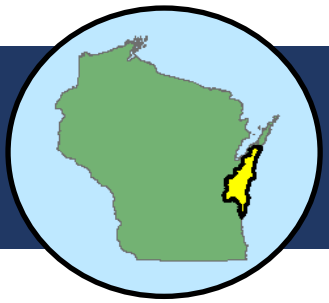


Northeast Lakeshore Total Maximum Daily Load

Project overview and the TMDL development process

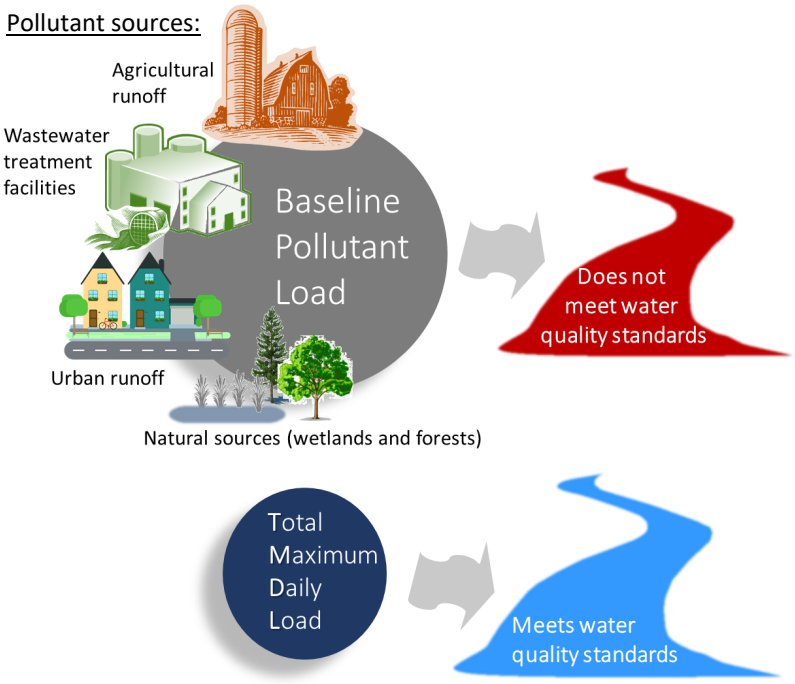
WISCONSIN DEPT. OF NATURAL RESOURCES

How did we get a Total Maximum Daily Load (TMDL) project in the NE Lakeshore?

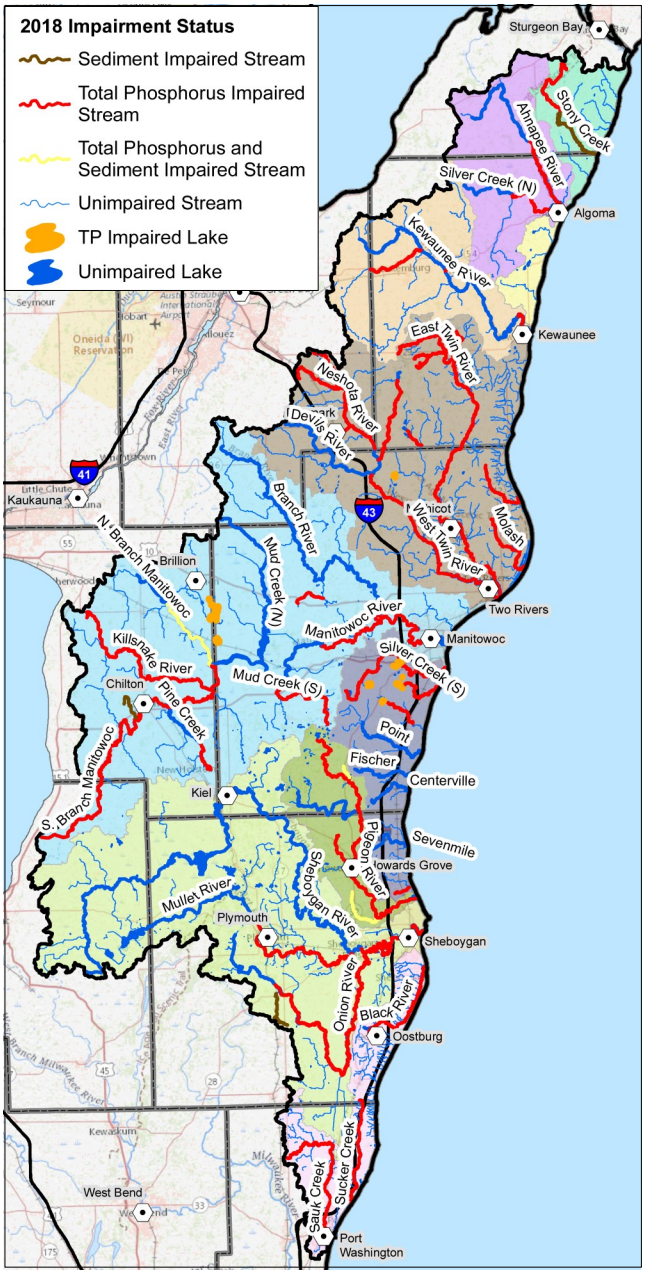
In 2017, the legislature allocated funding for a water quality improvement project and directed the Wisconsin DNR to develop a TMDL plan for the basins that make up Wisconsin's NE Lakeshore. The DNR, together with many partners throughout the basins, are working to improve surface water quality of streams, rivers, and lakes through the development and implementation of a TMDL plan.

What is a TMDL?

A TMDL is a value which represents the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. A TMDL report is created to describe the methods and data used to develop the TMDL value and provide a framework for TMDL implementation.

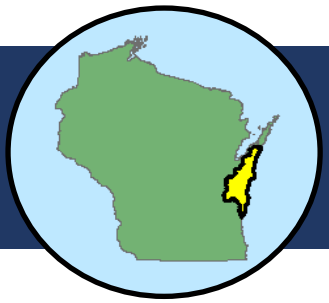


2018 Phosphorus and Sediment Impairments in the NE Lakeshore TMDL area



Why develop the NE Lakeshore TMDL?

In 2018, water quality monitoring indicated that 42 streams in the NE Lakeshore TMDL area were not meeting water quality standards for phosphorus and sediment. The Northeast Lakeshore TMDL is focused on reducing the point source and non-point source contributions of phosphorus and sediment into waterbodies. Ultimately, the TMDL study and implementation plan will provide a framework to restore water quality in waterbodies with high phosphorus and sediment concentrations.



Northeast Lakeshore Total Maximum Daily Load

Project overview and the TMDL development process

WISCONSIN DEPT. OF NATURAL RESOURCES

How is a TMDL developed?

1) Stream monitoring and watershed conceptualization

Stream flow and water chemistry data are collected to calibrate the watershed model. Additionally, the watershed is conceptualized by collecting data about land cover, land management, soil type, and climate.

Stream Monitoring

Watershed Conceptualization

2) Calculate Baseline loads

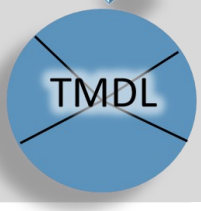
Watershed modeling is used to determine how much phosphorus and sediment is coming from each pollutant source. Pollutant sources include:

- Nonpoint sources: agricultural runoff, non-permitted urban stormwater runoff, and natural runoff from forests, wetlands, and grasslands
- Point sources: industrial wastewater outfalls, municipal wastewater outfalls, and permitted urban stormwater outfalls

Watershed Modeling

3) Determine the TMDL and allocations

Watershed modeling results along with phosphorus and sediment criteria are used to determine the TMDL of each subwatershed. Once the TMDL is established, it is allocated proportionally among the different pollutant sources to determine the amount of pollutant reduction needed to reach TMDL goals.



← Allocations

Throughout development: Stakeholder Involvement and Partnerships

Northeast Lakeshore TMDL Projected Timeline

- **2017—2019** Monitoring
- **2019—2020** Modeling
- **2021** Allocations
- **2022** EPA approval of TMDL report
- **2022 & Beyond** Implementation Phase

Stay up to date!

Subscribe to the NE Lakeshore TMDL email list to receive notifications about public comment periods and informational meetings.

For more information on the NE Lakeshore TMDL, contact:
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Or visit: https://dnr.wi.gov/topic/TMDLs/NELakeshore.html