Western Lake Erie Harmful Algal Bloom Early Season Projection
14 June 2022, Projection 06

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

With observations through June 13, we continue to expect a bloom that is likely less severe than 2021 (<6) with a maximum range a little >6. If precipitation for the rest of the spring continues to match the early season forecast of near average rainfall, a smaller bloom, similar to 2020 (~3), is likely. While June and July are expected to have average rainfall, there is still large uncertainty in the size of rain events, especially in the next few weeks. Larger rain events may produce larger TBP loads, resulting in a CI severity closer to 2021 (~6). We will issue a comprehensive seasonal forecast on June 30th.

Blooms that do form will move with the wind and change over time; we will provide information on the presence and location of the bloom throughout the summer. The TBP loads are projected using Heidelberg University data and river forecasts from the National Weather Service Ohio River Forecast Center (through July).

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