

Fact Sheet: Loading Analysis Plan – Big Darby Creek Watershed

In 2014, the Ohio Environmental Protection Agency (Ohio EPA) conducted a biological and water quality survey in the Big Darby Creek watershed. Based on the findings of that survey, a loading analysis plan was completed. The loading analysis plan is the third step in the new Total Maximum Daily Load development process.

What is a loading analysis plan?

A loading analysis plan (LAP) is a plan prepared by Ohio EPA that lists actions to be taken by the Agency for sampling sites found to be impaired for a beneficial use designation (aquatic life, recreation and public water supply). Actions may include development of a Total Maximum Daily Load (TMDL), follow up sampling, referral to another agency and/or no action, for example where the cause of impairment is natural.

For those sites where the Agency is planning to develop a TMDL, the LAP contains the proposed modeling approach and water quality restoration targets for a watershed study area.

How is the analytical method determined?

Ohio EPA considers numerous factors when deciding how to address impairments in TMDLs. The primary origin of the pollutant, its delivery mechanisms and the water body kinetics involved are all essential in determining which model is most appropriate. The complexity of the model utilized is dependent upon the complexity of the impairment.

When choosing a method, Ohio EPA must also look at any ongoing efforts in the watershed, previous TMDL analyses, the questions to be answered by the model and the amount of effort required to complete it. Additional data may be necessary depending on the selected method and the modeling approach is subject to change based on findings.

The Big Darby Creek watershed was previously assessed in 2004 and a TMDL report was developed in 2006 based on these findings. The watershed was then surveyed again in 2014. Due to the existing TMDL in the watershed, this project is considered a second round or “Round 2” project. Existing TMDLs will remain in place unless otherwise stated in this report and the analytical methods that will be used to address new or existing aquatic life use (ALU) and recreation use impairments are also detailed in the LAP. Figure 1, below, depicts the ALU attainment status for each site sampled in the survey area.

Where can I learn more?

- The full loading analysis plan is available at epa.ohio.gov/dsw/wq
- The study plan and biological and water quality report is available at epa.ohio.gov/dsw/tmdl/SciotoRiver#122446489-biological--water-quality-reports-supplemental-information
- For more information about biological, chemical and physical monitoring, please see the Water Quality Monitoring webpage at epa.ohio.gov/dsw/bioassess/ohstrat.aspx.

Stakeholder Input

The comment period for the Big Darby Creek LAP ended on November 4, 2020. The LAP is the third step in the TMDL development process. The next step is the preliminary modeling results, which will additionally be available for review and comment.

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Contact Information

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Figure 1 — Map summarizing ALU attainment status in the Big Darby Creek watershed in 2014.