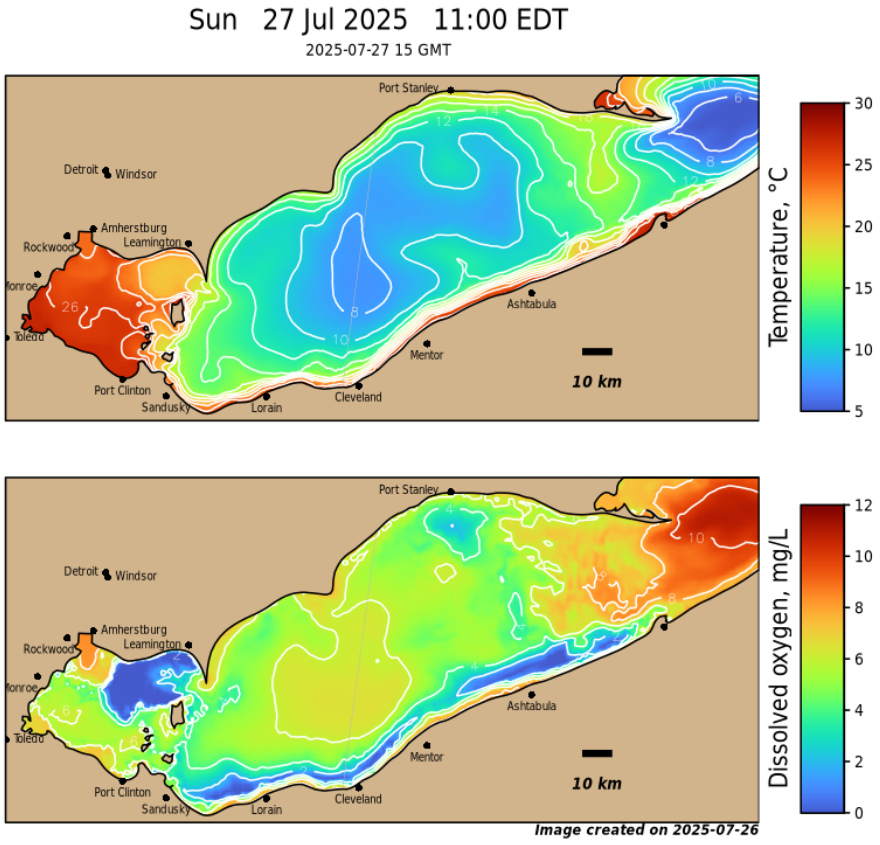
Lake Erie Hypoxia Forecast

2025-07-26

Summary

Currently, sensors along the southern OH coast are showing widespread hypoxia in the bottom waters from Rocky River, OH to Ashtabula, OH. The model is currently not predicting upwelling over the next few days. This text will change if the risk changes. ##--St. Laurent and Hounshell, 24 July 2025

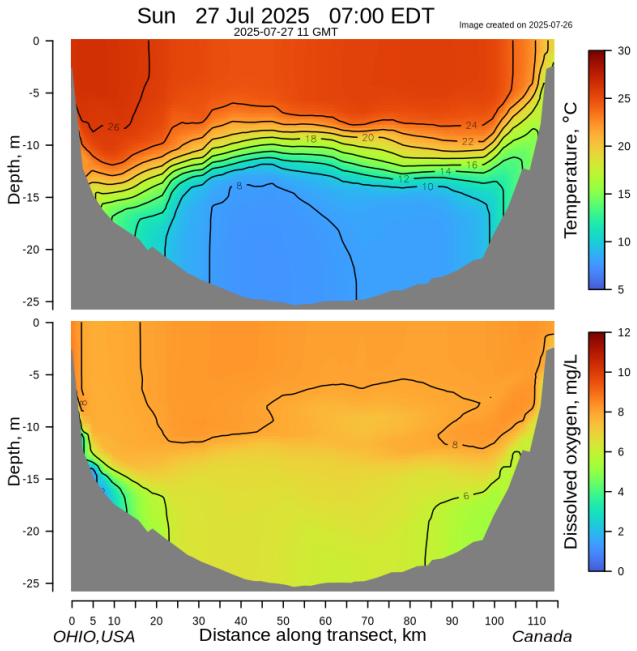
Forecasted Temperatures and Oxygen Levels at Bottom



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.

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.



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

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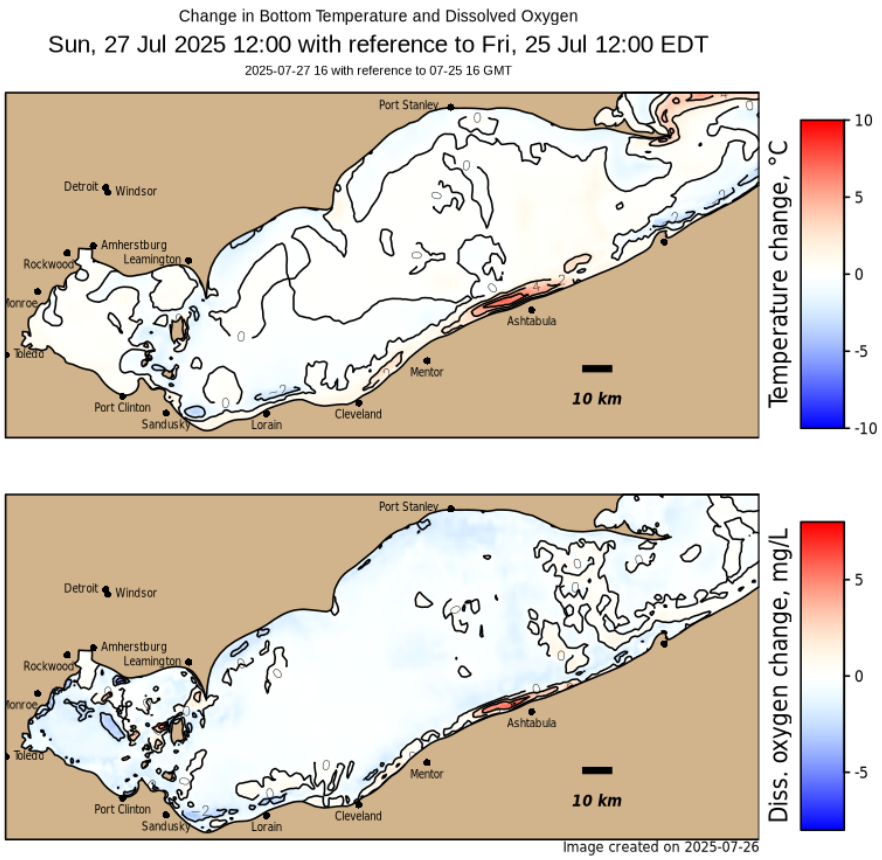
Lake Erie Forecasted Changes in Bottom Water Temperature and Dissolved Oxygen

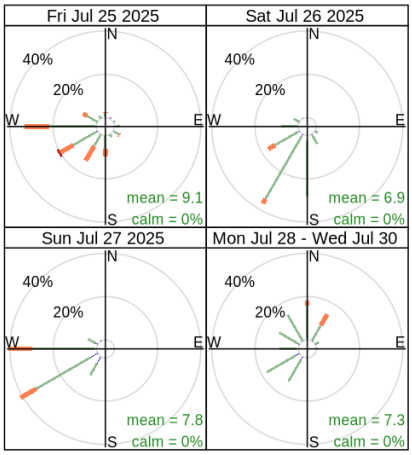


Changes in bottom water temperature and dissolved oxygen (mg/L)

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



Frequency of counts by wind direction (%)

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