

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

FEB 0 4 2019

Mr. Harold D. Ward, Acting Director Division of Water and Waste Management West Virginia Department of Environmental Protection 601 57th Street SE Charleston, West Virginia 25304

Dear Mr. Ward:

The U.S. Environmental Protection Agency (EPA) has conducted a review of the West Virginia Department of Environmental Protection's (WVDEP) 2016 Section 303(d) list and supporting documentation and information. With this letter (including the rationale set forth in the enclosure to this letter) EPA approves West Virginia's 2016 Section 303(d) list of water quality-limited segments still requiring Total Maximum Daily Loads (TMDLs) as submitted to EPA on May 2, 2018 and amended on October 17, 2018. The statutory and regulatory requirements, as well as an analysis of West Virginia's 2016 Section 303(d) submittal, are described in the enclosure.

EPA looks forward to working with WVDEP staff on future assessment reports along with implementation of EPA's Vision for the Clean Water Act 303(d) Program. If you or your staff has any questions, please feel free to contact me at 215-814-5717 or libertz.catherine@epa.gov.

Sincerely,

Catherine A. Libertz, Director Water Protection Division

Catherine a Subert

Enclosure

Review of West Virginia's 2016 Section 303(d) List and Decision Rationale

1. Introduction

Clean Water Act (CWA or Act) Section 303(d), 33 U.S.C. § 1313(d), (Section 303(d)) requires each state to identify those waters within its jurisdiction for which effluent limitations required by CWA Section 301(b)(1)(A) and (B), 33 U.S.C. § 1311(b)(1)(A) and (B), are not stringent enough to implement any applicable water quality standard, to establish a priority ranking for such waters, and to submit a listing of such waters (Section 303(d) list) to EPA Section 303(d) list for approval or disapproval.

On May 2, 2018, EPA received from the West Virginia Department of Environmental Protection (WVDEP) West Virginia's 2016 Section 303(d) list of water quality limited segments (WQLSs) (West Virginia's 2016 303(d) list), as part of the Integrated Report submitted by WVDEP (submission) to meet the requirements of CWA Sections 303(d), 305(b), and 314; 33 U.S.C. § §1313(d), 1315(b), and 1324. On October 17, 2018, WVDEP resubmitted their 2016 Integrated Report narrative which included a modified response to comments section. EPA has completed its review of WVDEP's submission. As a result of this review, EPA is approving West Virginia's Section 303(d) list.

2. Statutory and Regulatory Background

Section 303(d)(1) of the CWA directs each state to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard 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. 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's implementing regulations require states to biennially submit a list identifying water quality limited segments still requiring a TMDL. See 40 CFR 130.7(b)(1). EPA regulations provide that states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act; (2) more stringent effluent limitations required by state or local authority; or (3) other pollution control requirements required by state, local, or Federal authority. See 40 CFR 130.7(b)(1).

A. Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, (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 nonattainment of applicable 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. See 40 CFR 130.7(b)(5). EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available. See Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, Appendix C (1991) (EPA's 1991 Guidance). While states are required to evaluate all existing and readily available water quality-related data and information, states may make reasonable decisions as to whether and how particular data or information is considered 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 list or not list waters. Such documentation should include 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.

B. Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that states establish a priority ranking for 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, the regulations require that 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). In accordance with longstanding EPA guidance, States also may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, current and future vulnerability of particular waters as aquatic habitats, recreational, economic and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities. See 57 Fed. Reg. 33040, 33045 (July 24, 1992) and EPA's 1991 Guidance.

3. Analysis of WVDEP's Submission

EPA has reviewed West Virginia's submission, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR §130.7. EPA's review is based on its analysis of whether the state reasonably considered existing and readily available water quality related data and information and reasonably identified waters required to be listed as impaired.

A. Description of WVDEP's Submission

EPA received WVDEP's final 2016 Integrated Water Quality Monitoring and Assessment Report (IR) package combining the Section 303(d) list and Section 305(b) report on May 2, 2018. This package included: (1) a listing rationale narrative describing: (a) an overview of the process for development of the 2016 Integrated Report; (b) the assessment methodologies for the following kinds of data: numerical water quality criteria, biological impairment, fish consumption advisories and excess filamentous algae; and (c) an explanation of the data evaluated in the preparation of the list; (2) a summary of responses to comment letters received by WVDEP during the public comment period that could affect the listing of waters; (3) the 303(d) list with six supplemental tables tracking previously listed waters and one supplemental table tracking newly listed waters; (4) spreadsheets containing information on stream segments in each of the five assessment categories; (5) WVDEP's 303(d) Decision Database, an Access database that contains relevant water quality monitoring data including but not limited to biological assessment data and the various lists of waters that comprise WVDEP's Integrated Report; (6) a compilation of comment letters received by WVDEP during the public comment period; and (7) a spreadsheet of changes from the draft 2016 Section 303(d) list. Based on a request from EPA, WVDEP resubmitted their 2016 IR narrative on October 17, 2018 with an updated technical rationale for not using specific bioassessment data for 303(d) listing purposes. The technical rationale was included in West Virginia's response to comments section of their IR narrative.

WVDEP developed an Integrated Report that identifies the assessment status of all of West Virginia's waters combining EPA's Section 303(d) and 305(b) requirements. The Integrated Report assigned the waters of West Virginia into five distinct categories. All stream segments or assessment units fall into one of the following categories:

- Category 1 Fully supporting all designated uses.
- Category 2 Fully supporting some designated uses, but insufficient or no information exists to assess the other designated uses.
- Category 3 Insufficient or no information exists to determine if any of the uses are being met.
- Category 4 Waters that are impaired or threatened but do not need a Total Maximum Daily Load (TMDL).
 - Category 4a waters that already have an approved TMDL but are still not meeting standards.
 - o Category 4b waters that have other control mechanisms in place which are reasonably expected to return the water to meeting designated uses.
 - o Category 4c waters that have been determined to be impaired by pollution or other natural factors.

• Category 5 - Waters that have been assessed as impaired and are expected to need a TMDL.

West Virginia's Section 303(d) list of waters that are impaired and still need a TMDL is contained in Category 5 of West Virginia's 2016 Integrated Report. WVDEP identified 1,326 WQLSs in Category 5 and utilized the same format as its 2014 Section 303(d) list, consisting of the 303(d) list of impaired waters still needing a TMDL and six supplemental tables. The format of the 2016 Section 303(d) list follows WVDEP's Watershed Management Framework with five hydrologic groups (A-E). Within each hydrologic group, watersheds are arranged alphabetically and WQLSs are listed alphabetically by stream code within their appropriate watershed. The information that follows each WQLS stream includes the stream code, the affected water quality criteria, the source of the impairment (where known), the impaired size (or, by default, the entire length), the reach description, the projected timing of TMDL development and whether or not the stream was on the 2014 303(d) list.

Six supplemental tables were provided to track previously listed waters that are not present on the 2016 Section 303(d) list. An additional supplemental table was provided to track newly listed waters.

"Supplemental Table A - Previously Listed Waters - No TMDL Developed - 2016" is a list of previously listed waters which have been reevaluated and determined not to be impaired and, therefore, not in need of a TMDL. Causes for revision of the impairment status include recent water quality data demonstrating improved water quality condition, revision to the water quality criteria associated with the previous listing, or a modification of the listing methodology. Decisions regarding the need for TMDL development were made in accordance with the requirements of 40 CFR 130.7(b)(1) and the State's listing criteria.

"Supplemental Table B - Waters with TMDLs Developed" is a list of previously listed impaired waters for which a TMDL has been developed and approved by EPA. Waters included in this supplement have had a TMDL developed, but water quality improvements are not yet complete and/or documented. Since the Section 303(d) list is a list of WQLSs still requiring TMDLs (see 40 C.F.R. 130.7(b)), EPA's Integrated Water Quality Monitoring and Assessment Report Guidance recommends classification of such waters in a category separate from the 303(d) list. WVDEP developed this supplemental table to track previously listed impaired waters for which TMDLs have been developed. In the Integrated Report, these waters have been listed in Category 4a which includes waters that already have an approved TMDL but are not meeting standards.

"Supplemental Table B1 - Existing TMDL Resolves Newly Identified Impairments" is a list of waters with newly identified impairments that occur in the watersheds of existing TMDLs. While TMDLs are not prescribed for these waters specifically, implementation of load and wasteload allocations for the pollutant of concern in the drainage areas for these waters is expected to resolve the impairment. In the Integrated Report, these waters have been listed in Category 4a which includes waters that already have an approved TMDL but are not meeting standards.

"<u>Supplemental Table C - Water Quality Improvements</u>" is a list of previously listed impaired waters with improved water quality due to TMDL implementation or pre-TMDL stream restoration work that resulted in delisting. These waters are included in Category 1 (meeting all uses), provided that impairments for other uses or pollutants are not present.

"Supplemental Table D - Impaired Waters - No TMDL Development Needed" is a list of impaired waters for which either other control mechanisms are in place to control pollutants or the water is impaired by pollution (i.e., flow alterations caused by mining). These are the same waters contained in Category 4b and 4c, respectively.

"Supplemental Table E - Total Aluminum TMDLs Developed" is a list of previously listed impaired waters for which a total aluminum TMDL has been developed and established by EPA. Due to the criteria change from total aluminum to dissolved aluminum, WVDEP placed total aluminum TMDLs onto a separate table from Supplemental Table B. All waters contained on Supplemental Tables B and E are included on Category 4a of the Integrated Report.

"Supplemental Table F – New Listings 2016" is a list of impaired waters that were not previously included on the 2014 Section 303(d) list.

B. Description of the methodology used by WVDEP to develop West Virginia's 2014 Section 303(d) list

In preparation for the 303(d) listing process, the WVDEP's Division of Water and Waste Management (DWWM) is responsible for the collection and compilation of water quality-related data and information. WVDEP sought water quality information from various state and Federal agencies, colleges and universities, and private individuals, businesses and organizations. News releases and public notices were published in State newspapers and letters were sent to State and Federal agencies known by WVDEP to be generators of water quality data.

WVDEP used West Virginia's 2014 Section 303(d) list (including waters added by EPA on November 23, 2016) as a starting point for development of its 2016 Section 303(d) list. Except for waters identified in Supplemental Tables A through E, waters identified on West Virginia's 2014 Section 303(d) list (either by WVDEP or added by EPA) were retained on the 2016 Section 303(d) list. WVDEP issued a call for data to be used for purposes of the 2016 Section 303(d) list in which WVDEP sought data generated through June 30, 2015. WVDEP generated the majority of available surface water quality data through the Watershed Assessment Program (WAP) performed within the Watershed Management Framework cycle. Additional data was obtained from State and Federal agencies, local environmental agencies, colleges, and universities, citizen monitoring groups, and private firms. A complete list of data providers is shown on Table 4 of the Integrated Report.

WVDEP personnel with varying areas of expertise compared instream data to applicable water quality criteria and determined the impairment status of state waters. The West Virginia water quality standards were the basis for 303(d) listing decisions. In general terms, if water quality standards are not being met, a waterbody is considered impaired, placed on the 303(d)

list, and scheduled for TMDL development. The West Virginia water quality standards are codified at 47 CSR 2 - *Requirements Governing Water Quality Standards*, and at 60 CSR 5 - *Antidegradation Implementation Procedures*. For stream water quality assessments, the WVDEP generally used water quality data generated and analyzed between July 1, 2010 – June 30, 2015 from the State's 32 major watersheds.

WVDEP released the Draft 2016 Section 303(d) list for public comment on July 21, 2017 through August 21, 2017. Notices of the availability of the Draft 2016 Section 303(d) list were placed in newspapers statewide and promoted via e-mail and the internet. These notices included information on where to obtain the documents and where to send comments. On July 31, 2017, WVDEP provided EPA with its Section 303(d) Decision Database which records listing decisions for all waterbodies. After review of the Section 303(d) Decision Database, EPA provided comments to WVDEP on August 21, 2017. West Virginia received written comments from several entities including EPA. WVDEP evaluated all comments received and prepared a responsiveness summary detailing WVDEP's actions regarding these comments. In addition, West Virginia responded to each of EPA's comments in its final IR submission letter.

C. Description of the data and information used to identify waters, including a description of the data and information used by WVDEP to identify waters as required by Section 130.7(b)(5).

Pursuant to 40 CFR 130.7(b)(5), states must assemble and evaluate all existing and readily available water quality-related data and information to develop their Section 303(d) lists, including but not limited to, such data and information for the following categories of waters.

1. Section 130.7(b)(5)(i), Waters identified by WVDEP in its most recent Section 305(b) report as "partially meeting" or not meeting designated uses or as threatened."

West Virginia's 2016 Section 303(d) list and its 305(b) report are submitted in one document, referred to as the Integrated Report. Therefore, the 305(b) report is no longer a standalone document and the data that would have gone into development of such a "stand alone" report was used for the Integrated Report. WVDEP assembled all existing and readily available information for purposes of the Section 305(b) portion and Section 303(d) list of the Integrated Report. For a further discussion, see Section D below.

2. <u>Section 130.7(b)(5)(ii)</u>, Waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards.

Where predictive modeling indicated that discharges in accordance with existing permit limits would cause violation of water quality criteria, the designated use of the water quality may be classified as "threatened," thereby subjecting it to 303(d) listing and TMDL development pursuant to Section 130.7(b)(5). WVDEP states that much of the list is based upon limited

amounts of water quality monitoring data that may or may not accurately portray the extent of impairment. WVDEP uses the TMDL development process to refine identification of the extent of impairment.

3. <u>Section 130.7(b)(5)(iii)</u>, Waters for which water quality problems have been reported by local, state, or Federal agencies; members of the public; or academic institutions.

WVDEP solicited data from entities outside of the WVDEP. WVDEP also encourages volunteer data collection as part of West Virginia Save Our Streams program. Outside data sources other than WVDEP's are identified in Table 4 of the Integrated Report. WVDEP provided an explanation of how it considers external data in the Integrated Report.

WVDEP encourages comment on its draft lists, and the submission of water quality data and information, each time the list is public noticed. WVDEP received additional data and/or information in comments on its Public Notice Draft 2016 Section 303(d) list. WVDEP summarized the additional data and/or information received in comments and identified any changes that were made to the proposed list based on additional data and/or information.

4. Section 130.7(b)(5)(iv), Waters identified by WVDEP as impaired or threatened in a nonpoint assessment submitted to EPA under section 319 of the CWA or in any updates of the assessment.

WVDEP properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In Pronsolino v. Marcus, the District Court for the Northern District of California held that Section 303(d) of the CWA authorizes EPA to identify and establish TMDLs for waters impaired by nonpoint sources. Pronsolino et al. v. Marcus et al., 91 F.Supp.2d 1337, 1347 (N.D.Ca. 2000), aff'd, 291 F.3d 1123 (9th Cir. 2002), cert. denied, 539 U.S. 926 (2003). See also EPA's 1991 Guidance and National Clarifying Guidance for 1998 Section 303(d) lists, Aug. 27, 1997.

5. Other data and information used to identify waters (besides items 1-4 discussed above).

EPA has reviewed WVDEP's description of the data, information, and methodology used by WVDEP in the development of their 2016 Section 303(d) list. This includes supplemental data and information that was submitted in response to EPA's comments. Table 4 of the Integrated Report lists sources of data utilized during the listing process. As set forth in more detail in Section 4 below, WVDEP assembled all existing and readily available data.

D. A rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in Sections 130.7(b)(5) and 130.7(b)(6)(iii).

WVDEP evaluated data from internal and external sources to ensure that collection and analytical methods, quality assurance/quality control and method detection levels were consistent with approved procedures. EPA finds WVDEP's screening protocol and criteria described in its 2016 Integrated Report rationale narrative to be a reasonable rationale in determining the usage of outside data.

The regulations at 40 C.F.R. 130.7(b)(6)(iii) allow States to provide a "rationale for any decision to not use any existing and readily available data and information" to develop their Section 303(d) list. The decision not to use particular data, however, is distinguished from the requirement in 40 CFR 130.7(b)(5) that states must assemble and evaluate all existing and readily available data.

Consistent with the requirements of 40 CFR 130.7(b)(5), WVDEP assembled and evaluated all available data, including its genus level macroinvertebrate data. The State did not use the genus-level macroinvertebrate data for the purposes of identifying WQLSs on its 2016 Section 303(d) list. Although EPA's comments on the State's draft list recommended that WVDEP "employ its genus level macroinvertebrate bioassessment data to determine attainment with WV's narrative water quality criteria for aquatic life," those comments also noted that, consistent with federal regulations and longstanding EPA guidance, WVDEP could provide a rationale for not using the genus-level data for its Section 303(d) listing decisions. After receiving those comments, WVDEP has provided the following rationale, consistent with 40 C.F.R. 130.7(b)(6)(iii):

WVDEP is not using the genus level macroinvertebrate dataset for 303(d) listing purposes currently due to concerns with the robustness of the genus level reference dataset in several season / ecoregion specific IBIs. The Summer Plateau, Summer Mountain> 60 mi2, and Spring Plateau IBI's currently have less than 10% of the number of reference samples that were used in the recent update of the statewide WVSCI impairment threshold, with the Summer Plateau having just 6.4% of the number of reference samples used for the WVSCI update. WVDEP has determined that these numbers are too low to provide confidence in use of these IBIs.

WVDEP will not be using our genus level macroinvertebrate data or GLIMPSS for 303(d) listing purposes. WVSCI, with an updated impairment threshold of 72, will be used for AQL assessments for the Integrated Reports. WVDEP does utilize genus level macroinvertebrate data for other purposes. WVDEP uses genus level data for statewide probabilistic water quality condition summaries and for TMDL stressor identification purposes¹.

¹ Updated 2016 West Virginia Integrated Water Quality Monitoring and Assessment Report, pages 51-52

WVDEP has expressed a concern about insufficient reference datasets in GLIMPSS for the purposes of compiling its Section 303(d) list of water quality limited segments. In particular, WVDEP is concerned that GLIMPSS, as compared to the recent update of WVSCI, may lack a sufficiently robust genus-level reference dataset to ensure an acceptable level of confidence regarding the use of certain season/ecoregion specific indices of biotic integrity (IBIs). WVDEP has concluded that GLIMPSS should not be used at this time to make section 303(d) assessment determinations on a seasonal/ecoregional basis absent more robust reference data.

EPA's role in the section 303(d) listing process is one of oversight, and states may exercise some technical discretion in deciding how it is most appropriate to employ the available data and information. EPA notes that the State has articulated concerns about GLIMPSS, and in the State's judgment at this time the WVSCI methodology is sufficiently robust for determining the levels of biological degradation to identify impaired waters. Further, there is agreement between GLIMPSS and WVSCI at identifying biological impairments at the most disturbed sites (Pond et al., 2012). The differences between GLIMPSS and WVSCI are predominately with respect to identifying impairments near the attainment threshold. Under these circumstances, EPA concludes that WVDEP reasonably exercised its discretion to not use the genus-level data for purposes of developing its 2016 section 303(d) list and WVDEP's rationale satisfies the regulatory requirements at 40 C.F.R. 130.7(b)(5) and (b)(6)(iii) and longstanding EPA guidance. WVDEP has noted it will continue to use its genus-level data for statewide probabilistic water quality condition summaries and for TMDL stressor identification purposes. EPA encourages the State to continue to develop its genus-level macroinvertebrate taxonomy dataset.

E. WVDEP's basis for delisting waterbodies from the previous 303(d) list.

WVDEP has identified in "Supplemental Table A" waterbodies that were included in previous 303(d) lists but removed from the 2016 Section 303(d) list. WVDEP has demonstrated, to EPA's satisfaction, its basis for these delistings. 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).

In its final 2016 Section 303(d) list, WVDEP delisted waterbodies due to new water quality analyses demonstrating compliance with water quality standards, revisions to water quality criteria associated with the previous listing, listing previously in error, or, in the case of four streams, a biological listing in which the sample was collected in a manner not consistent with the underlying methodology.

For each previously listed segment removed from the 2016 Section 303(d) list, WVDEP provided EPA with a basis for removing the previously listed segment. EPA reviewed WVDEP's explanations and approves the delisting determinations listed in "Supplemental Table A".

WVDEP has also identified on "Supplemental Table B" those waterbodies where a TMDL has been completed. EPA agrees with WVDEP's decision to not include these waterbodies on the 2016 Section 303(d) list.

WVDEP identified 54 waters on "Supplemental Table B1 - Existing TMDL Resolves Newly Identified Impairments" with newly identified impairments occurring in watersheds of existing TMDLs. WVDEP provided EPA with information explaining how existing TMDLs will address the newly identified impairments. EPA analyzed this information and the existing TMDLs and agrees with WVDEP's decision to not include these waterbodies on the 2016 Section 303(d) list.

WVDEP's "Supplemental Table C" proposed to delist 23 new waters due to water quality improvement sufficient to achieve applicable water quality standards. WVDEP provided EPA with water quality data demonstrating attainment with applicable water quality standards. Data were included in a copy of WVDEP's Integrated Report Decision Database that was supplied to EPA as part of the WVDEP's Final Integrated Report package. EPA agrees with the delistings proposed in "Supplemental Table C."

F. Any other reasonable information requested by the Regional Administrator described in Section 130.7(b)(6)(iv).

WVDEP provided any additional information requested by EPA Region III staff.

G. Identification of the pollutants causing or expected to cause a violation of the applicable water quality standards described in Section 130.7(b)(4).

Where the impairing pollutants are known and are the subject of West Virginia numeric water quality criteria, WVDEP identified the pollutants that were causing or expected to cause a violation of the applicable water quality standards. For WQLSs identified on West Virginia's 2016 Section 303(d) list as violating West Virginia's narrative water quality criteria as applied to aquatic life, the impairing pollutant is frequently unknown because the impairment is identified by a direct measure of the biological community. Therefore, the Section 303(d) list identifies many WQLSs based upon failure to achieve the narrative water quality criteria as applied to aquatic life without identifying the cause of impairment. WVDEP anticipates that the cause of biological impairments will be determined during TMDL development. If WVDEP is able to identify the pollutant(s) causing the impairment and the WQLS remains on the list, then WVDEP "shall identify the pollutants causing or expected to cause violations of the applicable water quality standards" in the section 303(d) listing. 40 C.F.R. § 130.7(b)(4).

H. Priority Ranking and Targeting

Within the 2016 Section 303(d) list, WVDEP has provided TMDL development dates and a detailed discussion of both the priority ranking and schedule development in its 2016 Section 303(d) list rationale. This discussion includes a description of WVDEP's five-year Watershed Management Framework cycle for its five hydrologic groups (A-E). In addition,

WVDEP has identified WQLS targeted for TMDL development in the next two years. High priority has been placed on these stream segments. For other impairments where the timing of TMDL development is less certain, multiple year entries were indicated that represent the opportunity for TMDL development per the Watershed Management Framework cycle.

The State's TMDL development schedule as described in the 2016 Section 303(d) list also takes into account additional relevant factors, such as programmatic considerations (i.e., efficient allocation of resources, Watershed Management Framework cycles, and coordination with other programs or states) and technical considerations (i.e., data availability, problem complexity, availability of technical tools).

EPA agrees that, as to the WQLSs included on the 2016 Section 303(d) list, WVDEP satisfied the requirement to submit a priority ranking.

4. Coordination with the U.S. Fish and Wildlife Service

During West Virginia's public comment period, EPA sent a copy of West Virginia's Draft 2016 Section 303(d) list in electronic correspondence on July 25, 2017, to the U.S. Fish and Wildlife Service (FWS). EPA requested comments from FWS regarding the draft list. No comments from FWS were received.