of the Lake Erie Hypoxia Forecast (previously an experimental product at NOAA/GLERL). Currently there is low risk of hypoxic bottom water upwelling near the Ohio coast. However, pockets of hypoxic water exist along the Ohio coast. This text will change if the risk changes. ##--NCCOS HAB Forecasting Team 15 July 2024

### Forecasted Temperatures and Oxygen Levels at Bottom

Wed 17 Jul 2024 11:00 EDT  
2024-07-17 15 GMT

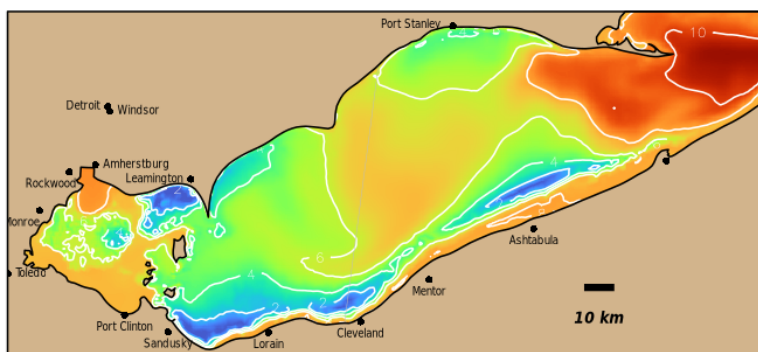
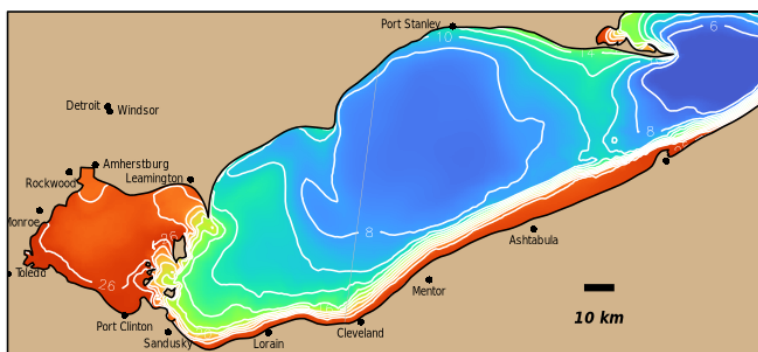


Image created on 2024-07-16

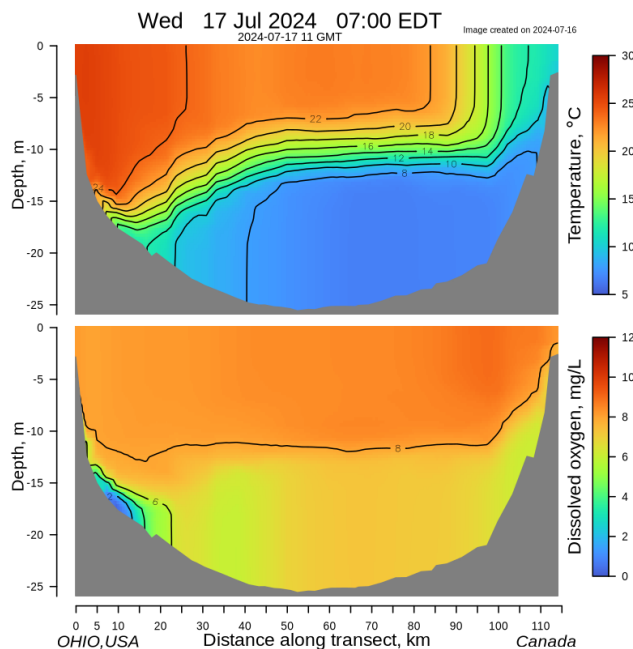
Model output includes near real-time estimated oxygen levels and temperatures in the bottom water across Lake Erie. In the top panel (temperatures), red colors indicate high temperatures (30 C) while blue colors indicate low temperatures (5 C). In the bottom panel (oxygen), red colors indicate high oxygen, 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](mailto: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

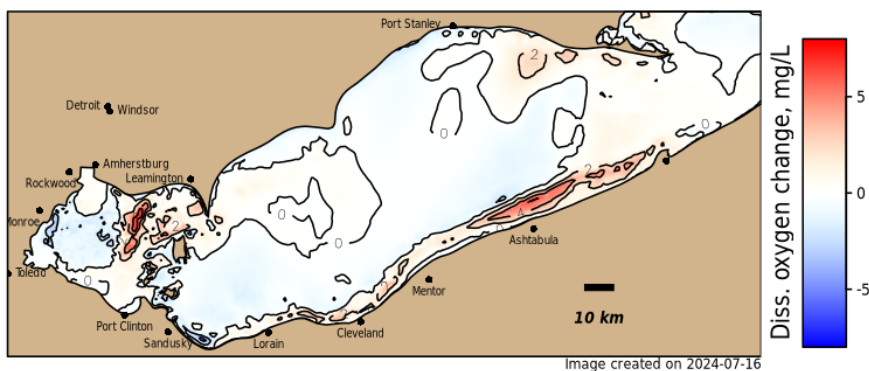
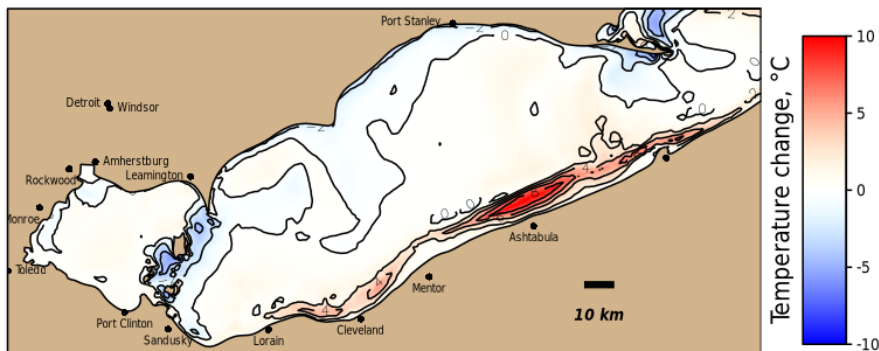
2024-07-16

## Lake Erie Forecasted Changes in Bottom Water Temperature and Dissolved Oxygen

Change in Bottom Temperature and Dissolved Oxygen

Wed, 17 Jul 2024 12:00 with reference to Mon, 15 Jul 12:00 EDT

2024-07-17 16 with reference to 07-15 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

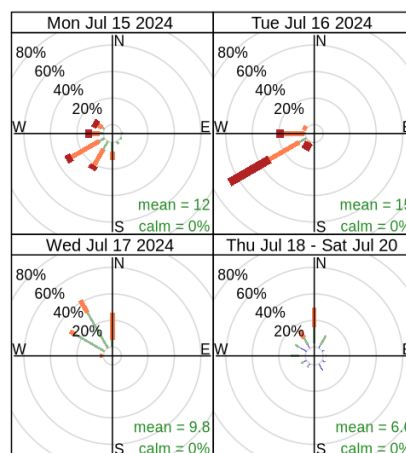


Image created on 2024-07-16

Frequency of counts by wind direction (%)

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