



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

Mr. Collin R. Burrell, Associate Director
Government of the District of Columbia
District Department of the Environment
Water Quality Division
51 N Street, NE
Washington, D.C. 20002

JAN 21 2015

Collin
Dear Mr. Burrell:

The U.S. Environmental Protection Agency (EPA) has conducted a complete review of the District of Columbia's (DC) 2014 Integrated Report and supporting documentation and information. Based on this review, EPA has determined that DC's list of water quality-limited segments still requiring Total Maximum Daily Loads fulfills the requirements of Section 303(d) of the Clean Water Act and EPA's implementing regulations. Therefore, by this order, EPA hereby approves DC's 2014 Section 303(d) list. The statutory and regulatory requirements, and EPA's review of the District's compliance with each requirement, are described in the enclosure.

We commend you and your staff for the excellent work and exemplary effort expended in establishing the 2014 303(d) list. EPA appreciates the continued cooperation of District staff on toxic TMDL revisions and we look forward to establishing these TMDLs within the timeframe outlined by the U.S. District Court.

EPA looks forward to working with District staff on future assessment reports along with implementation of EPA's New Vision for the Clean Water Act 303(d) program. Please feel free to contact Mrs. Evelyn S. MacKnight, Associate Director, at 215-814-5717, or Ms. Michelle Knabb, at 215-814-5192, if you have any questions or concerns regarding this decision.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jon M. Capacasa".

Jon M. Capacasa, Director
Water Protection Division

Enclosure



**RATIONALE FOR EPA APPROVAL OF
DISTRICT OF COLUMBIA 2014 SECTION 303(d) IMPAIRED WATERS LIST**

The U.S. Environmental Protection Agency (EPA) Region III has conducted a complete review of the District of Columbia's (DC) 2014 Integrated Report (IR) and supporting documentation and information. Based on this review, EPA has determined that the list of water quality-limited segments (WQLSs) still requiring TMDLs satisfies the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations. Therefore, by this order, EPA hereby approves DC's 2014 Section 303(d) list. The statutory and regulatory requirements, and EPA's review of DC's compliance with each requirement, are described in detail below.

Statutory and Regulatory Background

Identification of WQLSs for Inclusion in the Integrated Report.

EPA's five-part listing IR format is intended to satisfy the listing requirements of Section 303(d) and the requirements of Sections 305(b) and 314 of the CWA, but also places all of a State's waters into one of the IR's five primary assessment categories. It provides the public and other interested stakeholders with a comprehensive summary of the State's water quality. In broad terms the categories are as follows:

- Category 1: All designated uses are met.
- Category 2: Some of the designated uses are met, but there is insufficient data to determine if remaining designated uses are met.
- Category 3: Insufficient data to determine whether any designated uses are met.
- Category 4: Water is impaired or threatened, but a TMDL is not needed.
- Category 5: Water is impaired or threatened, and a TMDL is needed.

Section 303(d)(1) of the CWA and EPA's implementing regulations direct States to identify those waters within its jurisdiction still needing a TMDL for which effluent limitations required by Sections 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). Within the IR framework, Section 303(d) is reflected in Category 5.

EPA regulations provide that States do not need to list otherwise impaired waters where the following controls are adequate to implement applicable 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).

Consideration of Existing and Readily Available Water Quality-Related Data and Information.

In developing the IR, 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 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 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). In addition to these minimum categories, States are required to consider and should actively solicit any other data and information that is existing and readily available. EPA's 2006 guidance, promulgated on July 29, 2005, describes categories of water quality related data and information that may be existing and readily available. See *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the CWA, EPA Office of Water (EPA's 2006 Guidance)*. While States are required to evaluate all existing and readily available water quality related data and information, States may decide 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 list or not list waters. 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.

Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the CWA 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, 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, the CWA provides that States establish priorities. Priority rankings are required, but States have significant flexibility in ranking priority based on these factors. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, 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 CFR §33040, 33045 (July 24, 1992), and EPA's 1991 Guidance.

Analysis of the District of Columbia's Submission

Identification of Waters and Consideration of Existing and Readily Available Water Quality-Related Data and Information.

EPA has reviewed DC's 2014 IR, and has concluded that the District developed the Section 303(d) list section of its IR in compliance with guidance and with Section 303(d) of the CWA and 40 CFR §130.7. EPA's review bases its analysis on whether DC complied with the statutory and regulatory requirements discussed above, reasonably considered existing and readily available water quality related data and information, and reasonably identified waters required to be listed. As set forth more fully in the 2014 IR submission and below, the District Department of the Environment (DDOE) relied upon several data sources to construct the list, including data compiled for DC's 2014 Section 305(b) Report.

DC released its draft IR for public comment and review on August 22, 2014 with a public comment period, open for 30 days, until September 22, 2014. A notice of availability was published in the *DC Register* on August 22, 2014 in addition to the DDOE website. Copies were also available at the Martin Luther King, Jr. Public Library in Washington, DC, and the list could also be requested by contacting the Water Quality Division. EPA submitted comments to DDOE on September 15, 2014. No other external comments were received by DDOE.

EPA received DC's final 2014 IR report and a copy of the 2014 Assessment Database (ADB) on December 23, 2014. The final IR was submitted electronically via email.

A. Description of the methodology used to develop this list, Section 130.7(b)(6)(i).

DC's 2014 Section 303(d) list was developed using all readily available data. In the District, responsibility for collection and compilation of this information falls to the DDOE's Water Quality Division. It compiles DC's Inventory of Water Quality (the Section 305(b) Report) every two years pursuant to Section 305(b) of the CWA. The Section 305(b) Report utilizes water quality monitoring information collected by various programs in the Bureau of Environmental Quality including the Watershed Protection Division and the Fisheries and Wildlife Division.

Use attainment is determined by comparison of field measured or projected values of various water quality parameters to the numeric or narrative water quality standards. The process of determining impairments for the list begins with DC's Section 305(b) Report. The Section 305(b) Report indicates a violation of Water Quality Criteria (WQC) when water quality standard exceedences meet listing requirements outlined in DDOE's assessment methodology and there is a loss of designated use.

DC's 2014 IR utilizes the integrated approach to Section 303(d) listing based on EPA's 2006 Guidance. DC used the EPA guidance five-part structure as it was proposed, but did not have waters as entries into Categories 1 and 2. DC defined the remaining categories as follows:

Category 3 - There is insufficient available data and/or information to make a use support determination.

Category 4 - Available data and/or information indicate that at least one designated use is not being supported or is threatened, but a TMDL is not needed.

- Category 4a - A State developed TMDL has been approved by EPA or a TMDL has been established by EPA for any segment-pollutant combination.
- Category 4b - Other required control measures are expected to result in the attainment of an applicable water quality standard in a reasonable period of time.
- Category 4c - The non-attainment of any applicable water quality standard for the segment is the result of pollution and is not caused by a pollutant.

Category 5 - Available data and/or information indicate that at least one designated use is not being supported or is threatened, and a TMDL is needed. Category 5 comprises DC's 303(d) list.

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

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

DC's Section 303(d) List is based largely on the data collection and assessment that underlies the Section 305(b) report, which characterizes its water quality. The Water Quality Division compiles the District's Water Quality Assessment, the Section 305(b) Report, and every two years pursuant to Section 305(b) of the CWA. This iteration of DC's listing again allows for enumeration of specific pollutants of concern rather than strictly identifying categories of pollutants. The Water Quality Division used the 2012 Section 303(d) List and the previous Section 305(b) report as the basis for the present IR as further informed by information from: DC Ambient Water Quality Monitoring data for 2009 -2013, which was used to make support determinations for the 2014 Section 305(b) Report; DC Municipal Separate Storm Sewer System (MS4) 2007-2011 Monitoring data; Stream Survey Data collected between 2002-2003 and 2009-2013; analysis of biological samples for phytoplankton, zooplankton, and benthic macroinvertebrate samples (2005-2009); DC Fish Tissue Contamination Report, 2009; supplemental toxics monitoring data (collected by TetraTech under contract to EPA Region III), 2012-2013. The District identifies those waterbodies that currently do not meet the narrative or numeric water quality criteria established in its water quality standards. The Section 305(b) report indicates water quality impairments when water quality standard exceedences meet listing requirements outlined in DDOE's assessment methodology and there is a loss of designated use.

List determinations for primary contact, secondary contact and aquatic life support uses stemmed from physical, biological, chemical and bacterial data (fecal coliform and/or *E. coli*) collected from January 2009 to December 2013. The Section 305(b) report provided the use support determinations necessary for identifying surface water impairments due to pollutants or unknown causes. Fish consumption use determinations (Class D) are based on known fish

consumption advisories in effect during the assessment period. A fish consumption advisory remains in place for the District.

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

The District identified Potomac River Tidal Fresh and Anacostia River Tidal Fresh segments as impaired but having a TMDL in part 4a of their Integrated Report based upon modeling underlying the Chesapeake Bay TMDL.

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

The District's Water Quality Monitoring Regulations (Title 21, Chapter 19-District of Columbia Municipal Regulations) were developed to provide for accurate, consistent, and reproducible water quality monitoring data for decision making purposes, including Category 5 (TMDL) listing decisions. The District does not track verbal or phoned in reports of water quality problems unless they are corroborated by written documentation from the reporting party. The District requested water quality data from external sources (i.e. other government organizations, watershed groups, universities, etc.). Any data received was reviewed and considered by The District in preparation of the final Section 303(d) list. Therefore, no data collected in accordance with DC's Water Quality Monitoring Regulations was excluded from consideration.

4. Other data and information used to identify waters (besides items 1-3 discussed above).

EPA has reviewed the District's description of the data and information it considered and its methodology for identifying waters. This includes supplemental data and information that was collected by Tetra Tech under EPA contract. In addition, EPA sought to verify the veracity of each data source as it relates to listing submission. The 2008, 2010, and 2012 Section 303(d) lists, previous Section 305(b) reports, DC MS4 2007-20011 monitoring data, the 2009 DC Fish Tissue Contamination Report, and biological sampling data are reasonable in consideration for the Integrated Report. EPA concludes that DC properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR §130.7(b)(5).

C. The following language addresses the situation where EPA has requested that the District explain the basis for not listing certain waters, e.g., previously-listed waters or specific waters nominated by commenters. Where comments are received questioning DC's failure to list specific waters, the District needs to provide its rationale in response to such comments, even if EPA has not requested a good cause demonstration.

Beginning in 2013, with funding assistance from EPA, Tetra Tech conducted ambient toxics water quality sampling in DC to update the data upon which the original toxics listings were established. In addition, from December 21, 2012 to January 31, 2013, DDOE held a public solicitation for any available ambient water quality toxics data for District waters. No data were obtained via the data request.

In 2013, DDOE and EPA reviewed a ten year data record to evaluate toxic impairments in the District. Most of the original toxics listings were based on very limited data and were based on fish tissue data collected from the mainstem Anacostia River and Potomac River and not the specific listed waterbody. Anacostia River and Potomac River fish tissue results were extrapolated across the District to list most District waters as impaired for toxics. Both DDOE and EPA agree that fish tissue collected from the Potomac and Anacostia Rivers, while indicative of fish consumption impairment in both Rivers and any tributaries that may allow fish passage, is not appropriate for all waters of the District.

After review of the all available data, with an emphasis on the most recent data including recent fish tissue samples and 2013 ambient monitoring data, DC DDOE reconsidered its toxics listings for a number of District waters. Where ambient water quality data was available, DDOE retained an impaired listing for a stream segment if recent ambient water quality data exceeded a numeric water quality criterion.

In its listing decisions, DDOE also considered the fish tissue data for the Anacostia and Potomac Rivers and waters that are hydrologically connected to the Anacostia River or Potomac River. All waters in the District remain identified as impaired based upon a District-wide fish consumption advisory. In addition, all District waters that remain in Category 4a for a toxic impairment have water quality data (fish tissue and/or ambient data from 2013 Tetra Tech study) to support the impairment determination. DDOE, however, refined identification of impairing pollutants/causes. With respect to the tributaries, it should first be noted that all fish tissue data comes from the mainstem Anacostia and Potomac Rivers. Moreover, because fish are mobile, fish tissue contamination by itself may not provide definitive evidence that a particular tributary is impaired. Put simply, a fish exposed to a toxic parameter in the mainstem Anacostia River may swim into an unimpaired tributary. Therefore, for tributaries hydrologically connected to the Anacostia or Potomac Rivers, where there were no data other than fish tissue data from the mainstem Anacostia or Potomac Rivers, the toxic pollutant(s)-waterbody combinations were placed in Category 3 (insufficient data). For waters that are not hydrologically connected to the Anacostia River or Potomac River and have no evidence of a toxic pollutant present, those waters are no longer considered impaired for the specific parameters (though again, remain identified as impaired based upon the District-wide fish consumption advisory). There were not any District waters that were identified as fully attaining water quality standards. All district waters remain identified as impaired for at least one pollutant with many segments having multiple causes of impairment identified in either Category 4a or 5.

DC has committed to continue toxics monitoring for waters in Category 3 to better understand the cause and source of the fish tissue contamination. If future sampling provides evidence of an impairment for a specific pollutant in a particular water body segment, DDOE will list the pollutant-waterbody combination as impaired and develop appropriate TMDLs.

EPA finds reasonable DDOE's explanation and approach regarding the toxics impairments previously identified in Category 4a.

Although not explicitly stated on the District's Category 4a or 5 lists, EPA considers the 2014 Section 303(d) list as including all streams in the District as impaired for primary contact recreation use, fish consumption use and aquatic life use based on statements made by DDOE in the Integrated Report narrative. In the "Rivers and Streams Water Quality Assessment Designated Use Support" section of Integrated Report, DDOE notes that no District streams are attaining these uses.

D. Priority Ranking and Targeting

EPA reviewed DC's priority ranking of listed waters for TMDL development, and concludes that DC properly took into account the severity of pollution and the uses to be made of such waters, as well as other relevant factors such as risks to human health. Waterbodies listed for toxic substances such as metals, pesticides, carcinogens or noncarcinogens are ranked as high priority on the basis of their risk to human health. Many of the TMDLs originally established for these parameters were vacated by the U.S. District Court in connection with *Anacostia Riverkeeper, Inc., et al. v. Jackson*, Civ. Action No. 09-0098 (JDB). The Court stayed vacatur of these TMDLs until January 1, 2017 in order to allow the District and EPA sufficient time to develop replacement TMDLs. TMDL development for these toxics substances is underway.

There are no TMDLS for waters in Category 5 scheduled to be developed by 2016. DC is cooperating with EPA and actively working on revisions to toxic TMDLs challenged by Anacostia Riverkeeper, Friends of the Earth, and Potomac Riverkeepers in its complaint (Case No.: 1:09-cv-00098-JDB). EPA has reviewed DC's identification of these WQLSs targeted for TMDL development in the next two years, and concludes that the targeted waters are appropriate for TMDL development in this timeframe.

E. Coordination with the Services

EPA notified the Maryland Field Office of the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), by letter dated September 12, 2014, of the availability of DC's 2014 Integrated Report. EPA provided notification as an informal coordination regarding potential impacts the proposed listings may have on threatened and endangered species. No comments were received from either USFWS or NMFS.

