



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. D. Lee Currey, Director
Water and Science Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 4502
Baltimore, Maryland 21230-1718

Dear Mr. Currey,

The U.S. Environmental Protection Agency, Region III (EPA) reviewed the Maryland Department of Environment's (MDE) Final Draft Combined 2020-2022 Integrated Report and supporting documentation and information submitted as final on January 27, 2022. MDE published the draft Combined 2020-2022 Integrated Report for public notice and comment from December 6, 2021, until January 17, 2022. EPA reviewed and determined that the portion of the Integrated Report (Category 5) constituting Maryland's list of water quality-limited segments still requiring Total Maximum Daily Loads meets the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations. With this letter and the enclosed rationale, EPA approves MDE's Combined 2020-2022 Section 303(d) list as submitted electronically to EPA through the Assessment, TMDL Tracking and Implementation System (ATTAINS). The enclosed approval rationale describes the applicable statutory and regulatory requirements and EPA's review of Maryland's compliance with those requirements.

EPA commends you and your staff for the thorough work and exemplary effort in developing the list. EPA looks forward to working with MDE staff in preparation for the next Section 303(d) list submission due April 1, 2024, along with implementation of EPA's Vision for the Clean Water Act 303(d) Program.

If you have any questions, don't hesitate to contact me at 215-814-2737, or have staff contact Mr. Gregory Voigt, Chief of Standards and TMDLs Section, at 215-814-5737.

Sincerely,

CATHERINE
LIBERTZ

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CATHERINE LIBERTZ
Date: 2022.02.25
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Catherine A. Libertz, Director
Water Division

Enclosure

cc : Matthew Stover, MDE-WSA



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Rationale for EPA Approval of Maryland's Combined 2020-2022 Clean Water Act Section 303(d) List

I. Purpose

This document sets forth the U.S. Environmental Protection Agency, Region III's (EPA's) rationale for approving Maryland's Combined 2020-2022 Clean Water Act (CWA) Section 303(d) list. On January 27, 2022, EPA received the Maryland Department of the Environment (MDE) final Combined 2020-2022 Integrated Report (IR) and supporting documentation and information through the Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS). EPA has conducted a review of MDE's Combined 2020-2022 IR and supporting documentation and information. Based on this review, EPA has determined that the portion of the IR constituting Maryland's list of water quality-limited segments (WQLSs) still requiring TMDLs (i.e., Category 5 of the IR) satisfies the requirements of Section 303(d) of the CWA and EPA's implementing regulations. Therefore, EPA hereby approves Maryland's Combined 2020-2022 Section 303(d) list. The statutory and regulatory requirements, and EPA's review of Maryland's compliance with each requirement, are described in detail below.

II. Statutory and Regulatory Background

1) Identification of WQLSs for Inclusion on Section 303(d) List

Section 303(d)(1) of the CWA and EPA's implementing regulations at 40 C.F.R. Part 130 direct states to identify those waters within their jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement the applicable water quality standards, and to establish a priority ranking for such waters taking into account the severity of the pollution and the uses to be made of such waters. EPA's regulations require states to biennially submit to EPA the list identifying WQLSs still requiring a TMDL. This list of WQLSs is commonly referred to as the Section 303(d) list. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d). EPA regulations provide that states do not need to identify waters on the Section 303(d) list where the following controls are adequate to implement applicable water quality standards: (1) technology based effluent limitations required by the CWA; (2) more stringent effluent limitations required by state or local authority; and (3) other pollution control requirements required by state, local, or federal authority. See 40 CFR §130.7(b)(1) and (2).

EPA's recommended multi-part IR format is intended to satisfy the listing requirements of Section 303(d) and the requirements of Sections 305(b) and 314 of the CWA¹. This IR format is intended to provide the public and other interested stakeholders with a comprehensive summary of a state's water quality. Consistent with that format, MDE's IR places all surface waters in Maryland into one of the five assessment categories. Category 5 of the IR represents the Section 303(d) list of WQLSs still requiring a TMDL. The assessment categories used in MDE's IR are as follows²:

¹ With the exception of Category 5, EPA neither approves nor disapproves the Integrated Report. Category 5 constitutes the list of impaired waters pursuant to CWA Section 303(d) that EPA approves or disapproves pursuant to 40 C.F.R. 130.7

² Integrated Report categories are described in further detail in [EPA's Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303\(d\), 305\(b\) and 314 of the Clean Water Act](#):

- Category 1 – water bodies that meet all WQS and no use is threatened.
- Category 2 – water bodies meeting some WQS but with insufficient data and information to determine if other WQS are being met.
- Category 3 – Insufficient data and information are available to determine if a water quality standard is being attained. This can be related to having an insufficient quantity of data and/or an insufficient quality of data to properly evaluate a water body’s attainment status.
- Category 4 – one or more WQS are impaired or threatened but a TMDL is not required or has already been established. The following subcategories are included in Category 4:
 - Category 4a – TMDL already approved or established by EPA.
 - Category 4b – Other pollution control requirements (i.e., permits, consent decrees, etc.) are expected to attain WQS.
 - Category 4c – Water body impairment is not caused by a pollutant (e.g. habitat is limiting, dam prevents attainment of use, etc.).
- Category 5 – Water body is impaired, does not attain the water quality standard, and a TMDL or other acceptable pollution abatement initiative is required. This is the part of the IR historically known as the 303(d) List.
 - Subcategory 5s: Waterbody impairment is caused by chloride from road salt.

2) Consideration of Existing and Readily Available Water Quality Related Data and Information

In developing the Section 303(d) list, states are required to assemble and evaluate all existing and readily available water quality related data and information including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state’s most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate non-attainment of applicable water quality standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. In addition to these minimum categories, states are required to evaluate and should actively solicit any other data and information that is existing and readily available. See 40 CFR §130.7(b)(5). While states are required to evaluate all existing and readily available water quality related data and information, states may make reasonable decisions to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring states to assemble and evaluate all existing and readily available water quality related data and information, EPA regulations at 40 CFR §130.7(b)(6) require states to include, as part of their submissions to EPA, documentation to support decisions to rely or not rely on particular data and information, and decisions to list or not list waters on the Section 303(d) list. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) a rationale for any decision to not use existing and readily available data discussed in 130.7(b)(5); and (4) any other reasonable information requested by the Region.

3) Priority Ranking

<https://www.epa.gov/sites/production/files/2015-10/documents/2006irg-report.pdf>

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the CWA that states establish a priority ranking for Section 303(d) listed waters. The regulations at 40 CFR §130.7(b)(4) require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). As long as these factors are taken into account, states retain considerable discretion and may consider other factors when prioritizing and scheduling TMDLs. See 57 FR 33040, 33045 (July 24, 1992).

III. Analysis of Maryland's Submission

1) Identification of Waters and Consideration of Existing and Readily Available Water Quality Related Data and Information (CFR §130.7(b)(1), (2), (5))

EPA has reviewed MDE's Combined 2020-2022 IR and has concluded that MDE developed its Combined 2020-2022 Section 303(d) list in compliance with Section 303(d) of the CWA and 40 CFR §130.7. EPA's review is based on its analysis of whether MDE reasonably considered existing and readily available water quality related data and information, and reasonably identified waters required to be listed on the Section 303(d) list.

EPA received MDE's final Combined 2020-2022 Section 303(d) list on January 27, 2022, through ATTAINS, which is EPA's electronic system to accept and track 303(d) submissions and actions. ATTAINS transformed and modernized paper integrated reporting into an electronic system, which allows EPA, states, and the public to access, search, and track water quality assessment decisions³. Specifically, MDE's Category 5 data in ATTAINS represents MDE's Section 303(d) list of impaired waters requiring TMDLs. In addition to the Section 303(d) list, MDE submitted through ATTAINS water quality assessment results for its other surface waters pertaining to IR assessment categories 1 – 4, along with a narrative IR and supporting documentation and information. In addition to ATTAINS, MDE shares their IR and supporting documentation and information, including the Section 303(d) list, on their webpage⁴.

In summary, EPA considered the following as MDE's Combined 2020-2022 IR submission for its review: (1) the Integrated Report narrative and appendices; (2) the Section 303(d) list, or waters listed in Category 5, present within ATTAINS; (3) the remaining waters listed in Categories 1 – 4, present within ATTAINS; (4) the state's assessment methodologies; (5) descriptions of the data solicitation and public notice processes; (6) documentation to support decisions to list or not list waters, including decisions to remove waters from Category 5; (7) descriptions of data that the state considered; (8) comments received on the draft list; and (9) the state's response to those comments.

To the extent that prior approved Section 303(d) lists have been incorporated into the Combined 2020-2022 Section 303(d) list, EPA's rationale for approving those lists remains operative unless otherwise noted. EPA's review of the Combined 2020-2022 Section 303(d) list focused on changes from the prior lists.

A) Description of the methodology used to develop the list (CFR §130.7(b)(6)(i))

³ ATTAINS data is publicly accessible via EPA's How's My Waterway online tool and ATTAINS web and geospatial services. For more information, see: <https://www.epa.gov/waterdata/get-data-access-public-attains-data>

⁴ <https://mde.maryland.gov/programs/Water/TMDL/Integrated303dReports/Pages/index.aspx>

MDE has developed methodologies for assessing whether waters are achieving their water quality standards, including their designated uses and associated water quality criteria. These assessment methodologies are intended to describe the state's interpretation of its water quality standards and establish scientifically defensible approaches for assessing water quality. Assessment methodologies are not considered rules, but rather provide a means to provide consistency and transparency in integrated reporting. Furthermore, assessment methodologies are living documents that are revised as new statistical approaches, technologies, or other improved methods are adopted by the state.

On December 6, 2021, MDE provided the public with notice and an opportunity to comment on all of their assessment methodologies, and particularly those where changes were made. MDE's final assessment methodologies are published on their webpage⁵, which EPA reviewed and considered as supporting documentation associated with the IR. These assessment methodologies include:

- Bacteria Assessment Methodology
- Biological Assessment Methodology for Non-tidal Wadeable Streams
- Delisting Methodology for Biological Assessments
- Biological Data Quality Guidelines
- Chesapeake Bay Benthic Biological Assessment Methodology
- Chesapeake Bay Assessment Methodologies
- Assessment Methodology for Dissolved Oxygen and Chlorophyll a Criteria in Maryland's Seasonally Stratified Water-Supply Reservoirs
- pH Assessment Methodology
- Sediment Assessment Methodology
- Temperature Assessment Methodology for Use Class III(-P) Waters
- Toxics Assessment Methodology

For the Combined 2020-2022 reporting cycle, MDE made changes to three assessment methodologies and another new assessment methodology was created. The Listing Methodology for Identifying Waters Impaired by Bacteria in Maryland's Integrated Report was updated to reflect the updated recreational water quality criteria, including the addition of targeting a weekly sampling frequency and considerations for bacteria sampling at non-beach areas. The Fish Tissue Assessment Methodology section, which is part of the Methodology for Determining Impaired Waters By Chemical Contaminants for Maryland's Integrated Report of Surface Water Quality, was updated to include a target data requirement of five fish, a data assessment period of ten years, and information concerning the use of best professional judgement. The Temperature Assessment Methodology for Use III (-P) Streams in Maryland was updated to include a decision diagram and assessment process that supports the policy of independent applicability. The Delisting Methodology for Biological Assessments is a new assessment methodology intended to refine the spatial scale of biological impairment listings in order to demonstrate progress and identify areas that are attaining. The delisting methodology utilizes a targeted standardized approach that is complementary to the large-scale probabilistic design of the current biological assessment methodology.

B) Description of the data and information used to identify waters (CFR §130.7(b)(6)(ii))

⁵ https://mde.maryland.gov/programs/water/TMDL/Integrated303dReports/Pages/ir_listing_methodologies.aspx

In preparation for the 303(d) listing process, MDE is responsible for the collection and compilation of water quality-related data and information. MDE based the Combined 2020-2022 Section 303(d) list on a variety of data and information sources and considered all data and information regarding CFR §130.7(b)(5) categories.

In December 2009, MDE completed the last update of its comprehensive water monitoring strategy.⁶ Maryland's water quality monitoring programs are designed to support state WQS (Code of Maryland Regulations Title 26, Subtitle 08) for the protection of both human health and aquatic life. This strategy identifies the programs, processes and procedures that have been institutionalized to ensure state monitoring activities continue to meet defined programmatic goals and objectives.

Maryland assesses state waters using data generated by both long-term ongoing monitoring programs as well as short-term targeted monitoring efforts. These monitoring programs predominantly sample four water body types (flowing waters, impoundments, estuarine waters, and beaches) found throughout Maryland and collect water quality samples for both conventional and toxic pollutants. Although many assessments are still based on data collected by state agencies, MDE continues to make greater use of data collected by county government and non-governmental organizations.

For the Combined 2020-2022 Section 303(d) list, MDE considered and evaluated water quality monitoring datasets from the Chesapeake Bay and Coastal Bay assessment programs, EPA's National Estuary Program Coastal Condition Report, EPA's National Coastal Condition Assessment, MDE's and Maryland Department of Natural Resources (DNR) Lake Monitoring program, EPA's National Lake Survey, DNR's Maryland Biological Stream Survey and CORE/TREND non-tidal rivers and streams program, EPA's National Rivers and Streams Assessment, MDE's State Beaches program, MDE's TMDL program, MDE's Wetland Monitoring program, EPA's National Wetland Condition Assessment, United States Geological Survey's (USGS) non-tidal network trends program, DNR's tidal water quality trends program, Chesapeake Bay Program trends analysis program, EPA's waterborne disease program, MDE's Drinking Water program, MDE's Shellfish Harvesting program, MDE's fish tissue, shellfish, and crab toxic contaminant monitoring programs, MDE's, DNR's, and the Maryland Department of Health's Harmful Algal Bloom program, MDE's fish kill program, MDE's Combined and Sanitary Sewer Overflow program, DNR's invasive aquatic species program, and MDE's and DNR's groundwater monitoring and assessment programs. See Part C of MDE's IR for more information.

Although MDE considered data from all of these programs, data from some of these programs were not used for IR assessment decisions. For example, since national monitoring programs such as EPA's National Coastal Condition Assessment and EPA's National River and Streams Assessment were intended to inform national and regional water quality comparisons, the number of samples collected in these efforts is different than that needed to make site-specific attainment decisions and biological sampling methods are not comparable to Maryland Biological Stream Survey biological indices used for attainment decisions. So, data from EPA's national survey were not used for assessment decisions.

Maryland supports the use of computer models and other innovative approaches to water quality monitoring and assessment. Maryland and the Bay partners also relied heavily on the Chesapeake Bay model to develop loading allocations, assess the effectiveness of best management practices, and guide implementation efforts. Several different modeling approaches have also been used in TMDL development. With the growing number of biological impairments in Category 5 of the list, Maryland will be relying more heavily on land use analyses, Geographic Information System (GIS) modeling, data

⁶ https://mde.maryland.gov/programs/Water/TMDL/MD-AWQMS/Documents/Maryland_Monitoring_Strategy2009.pdf

mining, and other innovative approaches to identify stressors, define ecological processes, and develop appropriate TMDLs.

MDE also solicited relevant water quality data and information from the public via their webpage, and considered data collected from 2014 through 2019 for this IR cycle. As a result of the data solicitation, 31 organizations/programs submitted water quality data for consideration in MDE's Combined 2020-2022 IR.

MDE properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance⁷. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources.

In addition, MDE assembled and evaluated other data in addition to the categories of existing and readily available data and information listed in the EPA regulations and set out above.

EPA has reviewed MDE's description of the data and information considered in the listing process and its methodology for identifying waters. EPA concludes that MDE properly assembled and evaluated all existing and readily available water quality-related data and information, including data and information relating to the categories of waters specified in 40 CFR §130.7(b)(5).

C) A rationale for any decision to not use any existing and readily available data and information (CFR §130.7(b)(6)(iii))

While states are required to evaluate all existing and readily available water quality-related data and information, states may make reasonable decisions whether and how particular data or information is used in determining whether to list particular waters. MDE provided its rationale for not relying on particular existing and readily available water quality related data and information as a basis for identifying waters as part of the Section 303(d) list.

To aid in their evaluation of water quality data, MDE developed and published its assessment methodologies for public review. See section III(1)(A) of this document. These assessment methodologies describe target data sizes and data collection procedures that MDE utilizes when assessing water quality data. MDE's rationale to not use certain data and information may include incompatibilities with how criteria or assessment methodologies were derived compared to how data were collected.

In addition to requirements outlined in assessment methodologies, MDE explains that water quality datasets used for IR assessments should have a Quality Assurance Project Plan (QAPP) or other reports that define monitoring objectives and quality control. In general, when evaluating data, MDE reviews the data for sufficient sample size, data distribution (type and outliers/errors) and spatial and temporal distribution in the field. Censored data and field comments are examined for unusual events that may affect data quality (e.g., storm event). Data are examined for seasonality and known correlations (e.g., conductivity and salinity) are reviewed to verify that data are accurate. In addition, some assessments are conducted by other state programs using peer-reviewed or defined methods and are not re-evaluated using other approaches. Some assessments are conducted externally by other agencies and programs. In these circumstances, the assessment methods are peer reviewed and results

⁷ <https://www.epa.gov/sites/default/files/2015-10/documents/lisgid.pdf>

are provided to MDE.

To evaluate the external data submitted to MDE for the Combined 2020-2022 IR during the data solicitation period, MDE reevaluated their data quality system to promote greater consistency with Virginia Department of Environmental Quality and the Chesapeake Monitoring Cooperative and has refined the data evaluation process to incorporate three tiers of data quality.

MDE describes Tier III data as legally defensible data that can be used for regulatory decision-making purposes. Tier III data are used to list or delist waters on the IR and are subject to the highest data quality standards. Waters identified as impaired using Tier III data may require a TMDL or other regulatory actions. These data should be accompanied by a QAPP consistent with EPA guidance⁸. Tier III data analysis must also be consistent with MDE's assessment methodologies.

Tier II data are data with a defined methodology but do not meet Tier III data requirements and are not used to make regulatory assessment decisions by MDE. However, waters with this level of data may be placed in Category 3 of the IR, denoting that there are insufficient data to make an assessment and that follow up monitoring is necessary. Tier II data may be used to track performance of TMDL implementation, help target stream segments for WQS attainment assessments, or identify waters for MDE follow-up monitoring. These data should be accompanied by a QAPP consistent with EPA guidance⁷ or other equivalent documentation. Tier II data may have an incomplete QAPP or may use a monitoring method similar to MDE protocols, but not fully approved by MDE due to differences in sampling or testing methodology.

Tier I data do not meet the requirements of Tier II and Tier III, but are of known quality, and as a result, still contribute to the understanding of the health of Maryland's waters. Tier I data may be used for educational or outreach purposes, location information where monitoring is taking place, baseline data, assessing the general conditions of surface waters in Maryland, and highlighting community projects that are implemented to improve the health of water bodies. These data do not require a QAPP consistent with EPA guidance⁷, but uniform methodology is recommended. Tier I data may have a QAPP, standard operating procedures, and/or laboratory methods that do not meet MDE quality assurance and quality control methods. These data may include land use data, visual observations of water quality condition, or data not consistent with MDE's assessment methodologies.

Of the 31 organizations/programs that submitted water quality data to MDE for consideration in MDE's Combined 2020-2022 IR, 9 submitted Tier I data, 5 submitted Tier II data, and 18 submitted Tier III data. See table 3 of MDE's IR for a list of the organizations/programs that submitted data and notes on MDE's evaluation of those data.

In addition, MDE identifies certain water bodies as conditionally approved shellfish areas. A sub-set of these water bodies are restricted because they are closed for administrative reasons under guidance of the National Shellfish Sanitation Program. Typically, these waters are restricted due to their vicinity to wastewater treatment plants and the restriction is precautionary against the potential treatment system failure, rather than an expression of failure to meet WQS. In accordance with MDE's listing methodology and EPA guidance, both administratively restricted and conditionally approved shellfish waters are generally not listed on the Section 303(d) list.

EPA finds MDE's protocol for evaluating data described in its IR to be a reasonable rationale in

⁸ <https://www.epa.gov/quality/guidance-quality-assurance-project-plans-epa-qag-5>

determining the usage of outside data for the purposes of 130.7(b)(5) and (b)(6)(iii).

D) Any other reasonable information requested by the Regional Administrator (CFR §130.7(b)(6)(iv))

There are a total of 101 additions to the list of Category 5 (impaired, TMDL needed) waters in 2022. Two of the new Category 5 waterbody-pollutant combinations (also referred to as listings or assessment records) are for sulfate and are based on Biological Stressor Identification (BSID) analyses. In addition, there are 16 new fecal coliform listings in shellfish harvesting waters, three new chlorophyll *a* listings for lakes, two new listings for perfluorooctane sulfonate in fish tissue, three new listings for phosphorus, one new listing for high pH, and 74 new listings for high water temperatures in Class III or III-P cold water stream segments.

i) Rationale for delisting of waterbodies included on the previous Section 303(d) list

MDE has demonstrated, to EPA's satisfaction, good cause for not including certain waters on its list. As provided in 40 CFR §130.7(b)(6)(iv), EPA requested that MDE demonstrate good cause for not including waters that were on the previous Section 303(d) list for the prior IR cycle. For the Combined 2020-2022 Section 303(d) list, MDE submitted data and information demonstrating that certain previously listed waters either recovered to the point that the applicable water quality standards have been attained or were initially listed in error and/or are currently not impaired. A water may be delisted for various reasons including the following: more recent or accurate data; more sophisticated water quality modeling; flaws in the original analysis that led to the water being listed in the categories in section 130.7(b)(5); or changes in conditions (i.e., new control equipment, elimination of discharges). There may also be reassessments revealing that a WQLS is still impaired, but that the causes of impairment have changed; these waters therefore remain on the list but are identified as impaired by a different pollutant(s). For each water-pollutant combination proposed for removal from the Combined 2020-2022 Section 303(d) list, MDE provided EPA with sufficient documentation and justification.

Ten waterbody-pollutant combinations were removed from Category 5 in 2020-2022. One biological listing without a specified impairing substance has been replaced by a sulfate listing from the BSID analyses. Another listing was removed from Category 5 for temperature because the waterbody was erroneously assessed as a use Class III stream when it is actually an use Class I stream and is meeting the use Class I temperature criterion. One listing was removed from Category 5 for high pH and was replaced by another high pH listing covering a larger geographic area. The last seven listings removed from Category 5 included three for mercury in fish tissue and four for polychlorinated biphenyls (PCBs) in fish tissue. These seven listings were moved to Category 2 on the basis of new data that demonstrated water quality that met the applicable criterion or impairment threshold.

EPA reviewed these data and agrees that MDE has demonstrated good cause for why the waters or water-pollutant combinations are not included in the Combined 2020-2022 Section 303(d) list.

In addition, removal of water-pollutant combinations from the 2020-2022 Section 303(d) list also included those segments where EPA-approved TMDL(s) have been developed. These segments were moved to Category 4A. Implementation of the TMDL is not required prior to removal to Category 4A. Where a water was previously listed for more than one pollutant, only those pollutants addressed in an approved TMDL were moved to Category 4A.

ii) Rationale for excluding waterbodies from the Section 303(d) list pursuant to 40 CFR §130.7(b)(1) because the waterbodies are expected to meet water quality standards

MDE's decision not to include waters on its Combined 2020-2022 Section 303(d) list due to other required pollution controls is consistent with EPA regulations at 40 CFR §130.7(b)(1). These waters were identified in Category 4B of the IR. Under 40 CFR §130.7(b)(1), states are not required to list WQLSs still requiring TMDLs (i.e., the Section 303(d) list or waters listed in Category 5) where effluent limitations required by the CWA, more stringent effluent limitations required by state or local authority, or other pollution control requirements required by state, local, or federal authority, are stringent enough to implement applicable water quality standards. The regulation does not specify the timeframe in which these various requirements must implement applicable water quality standards to support a state's decision not to list particular waters. Consistent with EPA guidance on this issue, EPA expects that required controls will result in attainment in a reasonable time, based on the nature of the pollutant and actions that need to be taken to achieve attainment.

As indicated above, MDE has several listings in Category 4b. Consistent with a program of continuous assessment, EPA encourages MDE to continue efforts, including monitoring as appropriate, to provide updates on the status of these segments. Monitoring should be scheduled for these waters to verify either that water quality standards are attained or water quality standards are expected to be attained in a reasonable time. Where it is found that water quality standards will not be attained through implementation of the requirements listed in 40 CFR §130.7(b)(1) in a reasonable time, it is appropriate for the water to be placed on the Section 303(d) list to ensure that implementation of the required controls, and progress towards compliance with applicable water quality standards, is tracked. If it is determined that the water is, in fact, meeting applicable water quality standards when the next Section 303(d) list is developed, it would be appropriate for the state to remove the water from the Section 303(d) list or Category 4B of the IR at that time.

2) TMDL Priority Ranking and Targeting (CFR §130.7(b)(4))

EPA reviewed MDE's priority ranking of Section 303(d) listed waters for TMDL development and concludes that MDE properly took into account the severity of pollution and the uses to be made of such waters. Beyond these two statutory factors, states retain considerable discretion and may consider other factors when prioritizing and scheduling TMDLs, including: vulnerability of particular waters; recreational, economic, and aesthetic importance of particular waters; restoration potential; degree of public interest and support; state or national policies and priorities; technical considerations, such as the complexity of the impairment; availability of adequate data and models; and implementation of watershed-based permitting programs or basin planning cycles. *See, e.g.,* 57 Fed. Reg. 33040, 33,044-45 (July 24, 1992).

MDE used the same priority ranking methodology used in previous lists. Documentation describing this prioritization was incorporated as part of MDE's 2016 Integrated Report⁹. Within the Section 303(d) list, MDE has provided both a priority ranking of high, medium, or low, and a separate indication for waters targeted for TMDL development in the next two years. In general, criteria that affect human health or have an extreme effect on natural resources are ranked high, criteria that indicate a continuing downward trend in the loss of a significant resource, create a serious nuisance, or constitute a significant loss of a natural resources are ranked as medium, and the remaining cases rank low.

⁹ <https://mde.maryland.gov/programs/Water/TMDL/Integrated303dReports/Pages/2016IR.aspx>

In addition, EPA has reviewed MDE's identification of WQLSs targeted for TMDL development in the next two years and concludes that that schedule is reasonable. Scheduling takes into account additional considerations other than priority designations, such as programmatic consideration (e.g., efficient allocation of resources, basin planning cycles, coordination with other programs or states) and technical considerations (e.g., data availability, problem complexity, availability of technical tools).

3) Public Participation

MDE released its draft Combined 2020-2022 IR and the Section 303(d) list of impaired waters for public review and comment on December 6, 2021, with a public comment period, open for 42 days, until January 17, 2022. A notice of availability of the draft Combined 2020-2022 IR and the Section 303(d) list was published in the Maryland Register. In addition, announcements were sent via e-mail to MDE's stakeholder listserv. All materials, including the IR narrative and supporting documentation and information, were made available on MDE's webpage¹⁰. Paper copies could also be requested. A public meeting was held virtually to present and summarize the draft IR on January 5, 2022.

Comments were submitted from EPA on January 13, 2022. MDE received no additional comments from any other organizations/individuals, and MDE addressed EPA comments in a comment response document included within the final IR submission to EPA. In addition, MDE made changes to the IR in response to EPA comments, as appropriate. Comments submitted by EPA requested monitoring and assessment updates to existing 4b listings, as available, and re-consideration of the TMDL priority ranking for one water listed in Category 5. EPA has determined that MDE adequately addressed all public comments received.

4) Coordination with the U.S. Fish and Wildlife Service and National Marine Fisheries Service

On December 13th, 2021, EPA notified the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) of the availability of MDE's draft Combined 2020-2022 IR and Section 303(d) list. EPA provided this notification as a courtesy and to facilitate informal coordination between the agencies regarding potential impacts the proposed listings may have on threatened and endangered species and critical habitat. No comments were received from USFWS or NMFS.

In reaching its conclusions on approving Maryland's Combined 2020-2022 303(d) list, EPA collected and appropriately considered information on the endangered and threatened species and their critical habitat in Maryland's waters identified by NMFS and FWS.

¹⁰ <https://mde.maryland.gov/programs/Water/TMDL/Integrated303dReports/Pages/index.aspx>