

Proposed Nutrient Criteria for Missouri Lakes and Reservoirs

Summary

EPA is proposing a rule to establish federal Clean Water Act (CWA) criteria for nutrients (i.e., total nitrogen, total phosphorus and chlorophyll *a*) to protect designated uses for Missouri's lakes and reservoirs consistent with the terms of a 2016 consent decree. These criteria will help the State prevent or limit the negative effects of nutrient pollution, such as harmful algal blooms. If the State of Missouri submits nutrient criteria to EPA that the Agency can approve under the CWA, then EPA will not finalize this proposed rule (or will withdraw its final rule, if applicable).

Background

CWA section 101(a)(2) establishes the national goal that water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water. To protect designated uses from the harmful effects of pollutants in surface waters, states must establish criteria for their waters that are designated for such uses. EPA periodically publishes criteria recommendations under CWA section 304(a) for states to consider using to meet these CWA section 101(a)(2) goals.

In 2009, Missouri submitted to EPA for review and approval numeric criteria for total nitrogen (TN), total phosphorus (TP) and chlorophyll *a* (chl-*a*) for the State's lakes and reservoirs. EPA acknowledged the importance of Missouri's proactive efforts to address nutrient pollution by adopting numeric nutrient criteria. However, EPA concluded that

Missouri had failed to demonstrate the criteria would protect the State's designated uses consistent with CWA statutory and EPA regulatory requirements and disapproved most of Missouri's criteria on August 16, 2011.

On February 24, 2016, the Missouri Coalition for the Environment (MCE) sued EPA for failure to perform its mandatory duty under the CWA to propose and promulgate criteria to address EPA's 2011 disapproval. On December 1, 2016, EPA entered a consent decree with MCE that committed EPA to sign a notice of proposed rulemaking by December 15, 2017 to address EPA's 2011 disapproval, unless the State submits and EPA approves, nutrient criteria that address the disapproval on or before December 15, 2017. At the time this proposal was signed, Missouri had not adopted and submitted its rule for EPA Clean Water Act 303(c) review. EPA also committed to signing a notice of final rulemaking by December 15, 2018, unless the State submits and EPA approves, nutrient criteria that address the disapproval.

How EPA Derived the Proposed Nutrient Criteria

EPA is seeking public comment on two alternatives. Under the first alternative, EPA proposes nutrient protection values and eutrophication impact factors in a combined criterion approach. Under the second alternative, EPA proposes a similar combined criterion approach that would mirror the State of Missouri's October 2017 proposal for lake nutrient water quality standards.

Alternative 1 is comprised of “nutrient protection values.” Nutrient protection values are defined as maximum ambient concentrations of TP, TN, and chl-*a* based on the three-year rolling average geometric mean of nutrient data collected April through September. Alternative 1 uses nutrient protection values for TN, TP, and chl-*a* derived using a reference condition approach for the Plains ecoregion and a combined Ozarks ecoregion. The reference condition approach comports with longstanding EPA guidance and built on earlier collaborative efforts among the four states of EPA Region 7.

Alternative 2 includes high-end chl-*a* criteria for three ecoregions (i.e., Plains, Ozark Border, and Ozark Highland) that determine impairment independently. In addition, Alternative 2 includes “screening values” for TN, TP, and chl-*a* (at a lower level than the criteria).

Both alternatives operate in coordination with five “eutrophication impact factors” to determine impairment. Finally, both alternatives would apply to all lakes and reservoirs that (a) are listed in Table G of the Missouri water quality standards (WQS), (b) equal or exceed ten acres, (c) are located outside the Big River Floodplain Ecoregion, and (d) are not otherwise listed in Table M of Missouri’s WQS.

How EPA's Proposal Relates to the State of Missouri's Efforts to Develop Criteria

EPA is under a consent decree to finalize this proposed rule by December 15, 2018. If the State adopts and submits new or revised water quality criteria and EPA approves them before finalizing this proposed rule, EPA would not proceed with the final rulemaking for those waters and/or pollutants for which EPA approves Missouri’s new or revised criteria. If EPA finalizes this proposed rule, and Missouri subsequently adopts and submits new or revised criteria that EPA finds meet CWA requirements, EPA would expeditiously undertake a rulemaking to withdraw the federal criteria such that Missouri’s criteria would be effective for CWA purposes.

Public Hearings on the Proposed Rule

EPA is offering two online public hearings on the proposed rule so that interested parties may provide oral comments. The first hearing will be on Wednesday, February 7, 2018 from 9:00am to 11:00am Central Time. The second hearing will be on Thursday, February 8, 2018 from 4:00pm to 6:00pm Central Time.

Where can I find more information?

Contact Mario Sengco at (202) 566-2676 or sengco.mario@epa.gov, or Ann Lavaty at (913) 551-7370 or lavaty.ann@epa.gov. To access the proposed rule, supporting documents, and more details on how to make written comments and/or how to register to make oral comments at the online public hearings, visit EPA’s Water Quality Standards website at: <https://www.epa.gov/wqs-tech/proposed-nutrient-criteria-missouri-lakes-and-reservoirs>