



Total Maximum Daily Load Prioritization for Missouri 2018 303(d) List of Impaired Waters

Section 303(d) of the federal Clean Water Act and Chapter 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 still requiring wasteload allocations, load allocations and TMDLs are included in Missouri's 303(d) List of impaired waters. 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 2018 303(d) List, the Department of Natural Resources ranked 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 TMDL development. Priority rankings and development schedules will be reevaluated upon development of the 2020 303(d) List.

TMDL Priority Rankings and Development Schedules

<i>Priority Rank</i>	<i>TMDL Development Schedule</i>
High	Within 1 to 6 years following 2018 303(d) List approval (2018 to 2023)
Medium	Within 6 to 10 years following 2018 303(d) List approval (2024 to 2028)
Low	Will occur more than 10 years following 2018 303(d) List approval

When determining priority rankings, the department considered 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. Primary factors influencing priority ranking include:

- **Public health concerns:** Pollutants associated with a risk to human health, such as *E. coli* impairments in waters designated for whole body and secondary contact recreational uses, are given special consideration and typically ranked as High priority for TMDL development.
- **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 EPA in lieu of a TMDL as part of a category 4b demonstration. Water bodies where such a 4b demonstration may be appropriate are prioritized as High or Medium for development of a permit-in-lieu of a TMDL based upon other factors described in this document as well as existing permit renewal schedules.
- Recovery potential:** 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. A checklist describing elements for demonstrating how a plan may serve as a TMDL alternative for category 5-alt is provided on the department's 303(d) and TMDL webpages.
- Uncertainty:** Where there is substantial uncertainty as to the cause or source of the impairment (e.g., 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.

Prioritization of Missouri's 2018 303(d) List for TMDLs

<i>Priority Rank</i>	<i>No. of Impairments</i>
High	141
Medium	198
Low	131
<i>Total</i>	470

Opportunity for Public Comment and Participation

A 45-day public notice and comment period for the department's Total Maximum Daily Load Prioritization and Development Schedule for the Missouri 2018 303(d) List of Impaired Waters was held from January 12, 2018 through February 26, 2018. The department considered all comments received during this period to refine TMDL development priorities. Further refinement occurred as a result of additional input provided during the second public notice period for the proposed 2018 303(d) List, which was held from April 24, 2018 through July 23, 2018. Public meetings to discuss TMDL prioritization were held on January 18, 2018 and on February 5, 2018 at the Lewis and Clark State Office Building in Jefferson City.