State of Alabama Prioritization Framework



Alabama Department of Environmental Management January 2024

Section 303(d) of the Clean Water Act requires states to identify waterbodies within their boundaries that are not in compliance with applicable water quality standards. For those waterbodies identified as not meeting water quality standards, states are required to develop a Total Maximum Daily Load (TMDL) for the pollutant which is not in compliance with the applicable standard. A TMDL is the maximum amount of a pollutant (from point and nonpoint sources) that can be released into a waterbody without causing a violation of water quality standards.

In 2013, the United States Environmental Protection Agency (EPA) developed a new framework for implementing the Section 303(d) program: "A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program." The 2013 Vision provided states an opportunity to establish priorities for restoration or protection of waters for the 2013-2022 time period. In 2022, EPA published the "2022-2032 Vision for the CWA Section 303(d) Program." This Vision also encourages states to establish and focus on priority waters for restoration or protection.

The Alabama Department of Environmental Management (Department) utilized the knowledge and expertise of the TMDL development staff along with consultation with the Department's nonpoint source and NPDES programs when prioritizing waters for restoration through TMDL development or through an advance restoration approach. The Department also reviewed comments related to TMDL development that were submitted by the public on previous §303(d) lists.

The top four pollutants with regard to number of waterbodies on Alabama's current §303(d) list are pathogens, metals (mercury), siltation, and nutrients. The Department will prioritize continuing to address the pathogens impairments through the development of TMDLs. Nutrient impairments will also remain a priority for TMDL development.

The Department has been conducting research and collecting data to develop an improved and straightforward approach to addressing siltation impairments through TMDLs. Reference data is continuing to be collected for each of the applicable eco-regions in Alabama in addition to data on waterbodies listed as impaired for siltation. This process will continue over the next several years, and TMDLs will be prioritized for development once an appropriate strategy has been determined.

As noted above, Alabama also has a significant number of waterbodies on the §303(d) list that are impaired for mercury due to atmospheric deposition. The Department currently has plans to develop a statewide mercury TMDL that will address all these impairments at once. Currently, data collection and analysis, along with a review of other states' statewide mercury TMDLs, are ongoing. The Department will work to develop this statewide TMDL once sufficient data is available and an approach has been developed.

The Department has also been collecting additional data and information regarding impairments for total dissolved solids (TDS). This research will continue over the next several years so that defensible and implementable TMDLs can be developed to address the waterbodies currently identified as impaired due to TDS.

The Department's NPDES program indicated that giving priority to revising a particular existing TMDL would be helpful for their program. The TMDL program agrees that the TMDL should be revised and will therefore prioritize that TMDL revision during this Vision time period.

TMDL development will most likely begin with those waterbodies for which data is readily available and any required modeling is already underway. TMDLs that will require model development and/or additional data collection and/or research will follow in later years.

TMDLs will be the main restoration approach utilized to address existing water quality impairments. The Department will also consider the use of advance restoration plans, which are plans that are intended to address impairments prior to TMDL development, where there may be interested stakeholders and/or restoration activities already in place.

The Department currently utilizes a three-year rotating basin approach for water quality monitoring. Under this approach, the state's major basins are sampled once every three years. TMDLs are typically scheduled to be drafted one to three years after the basin containing the impaired waterbody is sampled. The Department's TMDL development staff will continue to coordinate with the Department's monitoring staff in sampling planning so that the necessary data can be collected and TMDLs for priority waterbodies can be developed.

Partnerships within the Department and with other agencies and stakeholders is a priority goal under the 2022 Vision. As mentioned above, the TMDL program is already working closely with the Department's monitoring program in order to ensure that data needs for TMDL development will be met. In addition, the TMDL program will work to improve communication and coordination with the nonpoint source program to align goals so that resources can be used in the most efficient manner possible. Continued coordination with the NPDES program will also be needed to ensure that TMDLs requiring point source reductions are easily understood and implementable.

The Department will also look to coordinate with government agencies such as EPA Region 4, USGS, TVA, and others for TMDL planning, data collection/analysis, etc. As the Vision process continues, the Department will attempt to include the programs within ADEM and any other agencies that may be affected by or have an interest in TMDLs or other restoration activities.

This prioritization strategy will be made available for public input along with the draft 2024 §303 list. The Department will consider any comments received from the public regarding this strategy and make any changes that may be warranted based on the comments provided. If specific waterbodies are identified as priorities for the public, those will be considered for inclusion as priority waters. In addition, the Department will work to communicate with affected stakeholders during the development of individual TMDLs and other restoration planning activities.

The TMDL staff will continue to utilize existing tools and explore the possibility of using new tools for data collection and analysis and TMDL development. Geographic information systems (GIS) and water quality modeling are important tools used in developing TMDLs, and the Department's staff will continue to pursue training opportunities related to GIS and modeling so that thorough and implementable TMDLs and other restoration approaches are developed.

Every two years, the Department will determine specific waterbodies for which TMDLs will be developed in accordance with the priorities described in this Framework. The waterbodies will be selected based on data availability, available resources, interested stakeholders, and other relevant factors.

The §303(d) list is updated every two years. Each new list will be evaluated to determine if any changes to the Department's priorities should be made. It is not anticipated that significant changes will be

necessary; however, the Department will remain flexible in order to work toward the goal of improved water quality across Alabama.

The Department's TMDL program is looking forward to continually working with stakeholders and other affected programs and agencies in the prioritization of restoration efforts throughout the state. It is anticipated that the 2022 Vision will allow for the efficient and effective use of resources to bring about improvements in Alabama's water quality.