Lake Erie Harmful Algal Bloom Early Season Projection

14 June, 2017  Projection 05

The severity of the western Lake Erie cyanobacterial harmful algal bloom (HAB) is dependent on input of bioavailable phosphorus, particularly from the Maumee River during the loading season (March 1-July 31). This product provides an estimate based on a combination of measurements to date and model predictions into July. The final seasonal forecast will be made July 13 with all the data and a comprehensive set of models.

While March and April saw below average discharge and phosphorus loads into the Lake from the Maumee River, wet weather in May led to large phosphorus loads. Drier conditions have developed, although rainfall this week will determine discharge for the next week or more. The total spring load has now exceeded the loads observed in mild bloom years.

Total bioavailable phosphorus (TBP) is the sum of dissolved phosphorus (which is ~100% available for HAB development), and the portion of particulate phosphorus that is available for HAB development. The TBP loads are projected to July 27th using river forecasts from the National Weather Service Ohio River Forecast Center, and to the end of the loading season using past data.

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For more information visit: http://www.ncwqr.org/ or http://coastalscience.noaa.gov/research/habs/forecasting/