



## Fact Sheet: Preliminary Modeling Results – Maumee Watershed Nutrient TMDL

*The Ohio Environmental Protection Agency (Ohio EPA) is developing a Total Maximum Daily Load (TMDL) report for the Maumee Watershed to address shoreline and open water impairments in the Western Basin of Lake Erie caused by harmful algal blooms (HABs). The Preliminary Modeling Results (PMR) report is the fourth step in Ohio's TMDL development process. A draft report was published on June 30, 2022, and comments were received through Aug. 17, 2022. Prior to issuing the draft TMDL (step five of five), a revised version of the PMR and responses to comments received have been developed.*

### What are the preliminary modeling results?

The PMR report documents the analytical methods used to develop the TMDL and associated proposed implementation. Ohio law requires the following to be included in the preliminary modeling results:

- Any management choices – the decisions made to develop the following items
- Load allocations – the amount of pollutant allowed from nonpoint sources
- Wasteload allocations – the amount of pollutant allowed from point sources
- Margin of safety – the amount of pollutant load reserved due to various uncertainties
- Allowances for future growth – the amount of pollutant load reserved for development
- Necessary permit limits – pollutant reductions required for permitted entities
- A preliminary TMDL implementation plan

This PMR proposes total phosphorus TMDL allocations for the Maumee watershed to address impairments to recreation use (due to algae), public drinking water supply use, and aquatic life use impairments, as well as the proposed implementation strategies. Figure 1 depicts the assessment units included in this project and shows the Maumee watershed.

### Overview of comments received and report updates

Ohio EPA received 160 pages of comments from a diverse group of stakeholders including citizens, environmental groups, community organizations, agricultural organizations, and point source facilities and their representative organizations. U.S. EPA also offered comments on the draft report for the Agency's consideration. Ohio EPA would like to thank the commentors for their time to develop these thoughtful comments which have provided valuable insight and additional information for the Agency to consider for the Maumee Watershed Nutrient TMDL. To facilitate responses, the comments were split into 16 categories of common themes. The following categories encompassed the most comments and resulting edits to the report:

- Contribution of manure to phosphorous loads
- Regulation of CAFOs
- Allocations for regulated treatment facilities and implementation in permits
- Allocations for regulated stormwater and implementation in permits
- Considerations for future growth
- Margin of safety and model verification

To address the comments, a response to comments document and revised version of the report have been published. Substantive revisions to the report were made to Appendix 1 (manure, fertilizer, and crop removal estimates), point source allocations, considerations for future growth, margin of safety considerations, and the model verification. Additional clarifications and minor edits were made as needed.

The next step in the process is to develop the complete draft TMDL report. This report will encompass the components of the first four steps of the TMDL development process. It will also add detail to the pollutant reduction implementation plan and document the reasonable assurances that nonpoint source loading goals can be met.

### Where can I learn more?

- [Preliminary Modeling Results \(PMR\)](#)
- [Loading Analysis Plan \(LAP\)](#)
- [Maumee Watershed Nutrient TMDL Project webpage](#)



Figure 1 — Map of Ohio's Western Basin of Lake Erie assessment units and the Maumee River watershed.