

## Lake Erie Hypoxia Forecast

2024-11-30

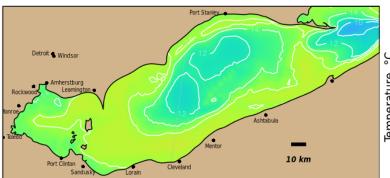
### Summary

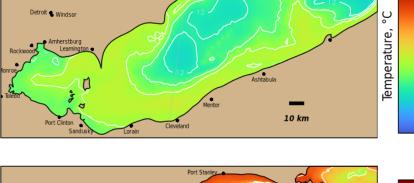
Welcome to the new home of the Lake Erie Hypoxia Forecast (previously an experimental product at NOAA/GLERL). The 2024 hypoxic upwelling forecast season has ended. We will resume forecasts in June 2025. ##--NCCOS HAB Forecasting Team 22 October 2024

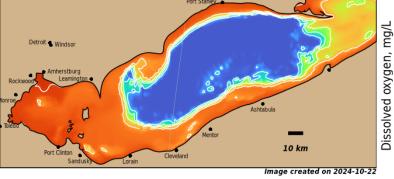
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## Forecasted Temperatures and Oxygen Levels at Bottom

#### Wed 23 Oct 2024 11:00 EDT 2024-10-23 15 GMT







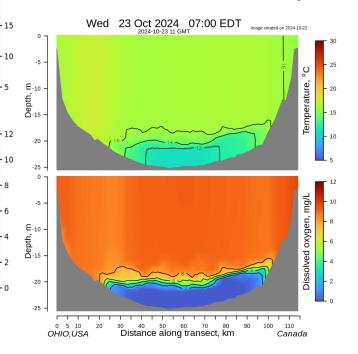
Model output includes near real-time estimated oxygen levels and temperatures in the bottom water across Lake Erie. In the top panel (temperatures), red colors indicate high temperatures (30 C) while blue colors indicate low temperatures (5 C). In the bottom panel (oxygen), red colors indicate high oxygen,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





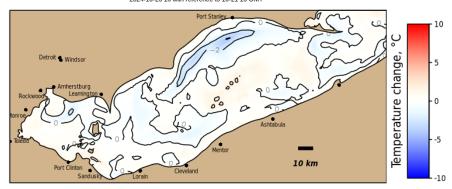
# Lake Erie Hypoxia Forecast

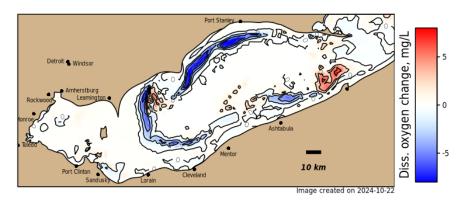
2024-11-30

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

Change in Bottom Temperature and Dissolved Oxygen
Wed, 23 Oct 2024 12:00 with reference to Mon, 21 Oct 12:00 EDT

2024-10-23 16 with reference to 10-21 16 GMT



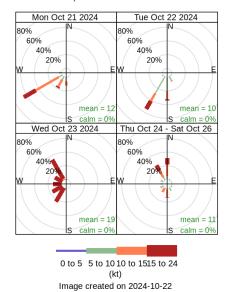


Changes in bottom water temperature and dissolved oxygen (mg/L)

# 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



Frequency of counts by wind direction (%)

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