TMDL List Update

Provided to the Water Policy Interim Committee on May 20, 2024

Total Maximum Daily Load studies have been developed in more than 60 project areas in Montana. Many impaired waterbody - pollutant combinations, identified on the state's 303(d) list, still require TMDL development. In consultation with the Statewide TMDL Advisory Group, DEQ works to address these by identifying priority areas and developing TMDLs in accordance with state law.

The prioritization process involves consideration of the factors outlined in 75-5-702, MCA. The factors with most influence include those linked to the likelihood that local stakeholders will pursue TMDL implementation efforts; the ability to improve coordination among water quality programs; and the recreational, economic, and aesthetic importance of the waterbodies in a watershed. Prioritization allows DEQ to focus its monitoring and assessment resources in the priority watersheds prior to formal TMDL development in accordance with 75-5-703, MCA.

TMDL Priority Areas:

- Beaverhead Watershed (nutrients)
- Red Rock Watershed (nutrients)
- Flathead-Stillwater TMDL Revision (Ashley Creek subwatershed nutrients and sediment)
- Smith River (nutrients)
- Missouri River - Three Forks to Marias River (metals and nutrients)
- Upper Gallatin (algae)
- Clarks Fork Yellowstone Watershed (pollutants TBD)

TMDL Status:

Completed 2023

- Bitterroot River Nutrient Protection Plan (accepted by EPA March 2023)

2024 Efforts

- Full draft of Beaverhead nutrient TMDLs to be submitted to EPA September 2024
- Partial draft of Flathead-Stillwater TMDL Revision to be submitted to EPA September 2024 (pending a use attainability analysis by the City of Kalispell)
- Partial draft of Red Rock nutrient TMDLs to be submitted to EPA September 2024
- Initial TMDL development in progress for Smith River nutrients
- Monitoring completed for Upper Missouri River; initial TMDL development in progress
- Multi-year monitoring in-progress for Upper Gallatin algae project
- Multi-year monitoring in-progress for Clarks Fork Yellowstone (nutrients, metals, *E. coli*, sediment)
- Development of Adaptive Management Program per SB358

2025 – 2026 Plans

- Completion of Red Rock nutrient TMDLs (submit to EPA by Sept 2025)
- Completion of Flathead-Stillwater Revision (submit to EPA by Sept 2025)
- Completion of Smith River nutrients
- Completion of Upper Missouri metals and nutrients
- Initiate TMDL development for Upper Gallatin algae
- Initiate TMDL development for Clarks for Yellowstone

Background Information

What is a TMDL?

A total maximum daily load (TMDL) can be thought of as a pollution diet for a given waterbody. It is a mathematical equation which multiplies water quality standards or targets by discharge volumes and conversion factors to determine permissible loads (pounds or tons) of pollutants passing a specified point over the course of a day. TMDL documents extend beyond the pure 'math' of this equation by outlining a path toward improvement through reductions assigned to various sources of pollution. Point sources of pollution may receive wasteload allocations which inform permitting requirements. Nonpoint sources of pollution may receive load allocations, requiring voluntary implementation to achieve.

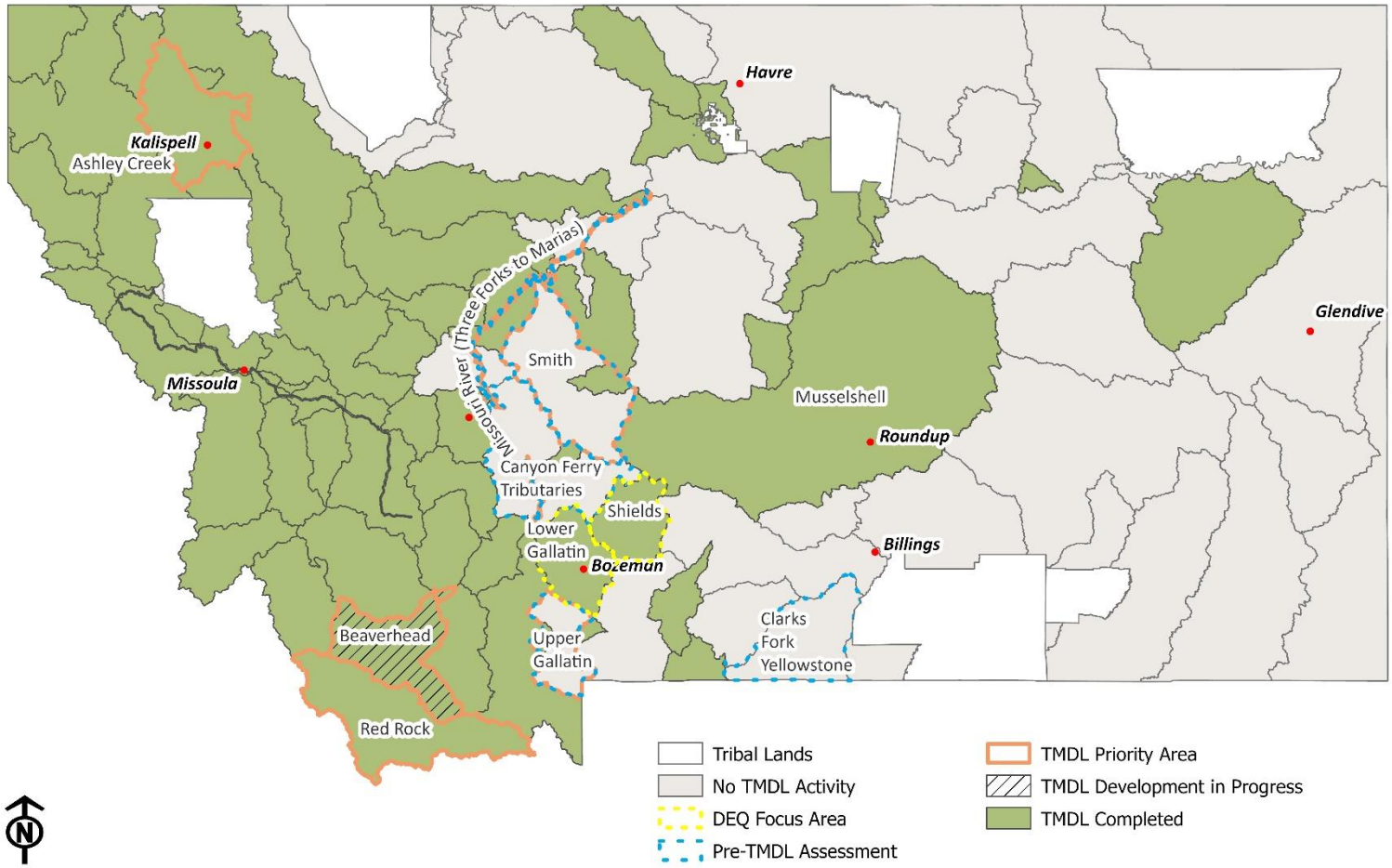
Summary of the TMDL Development Process (75-5-703, MCA):

The process begins with monitoring and assessment, which typically takes three to four years to ensure adequate data availability. Document drafting then begins with input from stakeholders throughout. Once a draft is complete, it is shared with stakeholders for review. After comments are incorporated, the document goes out for public comment. Following public comment, documents are submitted to EPA for approval. TMDL development may take two to five years to complete, depending on the project scope, number of impairments identified, and complexity.

Scope of TMDL Projects:

TMDL projects often address multiple types of pollutant impairment causes, organized into pollutant groups. Projects are typically conducted at a watershed scale, though waterbody-specific TMDLs may be developed. The most common pollutant groups in Montana are sediment, nutrients, metals, temperature, pathogens, and salinity.

TMDL Development Status



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