

Prioritization Framework for Development of Total Maximum Daily Loads

Section 303(d) of the federal Clean Water Act and Title 40 of the Code of Federal Regulations (CFR) Part 130 requires states to develop total maximum daily loads (TMDLs) for waters not meeting applicable water quality standards. The purpose of a TMDL is to determine the pollutant loading a water body can assimilate without exceeding state water quality standards.

Waters requiring TMDLs are included in Missouri’s 303(d) list of impaired waters, which is developed every two years on even numbered years. Per federal regulations at 40 CFR §130.7(b)(4), the list shall include a priority ranking for all impairments and such prioritization should take into account the severity of pollution as well as the water bodies’ designated uses. The priority ranking shall specifically include the identification of waters targeted for TMDL development in the next two years.

For Missouri’s 303(d) list, the Missouri Department of Natural Resources ranks water body impairments as “High,” “Medium,” or “Low” for TMDL development. Specific schedules for TMDL development are provided for water body impairments prioritized as High. Water body impairments ranked as Medium or Low priority are given a general range of years for which TMDL development may occur. Actual progress towards completing TMDL development will be dependent upon availability of resources and staff workload. All priority rankings and development schedules will be reevaluated upon development of each consecutive 303(d) list.

Priority Rank	TMDL Development Schedule
High	Within 1 to 6 years following 303(d) list approval by EPA
Medium	Within 6 to 10 years following 303(d) list approval by EPA
Low	Will occur more than 10 years following 303(d) List approval by EPA

Factors Influencing Prioritization

When determining priority rankings, the Department considers a wide variety of factors, including, the severity of the pollution, designated uses, type of pollutant, data availability, existing work plans, suitability for a watershed approach, and age of listing. Newly listed waters will often be given a lower priority for TMDL development than waters that have been listed for a number of years. However, in cases where a new listing may be addressed through a watershed approach with other water body impairments already given a higher priority, then the new impairment will be assigned the same prioritization. Other primary factors influencing priority ranking include:

- **Public health concerns:** Pollutants associated with a risk to human health are given special consideration and are typically ranked as High priority for TMDL development. For example, *E. coli* impairments in waters designated for whole body contact recreation.
- **Toxicity to aquatic life:** Metal toxicity is of special consideration in Missouri because of numerous historical and active lead mining activities. Metal contamination can adversely affect a variety of aquatic life, influencing growth and reproduction. In severe cases, acute toxicity may result. Such impairments are commonly ranked as High or Medium priority for TMDL development depending upon known remediation efforts and the extent of pollution impact.

- **Sources of impairment:** Pollutants known to originate primarily from point source discharges are, in most cases, ranked as Medium priority for TMDL development to allow time for water quality improvements through facility upgrades or compliance with specified permit limits and conditions. Where it is demonstrated that the impairment is caused by and can be remediated by a sole point source, then a new or modified permit may be submitted to U.S. Environmental Protection Agency (EPA) in lieu of a TMDL as part of a category 4b demonstration. Category 4b waters do not require a TMDL, because other water pollution controls required by a local, state, or federal authority are expected to correct the impairment in a reasonable period of time.
- **Recovery potential:** Water bodies for which there is data showing a trend towards attainment of water quality standards, will be ranked as Low priority for TMDL development to allow time for additional data collection efforts to take place. If new data confirms continued impairment, then prioritization for TMDL development will be reevaluated based on the other factors described in this document. Where known implementation activities are occurring, such as actions occurring through Superfund remediation, integrated management plans, or an implemented Clean Water Act Section 319 watershed-based plan, waters are often ranked as Medium priority for TMDL development to allow time for measurable water quality improvements to occur. Where such actions or plans are demonstrated to provide certainty that water quality standards will be re-attained, such as an accepted TMDL alternative (category 5-alt) plan, waters will be ranked as Low priority for TMDL development. Guidance for what information should be provided to the Department for demonstrating how a plan, or combination of plans and actions, may serve as a TMDL alternative is provided online at dnr.mo.gov/env/wpp/tmdl/documents/category-5alt-components.pdf.
- **Uncertainty:** Where there is substantial uncertainty as to the cause or source of the impairment (i.e., waters impaired for unknown pollutants), or substantial barriers to implementation (e.g., mercury impairments), waters are ranked as Low priority for TMDL development in order to allow time for additional data collection, planning, or interagency coordination.

Additional Prioritization Considerations

In December 2013, the EPA announced a new national framework for implementing the Clean Water Act Section 303(d) Program titled *A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program*. This vision evaluates individual state progress for addressing waters through TMDLs, alternatives, or protection approaches, and is part of EPA's performance measure for reporting national progress of Clean Water Act goals by the end of federal fiscal year 2022. Although Missouri retains flexibility in how it addresses impaired waters and sets long-term priorities, consideration will be given to EPA's vision measures and applicable federal grant reporting requirements when establishing TMDL development priorities and schedules.

Opportunity for Public Comment and Participation

In conjunction with the public notice and comment period of Missouri's 303(d) list of impaired waters, the Department will also accept comments that pertain to TMDL prioritization and development schedules. Additional opportunities for public input will be made available during public availability sessions, stakeholder meetings, and public hearings associated with the development of the 303(d) list. All comments received during these comment opportunities will be considered to further refine TMDL development priorities.