# Alabama Department of Environmental Management 2024 Triennial Review of Water Quality Standards Response to Comments Public Hearing August 21, 2024 Public Comment Period July 3, 2024, through August 21, 2024

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# Individuals / Organizations Submitting Comments

# **Response to Comments**

# 335-6-10-.07 TOXIC POLLUTANT CRITERIA APPLICABLE TO STATE WATERS

1. Several commenters suggest water quality criteria for the protection of human health be updated.

**Response:** The Department is making every effort to review and consider EPA's updated national 304(a) criteria recommendations for both human health and aquatic life during the current triennial review period. With respect to adoption of EPA's recommendations, Alabama can (1) adopt the criteria as recommended, (2) propose alternative criteria based on its own scientifically defensible methods, or (3) propose leaving criteria as they are, again with proper scientific justification. Whichever option is chosen must ultimately be approved by EPA.

The Department hosted two stakeholder meetings in February 2024 and April 2024 to receive input regarding potential revisions to water quality standards. During these stakeholder meetings, the Department shared that adopting/revising both human health and aquatic life criteria during the 2024-2026 triennial review period is a priority. It is anticipated that the Department will conduct two separate rulemakings to revise/adopt both human health and aquatic life criteria. The Department will continue to review and evaluate all data and information and collaborate with EPA and stakeholders.

2. One commenter suggests water quality criteria for the protection of human health be updated and developed using the probabilistic risk assessment method instead of following EPA's deterministic approach.

**Response:** National Recommended Water Quality Criteria published by EPA pursuant to §304(a) of the Clean Water Act (CWA) provide guidance for states and tribes to use to establish water quality standards and are strictly recommendations. EPA's recommended criteria do not impose legally binding requirements, and states and authorized tribes have the discretion to adopt, where appropriate, other scientifically defensible water quality criteria that differ from these recommendations.

The Department will review and evaluate applicable data and information and collaborate with EPA and stakeholders pertaining to the adoption/revision of human health criteria.

**3.** One commenter suggests water quality criteria be established for those PFAS chemicals for which U.S. EPA has established enforceable limits and goals. Also, the commenter suggests water quality criteria be established for total PFAS.

**Response:** In September 2024, U.S. EPA published final recommended aquatic life criteria and benchmarks for select PFAS chemicals. More specifically, final freshwater criteria for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) for both acute and

chronic exposures, as well as saltwater benchmarks for acute exposure. The Department continues to spend considerable time and resources collecting and reviewing PFAS data throughout the State of Alabama and, in numerous situations, work with entities to reduce the levels of PFAS in the environment. Additionally, the Department is taking a proactive approach to addressing PFAS by working closely with EPA and various other federal, state, and local stakeholders. The Department will continue to review and evaluate applicable data and information and collaborate with EPA and stakeholders in addressing PFAS in future triennial reviews.

# 335-6-10-.09 SPECIFIC WATER QUALITY CRITERIA

4. One commenter suggests revisions of water quality standards to include a state minimum water temperature.

**Response:** As part of the triennial review process, the Department will take the request for a minimum temperature criteria under consideration to include relevant past, present, and future physical, chemical and biological surveys.

A recent study completed in 2021 by Auburn University used bioenergetics modeling to evaluate the effects of altered flow and temperature due to discharge from Harris Dam on fish in the tailrace. The results of this study revealed that cooler water temperatures in the tailrace had no significant impact on the fish community. The Department will include the results of relevant surveys, such as the project mentioned above, in considering minimum temperature criteria.

5. Several commenters suggest that the 4.0 mg/L minimum dissolved oxygen criteria for existing hydroelectric generating facilities be revised.

**Response:** The Department is compiling and evaluating all readily available data and information with respect to dissolved oxygen levels below existing hydropower facilities in Alabama. Upon completion of the analysis, the Department will determine whether revisions to the existing dissolved oxygen criteria are warranted or if additional studies and analyses need to be conducted.

With respect to the existing dissolved oxygen criteria for discharges from existing hydroelectric generation impoundments, the Department will also consider adding language to clarify the existing regulations.

6. One commenter suggests more stringent water quality criteria for turbidity levels to be protective of designated use classifications, public health, and aquatic life.

**Response:** As part of ADEM's ongoing siltation research, the Department has been collecting extensive continuous "real-time" flow, turbidity and total suspended solids (TSS) data within various ecoregions of the State. The goal of the research will be to improve various aspects of our water quality monitoring and protections programs. Currently, the Department is expanding

its efforts by installing more continuous, in-situ flow/water quality monitoring stations throughout the state to collect additional data that will support future criteria for turbidity.

# 335-6-10-.09(3) SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS

7. One commenter suggests the "Swimming and Other Whole Body Water-Contact Sports" use classification for waterbodies where swimming and other recreational activities is an existing, past, or potential use. The commenter also states that wastewater treatment facilities are foreseeable, correctable pollution and should not affect classifying a waterbody as "Swimming and Other Whole Body Water-Contact Sports."

**Response:** The prohibition on assignment of the Swimming and Other Whole Body Water-Contact Sports use classification within the vicinity of treated wastewater discharges is included in the ADEM regulations at the request of the Alabama Department of Public Health to provide for a reduced risk of illness and for the protection of public health. The provision recognizes that no treatment system is completely fail-safe and that instantaneous notification of the public when a failure is detected is impractical. The note further serves to inform the public of the increased risk they may incur when swimming in the immediate vicinity of treated wastewater sources.

Effective February 3, 2017, the Department revised the bacteriological criteria for several use classifications by extending the recreational season and revising the single sample maximum criterion for freshwater. In doing so, the Department considers the Fish and Wildlife (F&W) use classification provides adequate protection for water recreation (i.e. swimming and other whole body water-contact activities) during the months of May through October.

Simply because swimming is observed in a particular waterbody classified as F&W does not necessitate that the Swimming and Other Whole Body Water-Contact Sports (S) classification should be added to the subject waterbody. Both classifications are considered protective of incidental contact recreation (i.e. wading, paddling) year-round and whole body water-contact recreation (i.e. swimming) during the months of May through October. Therefore, the Department will continue to be judicious in assigning the Swimming classification to existing F&W classified waters, unless it can be demonstrated that such waters are being utilized in a manner consistent with the Swimming and Other Whole Body Water-Contact Sports (S) classification.

# 335-6-10-.09(5) FISH AND WILDLIFE

8. One commenter suggests E. coli criterion for "Fish and Wildlife" use classification be made more stringent to protect recreational uses. Also, the commenter suggests the elimination of the differentiation of an incidental contact season to reflect swimming and recreation that occurs in "Swimming and Other Whole Body Water-Contact Sports" and "Fish and Wildlife" classified waterbodies throughout the year.

**Response:** Effective February 3, 2017, the Department revised the bacteriological criteria for several use classifications by extending the recreational season and revising the single sample maximum criterion for freshwater. In doing so, the Department considers the Fish and Wildlife (F&W) use classification provides adequate protection for water recreation (i.e. swimming and other whole body water-contact activities) during the months of May through October.

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#### 335-6-10-.09 WATERBODIES LESS THAN "FISHABLE/SWIMMABLE"

**9.** One commenter suggests that "Agricultural and Industrial Water Supply" and "Limited Warmwater Fishery" use classifications be eliminated so that all Alabama waters attain the "fishable/swimmable" goal of the Clean Water Act.

**Response:** It is not the Department's intent to downgrade waters from the Fish and Wildlife (F&W) use classification to the Limited Warmwater Fishery (LWF) or Agricultural and Industrial Water Supply (A&I) use classification and, to date, this has not been done. However, federal regulations at 40 CFR §131.10(g) provide states a mechanism to assign use classifications to waterbodies that cannot attain the "fishable/swimmable" goal as defined under Section 101(a)(2) of the Clean Water Act. Pursuant to applicable federal laws, regulations and policy, ADEM has prepared a Use Attainability Analysis (UAA) for each and every waterbody in Alabama that has been assigned an LWF or A&I use classification and subsequently received EPA approval on those decisions.

One of the primary objectives of the Department is for all waterbodies in Alabama to meet the "fishable/swimmable" goal as defined under the CWA. The Department continues to monitor and evaluate all LWF and A&I waterbodies and, as new information becomes available demonstrating that a higher use is attainable, the Department intends to propose a change to the ADEM Administrative Code r. 335-6-11-.02 assigning the higher use classification.

# 335-6-10-.12 IMPLEMENTATION OF THE ANTIDEGRADATION POLICY

**10.** One commenter suggests review of the antidegradation policy to ensure permitted discharges do not cause gradual water quality degradation over time.

**Response:** The Antidegradation Policy in the Department's water quality standards at ADEM Administrative Code r. 335-6-10-.04 are consistent with federal requirements, and the

Department is not anticipating any changes to its antidegradation implementation methods at this time.

#### 335-6-11-.02 USE CLASSIFICATIONS

11. Two commenters suggest the entire free-flowing portion of Locust Fork, Turkey Creek in Jefferson County, Blackwater Creek in Winston and Walker counties, North River, and Clear Creek in Fayette and Tuscaloosa counties be classified as "Outstanding Alabama Water."

**Response:** Additional data has been collected for Locust Fork, Turkey Creek, Blackwater Creek, and North River since the last triennial review so the Department will evaluate the request to upgrade these waterbodies to the OAW use classification. As a part of this evaluation, the Department must consider whether the proposed use is currently being attained.

Additional data is required to proceed with evaluating Clear Creek as a candidate for the OAW use classification. As a part of this evaluation, water quality data collected within the past five years must be available for the requested waterbody, and the available data must indicate the waterbody is compliant with the OAW use classification requirements.

**12.** One commenter suggests the Coosa River, from Wetumpka to Jordan Dam, be classified as "Outstanding Alabama Water."

**Response:** The Department is currently reviewing the available data and information for this segment of the Coosa River and will evaluate the request to upgrade this water to the OAW use classification.

**13.** One commenter suggests the "Swimming and Other Whole Body Water-Contact Sports" use classification for the following waterbodies: Black Creek, Big Canoe Creek, Big Cove Creek, Coldwater Creek, Little Canoe Creek, Talladega Creek, and Corn Creek.

**Response:** See response to comment 7.

14. Two commenters suggest that Locust Fork River, from Kelly Creek to Slab Creek, be classified as "Swimming and Other Whole Body Water-Contact Sports."

**Response:** See response to comment 7.

**15.** Two commenters suggest that Graves Creek, from Locust Fork to its source, be classified as "Swimming and Other Whole Body Water-Contact Sports."

**Response:** See response to comment 7.

**16.** One commenter suggests the "Swimming and Other Whole Body Water-Contact Sports" use classification for the following waterbodies:

Waterbody	From	То	Current Classification
Lost Creek	2m upstream of Wolf Creek	Cane Creek	PWS/F&W
Mulberry Fork	Burnt Cane Creek	Frog Ague Creek	PWS/F&W
Mulberry Fork	Frog Ague Creek	Mulberry/Sipsey Junction	PWS/F&W
Sipsey Fork	Mulberry Fork/Wilson Br.	Lewis Smith Dam	PWS/F&W
Self Creek	Alabama Hwy 79	Its source	PWS
Calvert Prong	Calvert Prong dam above Hwy 231	Its source	PWS
Brindley Creek	Broglen River	Its source	PWS
Eightmile Creek	Lake Catoma Dam	Its source	PWS
Brushy Creek	Smith Lake	Hwy 278	PWS/F&W
Clear Creek	City of Haleyville	Its source	PWS
Curtis Mill Creek	Town of Double Springs	Its source	PWS
Mulberry Fork	Sipsey Fork	Its source	F&W
Big Prairie Creek	Demopolis Lake Lock and Dam 6	Its source	F&W
Five Mile Creek	Warrior Lake	Payne Lake in Talladega National Forest	F&W
North River	Lake Tuscaloosa	Ellis Creek	F&W
Hurricane Creek	Oliver Lake	Its source	F&W
Davis Creek	Holt Lake	Its source	F&W
Turkey Creek	Locust Fork	Its source	F&W
Self Creek	Gurley Creek	Hwy 79	F&W
Gurley Creek	Locust Fork	Its source	F&W
Calvert Prong	Little Warrior River	Calvert Prong Dam	F&W
Blackburn Fork	Little Warrior River	Inland Lake Dam	F&W
Graves Creek	Locust Fork	Its source	F&W
Slab Creek	Locust Fork	Its source	F&W
Burnt Cane Creek	Mulberry Fork	Its source	F&W
Locust Fork	Kelly Creek	Slab Creek	F&W

**Response:** See response to comment 7.

**17.** One commenter suggests the "Swimming and Other Whole Body Water-Contact Sports" use classification for the following waterbodies:

Black Warrior River	Selden Lock and Dam	Oliver Lock and Dam	F&W
Fivemile Creek	Black Warrior River	Payne Lake Dam	F&W
North River	Binion Creek	Ellis Creek	F&W
Five Mile Creek	Old Jasper Hwy	Alabama Highway 79	F&W
Lost Creek	Mulberry Fork	2m upstream of Wolf	F&W
	-	Creek	
Valley Creek	Black Warrior River	Blue Creek	F&W
Valley Creek	Blue Creek	Its source	LWF

**Response:** See response to comment 7.

**18.** One commenter requests clarification and guidelines on requirements for classifying a waterbody "Swimming and Other Whole Body Water-Contact Sports."

**Response:** See response to comment 7.

# GENERAL

**19.** One commenter suggests changing the triennial review process by providing the general public and stakeholders with information regarding potential water quality criteria revisions prior to the public notice of the triennial review and the associated comment period.

**Response:** The Department conducts a review of water quality standards at least once every three years in compliance with the Clean Water Act and 40 CFR §131.20. A minimum 45-day public notification and comment period is provided, as well as a public hearing for public input. The Department also hosted two stakeholder meetings in February 2024 and April 2024 to receive input regarding several water quality standards potential revisions for the 2024-2026 triennial review period. The Department provides participation avenues to the public and stakeholders in the triennial review process, as well as any proposed regulatory revisions to water quality standards.

# **GENERAL: NUTRIENT CRITERIA DEVELOPMENT**

**20.** One commenter suggests the development of nutrient criteria beyond chlorophyll *a* for water quality standards.

**Response:** The Department revised the Nutrient Criteria Implementation Plan in December 2021. The revisions reflect the Department's current priorities for development of nutrient criteria for waterbodies that typically have the highest risk for nutrient over-enrichment, which based on our findings are tributary embayments of lakes/reservoirs and coastal/estuarine waters. In addition, the development of numeric nutrient criteria for rivers and streams may be difficult to implement due to the varying ecology and topography within Alabama; therefore, the Department is also investigating the option of adopting additional narrative criteria to more specifically address nutrients in rivers and streams.

The Department has had great success in addressing nutrient over-enrichment throughout Alabama via the TMDL program. TMDLs have established limits/reductions for nutrients (i.e. total phosphorus) for both point and nonpoint sources to address nutrient impairments, and post TMDL follow-up monitoring has shown a significant reduction in nutrient loadings and corresponding improvements in various response parameters such as chlorophyll-a (algae), dissolved oxygen, pH, fish and macroinvertebrates. The Department has and will continue to use scientifically valid approaches to develop nutrient criteria that are protective of designated uses, implementable, and scientifically defensible.

**21.** One commenter requests an update of progress made in developing and executing the coastal nutrient monitoring program.

**Response:** See response to comment 20. In addition, it is a priority for the Department to obtain additional data to support assessment and development of nutrient criteria in coastal waters.

# **GENERAL: TMDLs**

22. One commenter suggests TMDL development for waters impaired by mercury.

**Response:** The Department has plans to develop a statewide mercury TMDL. The Water Quality Branch has prioritized the assessment of the data that is currently available and will evaluate the best approach to addressing mercury on a statewide level. A timeframe for the establishment of this TMDL will be determined once the data assessment is complete and an effective approach for TMDL development has been determined.

23. One commenter requests an update on the status of implementation of TMDLs for Tallaseehatchee Creek, Big Wills Creek, and Choccolocco Creek in the Coosa River watershed.

**Response:** Implementation of TMDLs is outside the scope of the review of Alabama's water quality standards regulations in ADEM Administrative Code r. 335-6-10 and 335-6-11. The commenter's concerns have been provided to the NPDES Permit Program for consideration.

# **Other Comments Submitted During the Comment Period**

The Department received several other comments during the 2024 triennial review comment period that did not pertain to provisions in ADEM Administrative Code r. 335-6-10 or 335-6-11. Many of these comments expressed concerns with provisions in other chapters of the Department's administrative code and will be provided to the appropriate program managers. A few comments were submitted which addressed the Department's Water Quality Assessment and Listing Methodology. These comments will be considered as a part of future reviews/revisions to the methodology.

Also, some commenters expressed a desire for the Department to respond to comments submitted during previous triennial review periods. While the Department appreciates these comments and has considered many of them, it is beyond the regulatory requirements to provide specific responses to comments submitted prior to the 2024 triennial review.

The Department appreciates the time and effort of all the individuals and organizations that have participated in the 2024-2026 triennial review, with the goal of improving water quality in Alabama. These comments have been made a part of the hearing record, which will be provided to EPA Region 4 and made available on ADEM's webpage.