Western Lake Erie Harmful Algal Bloom Early Season Projection
10 May 2022, Projection 01

The Western Lake Erie HAB Early Season Projection gives an estimate of potential bloom severity based on a combination of measurements and forecasts of river discharge and phosphorus loads from now through July. The severity of the western Lake Erie cyanobacterial harmful algal bloom (HAB) depends on input of total bioavailable phosphorus (TBP) from the Maumee River during the loading season (March 1-July 31). TBP is the sum of dissolved phosphorus and the portion of particulate phosphorus available for HAB development.

With observations through May 8, we expect a bloom that is less severe than 2021 (<6). If precipitation for the rest of the spring matches the early season forecast of near or below average rainfall, a smaller bloom, similar to 2020 (<3), is likely. While July is not expected to be wet, it is still too far in the future for an accurate forecast. We will update the early season projection each week with new information, and will issue a comprehensive seasonal forecast on June 30th.

Any bloom that does develop will change over time and move with the wind; we will provide information on the presence and location of the bloom throughout the summer. The TBP loads are projected based on Heidelberg University data, river forecasts from the National Weather Service Ohio River Forecast Center (through early July), and previous years to the end of July.

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