



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

November 17, 2020

Graham Stevens, Chief
Bureau of Water Protection and Land Reuse
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

Dear Mr. Stevens:

Thank you for your submittal of the 2020 Clean Water Act (“CWA”) Section 303(d) list, Connecticut’s 2020 list of water bodies not meeting water quality standards. In accordance with Section 303(d) of the CWA and 40 CFR §130.7, the U.S. Environmental Protection Agency, Region 1 (EPA) conducted a complete review of Connecticut’s 2020 Section 303(d) list and supporting documentation. Based on this review, EPA has determined that Connecticut’s list of water quality limited segments still requiring total maximum daily loads (TMDLs) meets the requirements of Section 303(d) of the CWA and EPA’s implementing regulations. Therefore, by this letter, EPA hereby approves Connecticut’s 2020 Section 303(d) list.

The Section 303(d) list was submitted as Appendix B-1 of the State of Connecticut’s 2020 Integrated Water Quality Report. Appendix B-1 comprises the list of those waters for which technology-based and other required controls for point and nonpoint sources are not stringent enough to attain or maintain compliance with the state’s water quality standards. The submittal also presents Connecticut’s TMDL strategy, which describes the priority setting approach and identifies those waters for which TMDLs, alternatives, and/or protection plans will be completed and submitted during the next two years. The State’s priority ranking for action plan development, including TMDLs, for the next two years is included as Appendix C-1 of the 2020 Integrated Water Quality Report. The statutory and regulatory requirements, and EPA’s review of Connecticut’s compliance with each requirement, are described in detail in the enclosed approval document.

The Connecticut Department of Energy and Environmental Protection (“CT DEEP”) has also successfully completed a public participation process during which the public was given the opportunity to review and comment on the 2020 Section 303(d) list. As a result of this effort, Connecticut has considered public comments in the development of the final list. The public comments and CT DEEP’s responses to those comments were included in the State’s final submittal.

Your staff has prepared a comprehensive and informative 2020 Integrated Water Quality Report incorporating the State’s 303(d) list and has also provided EPA with supporting documentation and assistance to aid in our review and approval. The 2020 Integrated

Water Quality Report reflects the State's larger vision for addressing impaired and protecting unimpaired waters through CT's Integrated Water Resource Management process. My staff and I look forward to continued cooperation with CT DEEP in implementing the requirements under Section 303(d) of the CWA.

Please feel free to contact Mary Garren at 617-918-1322 if you have any questions about or comments on our review.

Sincerely,

/s/

Ken Moraff, Director
Water Division

Enclosure

cc:

Chris Bellucci, CT DEEP
Traci Iott, CT DEEP
Philip Trowbridge, CT DEEP
Jennifer Perry, CT DEEP
Dan Arsenault, EPA
Mel Coté, EPA
Greg Dain, EPA

EPA NEW ENGLAND'S REVIEW OF CONNECTICUT'S 2020 CWA SECTION 303(D) LIST

I. INTRODUCTION

EPA has conducted a complete review of Connecticut's (CT) 2020 Section 303(d) list and supporting documentation and information and, based on this review, has determined that CT's list of water quality-limited segments (WQLSs) still requiring total maximum daily loads (TMDLs) meets the requirements of Section 303(d) of the Clean Water Act ("CWA" or "the Act") and EPA's implementing regulations. Therefore, by this order, EPA hereby approves CT's final 2020 Section 303(d) list, included as part of the *State of Connecticut 2020 Integrated Water Quality Report (IWQR)*, dated October 15, 2020. The final IWQR was received by EPA on October 20, 2020. The statutory and regulatory requirements, and EPA's review of CT's compliance with each requirement, are described in detail below.

II. STATUTORY AND REGULATORY BACKGROUND

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

Section 303(d)(1) of the Act directs states 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 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, and (3) other pollution control requirements required by state, local, or federal authority. See 40 CFR Section 130.7(b)(1).

Consideration of 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, 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 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 any other data and information that is existing and readily available. EPA's 2006 Integrated Report Guidance describes categories of water quality related data

and information that may be existing and readily available. All EPA integrated reporting guidance under CWA Section 303(d), 305(b) and 314 may be found at <https://www.epa.gov/tmdl/integrated-reporting-guidance-under-cwa-sections-303d-305b-and-314>. 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 rely or not rely on particular data and information and 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; and (3) 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 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, states must, at a minimum, take in to 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 Act provides that states establish priorities. 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 FR 33040, 33045 (July 24, 1992), and EPA's 2006 Integrated Report Guidance and the 2006, 2009, 2010, 2011, 2013, 2015 and 2017 memoranda and attachments.

III. REVIEW OF CONNECTICUT'S SECTION 303(d) SUBMISSION

The Connecticut Department of Energy and Environmental Protection (CT DEEP) submitted the final 2020 Section 303(d) list to EPA along with a cover letter, dated October 15, 2020, requesting EPA review and approval. The integrated listing format (i.e., a combination of the state's Section 305(b) report and the state's Section 303(d) list) allows states to provide the status of all assessed waters in a single multi-part list or document. CT's 2020 IWQR can be found at: https://www.ct.gov/deep/cwp/view.asp?a=2719&q=325610&deepNav_GID=1654. The final 2020 Section 303(d) list is found in Appendix B-1 of the 2020 IWQR.

Chapter 1 of the IWQR, *Connecticut Consolidated Assessment and Listing Methodology (CT CALM)*, describes the procedure used by the CT DEEP to assess the quality of the State's waters relative to attainment of Connecticut Water Quality Standards Regulations. Chapter 2, *305(b) Assessment Results*, provides a series of figures and tables presenting the results of CT DEEP's assessment of all readily available data relating to designated use attainment in

Connecticut waters. Chapter 3, *Waterbodies identified for restoration and protection strategies pursuant to Section 303 of the Clean Water Act*, provides additional information concerning those assessed waters that do not currently meet water quality standards. The *List of Impaired Waters for Connecticut (EPA Category 5)*, found in Appendix B-1 of the IWQR, is the State's 2020 Section 303(d) list.

States may include each waterbody or segment thereof into one or more of the following five categories as part of an IWQR; however, only waterbodies or segments placed in Category 5 (impaired by a pollutant and for which a TMDL is needed) constitute a state's Section 303(d) list:

- 1) *All designated uses are supported, no use is threatened;*
- 2) *Available data and/or information indicate that some, but not all of the designated uses are supported;*
- 3) *There is insufficient available data and/or information to make a use support determination;*
- 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;*
 - 4-A) *A state-developed TMDL has been approved by EPA or a TMDL has been established by EPA for any segment-pollutant combination;*
 - 4-B) *Other required control measures are expected to result in the attainment of an applicable water quality standard in a reasonable period of time;*
 - 4-C) *The non-attainment of any applicable water quality standard for the segment is the result of pollution and is not caused by a pollutant;*
- 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; and*
 - 5-Alt) *Impaired without a TMDL completed but assigned a low priority for TMDL development because an alternative restoration approach is being pursued.*

Chapter 3 of Connecticut's IWQR presents the State's discussion of placement of waters in specific categories and for prioritizing TMDL or TMDL alternative development for Category 5 waterbody segments and their associated impairments. The Section 303(d) list includes all waters that have been assigned to Category 5. Waters listed by CT in Appendix B-1 of the IWQR represent the State's 2020 Section 303(d) list, which the State is required to submit to EPA for review and approval or disapproval. Appendix C-1 presents the State's prioritization of waters on its Section 303(d) list for action plan (TMDL, TMDL alternative, or protection plan) development over the next two years.

1.) Final 2020 State of Connecticut Integrated Water Quality Report

Connecticut's IWQR includes extensive information on all waters assessed in the State. All waters known or suspected not to be meeting water quality standards and in need of TMDLs have been included on the Section 303(d) list in the IWQR. Under its current listing approach, Connecticut keeps a water on its impaired waters list until it is shown that water quality standards are being attained, revision of the water quality standards support a change in assessment status, data indicates that the designated uses of the waterbody are being met,

criteria are met for its placement in Category 4, or the initial listing is confirmed as having been incorrect. TMDLs for listed waters will be completed in accordance with the schedule established, which reflects priority rankings and other relevant factors.

The IWQR specifies waters in Category 4. These are waters that are currently not meeting water quality standards but do not need a TMDL completed due to one of three reasons. Waters for which TMDLs have already been approved are listed in Category 4-A. Category 4-B includes waters for which a functionally equivalent control action has been developed, i.e., an impairment caused by a pollutant is being addressed through other pollution control requirements. Waters in Category 4-C are not attaining water quality standards; however, the cause is not associated with a pollutant. EPA reviews the Category 4 list to ensure that the waters are categorized appropriately and do not belong in Category 5. Category 4 waters are listed in Appendices B-2, B-3, and B-4 of the IWQR.

As noted above, Category 5 contains waters where available data and/or other information indicate that at least one designated use is not being supported or is threatened, and a TMDL is needed. Federal Regulations in 40 CFR Section 130.7 require EPA to review and approve or disapprove the Category 5 list of impaired waters.

2.) Response to Public Comments

CT DEEP published a draft *2020 Integrated Water Quality Report* on May 19, 2020. The State's *List of Impaired Waters for Connecticut (EPA Category 5)* was included as Appendix B-1 of the draft report. The public notice notifying stakeholders of the opportunity to comment on the draft report was sent to interested parties by email, posted on the CT DEEP website, and published in five newspapers throughout the State. A public informational meeting was held on June 5, 2020. Due to the pandemic and the closure of CT DEEP offices, the public informational meeting was held online via ZOOM. The sign-in sheet for the public meeting as well as the public notice document were submitted along with the final IWQR. Comments were accepted from the public from May 19, 2020 to June 19, 2020. The State published a detailed response to comments, including links to the original comment letters, along with the final IWQR. The text of the response to comments provided a summary of the public comments and the State's responses to each question or issue raised.

CT DEEP received twelve written comment letters during the public comment period. Comment letters were from the Eastern Connecticut Conservation District, Niantic Watershed Committee, Norwalk River Watershed Association, Pomperaug River Watershed Coalition, Connecticut River Conservancy, Lower Farmington River and Salmon Brook Wild and Scenic Committee, The Nature Conservancy's Connecticut Chapter, New Haven Environmental Advisory Council, Rivers Alliance of Connecticut, and a number of interested citizens. CT DEEP reviewed information provided by the commenters and made certain changes to the final IWQR based on public comment. In addition, the State provided a response to comments document to address questions raised by the public that were responsive and clarified why the State made decisions regarding listing or delisting of certain waterbody segment/impairments.

The comment letters received during the public comments period generally raise questions or comments regarding a wide variety of issues. Those issues included, but were not limited to,

nutrients, emerging contaminants, flow impairments, prioritization of waters for monitoring, issues of environmental justice, stakeholder involvement, suggestions for CT DEEP to consider, and acknowledgements of the State's efforts to improve water quality.

The Connecticut River Conservancy raised questions regarding the State's prioritization of waters for action plan development with respect to issues of environmental justice. It is important that communities without strong watershed groups to advocate on their behalf receive fair consideration as priorities are set by the State on where to focus resources. EPA is working with the State as it develops new approaches to address impaired waters through TMDLs or other action plans. The State is currently piloting these approaches in communities that have engaged local partners to assist in their development. Successful piloting of these approaches should expedite the State's efforts to address more impaired waters in a shorter time frame. EPA encourages the public to help identify specific waters located in underserved communities that should be considered for high prioritization by the State. EPA can assist the State in identification of communities at risk as priorities are chosen for future implementation of these new approaches.

EPA has reviewed the language within CT DEEP's IWQR addressing areas of public concern as well as CT DEEP's responses to public comments. EPA concludes that Connecticut has appropriately and adequately responded to the public comments and concerns.

IV. IDENTIFICATION OF WATERS AND CONSIDERATION OF EXISTING AND READILY AVAILABLE WATER QUALITY-RELATED DATA AND INFORMATION

EPA has reviewed the State's submission and has concluded that the State developed its 2020 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.

The State of Connecticut uses sources of data and information consistent with EPA regulations and EPA's 2006 Integrated Report Guidance when conducting water quality assessments. As outlined in the IWQR, these data include:

- Results from recent ambient monitoring;
- Recent Section 305(b) reports, 303(d) lists, and 319(a) nonpoint assessments;
- Reports of water quality problems provided by local, state, territorial or federal agencies, volunteer monitoring networks, members of the public or academic institutions;
- Fish and shellfish advisories, restrictions on water sports or recreational contact;
- Reports of fish kills;
- Safe Drinking Water Act source water assessments;
- Superfund and Resource Conservation and Recovery Act reports;
- Results from predictive modeling, dilution calculations or landscape analysis; and

- Results from analysis of water quantity impacting aquatic life and other designated uses.

The primary sources of assessment information for rivers are ambient monitoring data collected by CT DEEP monitoring staff, and physical, chemical and bacteria data collected at fixed sites by the United States Geological Survey (USGS). Lake assessments and trophic status are generally determined from studies conducted by CT DEEP, the Connecticut Agricultural Experiment Station, USGS and Connecticut College since 1979 (Frink and Norvell, 1984; Canavan and Siver, 1995; Healy and Kulp, 1995; CT DEP, 1998) as well as recent studies by professional contractors. For estuaries, use assessments are based primarily on physical, chemical and biological monitoring by the CT DEEP Long Island Sound Study and National Coastal Assessment (Strobel, 2000), bacterial monitoring for shellfish sanitation by the Connecticut Department of Agriculture, Bureau of Aquaculture (CT DA/BA), and bathing beach monitoring by state and local authorities. (taken from Page 7 of the IWQR)

Connecticut relies upon data and/or other information from many sources to assess whether a water is meeting water quality standards and maintaining the water's designated uses. These sources are outlined above. The types of data used to assess the status of a water may include but are not limited to: ambient physical and chemical, benthic invertebrate and fish community, indicator bacteria, indicators of productivity and enrichment/eutrophication, aquatic toxicity, tissue contaminant, sediment chemistry/toxicity, and effluent analysis. The data and/or other information that meets CT DEEP's minimum standard for data acceptability is then used to assess the status of the waterbody.

In order to prepare the 2020 Section 303(d) list, the State established a date by which data would be considered for this listing cycle. Data available to CT DEEP as of November 1, 2019 are relied upon for these assessments. Connecticut uses November 1 of the year before the next Integrated Report is due as the cut-off data for data submission. Assessment data are maintained by the State in the EPA Assessment, Total Maximum Daily Load Tracking and Implementation System (ATTAINS) database, as well as databases designed for CT DEEP use.

Waters included on the 2020 Section 303(d) list were assessed as impaired based upon failure of the water to attain its designated uses and attain water quality standards. CT's waters may be placed in multiple categories to reflect the attainment or non-attainment of different designated uses. Table 2-1 of the IWQR summarizes the status of CT's rivers, lakes, and estuarine waters.

EPA has reviewed CT's description of the data and information considered in development of the 2020 Section 303(d) list, including but not limited to the State's methodology for identifying waters, data in ATTAINS, and the CT Water Quality Standards Regulations. CT's Water Quality Standards Regulations are found at: https://portal.ct.gov/-/media/DEEP/water/water_quality_standards/wqsfinaladopted22511pdf.pdf. EPA concludes that the State 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).

Waterbody Segment/Impairments newly listed on Connecticut’s 2020 Section 303(d) list.

There are 22 waterbody segments on the Connecticut’s 2020 Section 303(d) list, impaired for one or more designated uses. Additions to the 2020 Section 303(d) list, Category 5, involve a total of 26 water body segment/impairment causes. There are 16 fresh waterbody segment/impairments and six estuarine segment/impairments. Two of the estuarine segments are impaired for multiple pollutants. These listings were related to bacteria and nutrients.

Table 1: New waterbody segment/impairments added to Connecticut’s 2020 Section 303(d) list (Category 5 of the IWQR)

Segment ID	Waterbody Name	Impaired Use	Parameter (Cause)
CT2101-01_01	Wheeler Brook (Stonington)-01	Recreation	Escherichia coli (E. Coli)
CT2101-03_01	Donahue Brook (Stonington)-01	Recreation	Escherichia coli (E. Coli)
CT3100-00_05	Willimantic River (Tolland/Willington/Ellington/St afford)-05	Recreation	Escherichia coli (E. Coli)
CT4300-32_01	Minister Brook (Simsbury)-01	Recreation	Escherichia coli (E. Coli)
CT7105-00_01	Pequonnock River (Bridgeport)-01	Recreation	Escherichia coli (E. Coli)
CT7106-02_01	Horse Tavern Brook (Fairfield/Trumbull)-01	Recreation	Escherichia coli (E. Coli)
CT7108-00_01	Mill River (Fairfield)-01	Recreation	Escherichia coli (E. Coli)
CT7200-00_01	Saugatuck River-01	Recreation	Escherichia coli (E. Coli)
CT7200-29_01	Deadman Brook (Westport/Fairfield)-01	Recreation	Escherichia coli (E. Coli)
CT7203-00_01	West Branch Saugatuck River-01	Recreation	Escherichia coli (E. Coli)
CT7301-00_02	Comstock Brook (Wilton)-02	Recreation	Escherichia coli (E. Coli)
CT7302-00_01	Silvermine River (Norwalk)-01	Recreation	Escherichia coli (E. Coli)
CT7402-01_01	Goodwives River (Darien)-01	Recreation	Escherichia coli (E. Coli)
CT7408-00_01	Greenwich Creek (Greenwich)-01	Recreation	Escherichia coli (E. Coli)
CT7409-00_01	Horseneck Brook-01	Recreation	Escherichia coli (E. Coli)
CT7409-00_02	Horseneck Brook-01	Recreation	Escherichia coli (E. Coli)
CT-C1_011	LIS CB Inner - Farm River, East Haven	Habitat for fish, other aquatic life & wildlife	Dissolved Oxygen, Nitrogen Total, Nutrients
CT-C2_015-SB	LIS CB Shore - Pages Cove, Branford	Habitat for fish, other aquatic life & wildlife	Dissolved Oxygen, Nitrogen Total, Nutrients
CT-C2_021	LIS CB Shore - Bayview, Milford	Shellfishing	Fecal Coliform
CT-E2_009-SB	LIS EB Shore - Thames River Mouth (East), Groton	Shellfishing	Fecal Coliform
CT-W1_007	LIS WB Inner - Sasco Brook, Westport	Recreation	Enterococcus
CT-W1_011	LIS WB Inner - Saugatuck River, Westport	Recreation	Enterococcus

The waterbody segment/impairments noted above were identified by new assessments during this listing cycle and were thus placed in Category 5, the Section 303(d) list.

Additionally, EPA notes that while it is not acting to approve or disapprove Connecticut’s listing methodology set forth in its CALM, EPA has reviewed all the relevant material and concludes that the methodology CT DEEP used to develop the impaired waters list is

reasonable and consistent with Connecticut’s Water Quality Standards Regulations, the Clean Water Act, and EPA Section 303(d) regulations and guidelines.

Waterbody Segment/Impairments not listed on Connecticut’s 2020 Section 303(d) list that were listed on Connecticut’s 2018 Section 303(d) list.

EPA requested that CT provide a rationale for its decision not to include on its 2020 Section 303(d) list previously listed waters. As discussed below, the State has demonstrated to EPA’s satisfaction good cause for not listing those waters, consistent with 40 CFR §130.7(b)(6)(iv).

Category 5 in 2018 to Category 2 in 2020

For the 2020 Section 303(d) list cycle, the State has delisted six waterbody segments with various impairments that were included on the State’s 2018 Section 303(d) list. Six waterbody segments with various impairments were listed in Category 5 in 2018 and are being placed in Category 2 in 2020. In these waterbody segments the designated use of the waterbody segment has been restored and the water is now meeting WQS for the pollutant(s) that caused the impairment.

CT DEEP supplied to EPA up-to-date information on all the State’s waters as part of the 2020 assessment cycle. Summaries of this information can be found in the State’s IWQR. Information regarding waters in the IWQR is also available for review at EPA’s water information page for the State of Connecticut at: <https://www.epa.gov/ct/environmental-information-connecticut#Water>. Additional information on the State of Connecticut’s water quality monitoring program and data is available at: https://www.ct.gov/deep/cwp/view.asp?a=2719&q=325616&deepNav_GID=1654.

Table 2: Waterbody segment/impairments on Connecticut’s 2018 Section 303(d) list (Category 5 of the IWQR) that are being delisted in 2020.

Segment ID	Waterbody Name	Parameter (Cause)	Reason for Delisting
CT3100-00_03	Willimantic River (Willington/Tolland)-03	Escherichia coli (E. Coli)	Applicable WQS attained; based on new data
CT3200-00_02	Natchaug River (Eastford)-02	Escherichia coli (E. Coli)	Applicable WQS attained; based on new data
CT7410-00_01	East Branch Byram River-01	Escherichia coli (E. Coli)	Applicable WQS attained; based on new data
CT-C2_018-SB	LIS CB Shore - New Haven Harbor (West), West Haven	Enterococcus	Applicable WQS attained, due to restoration activities
CT-E1_017	LIS EB Inner - Alewife Cove, Waterford/New London	Dissolved Oxygen, Nitrogen Total, Nutrients	Applicable WQS attained; based on new data
CT-W1_006	Mill River (Fairfield)-01	Chromium	Applicable WQS attained, due to restoration activities

EPA has reviewed the specific bases for the delisting of these six waterbody segments and respective impairments on the 2020 Section 303(d) list and agrees with CT DEEP that these delistings are appropriate. The Willimantic River (CT3100-00_03), the Natchaug River (CT3200-00_02), and the East Branch of the Byram River (CT7410-00_01) are being delisted after review of new data. The recreational uses of these three segments were impaired due to elevated levels of E. Coli in the water. All three segments were sampled in 2020. The geomean

values of the samples at each location were far below the water quality standard for E. coli and based upon a sufficient number of samples.

Recreational use of New Haven Harbor in West Haven (CT-C2_018-SB) was impaired due to elevated levels of Enterococcus in 2018. The City of West Haven investigated and discovered a leaking sewer line discharging an estimated 10,000 gallons for several days. The pipe was replaced removing the source of the impairment to the beach and the need for beach closures.

Alewife Cove in Waterford and New London (CT-E2_017) was listed for dissolved oxygen, total nitrogen, and nutrients. In 2018 extensive sampling was conducted for dissolved oxygen. All 37 samples were between 3.30 and 8.85 mg/l. Connecticut’s acute and chronic regulations for dissolved oxygen in estuarine waters address violations when numbers are below 4.8 mg/l. One of the 37 samples was below 4.8 mg/l and that sample was 3.30 m/l. Connecticut’s regulations allow a minimum Dissolved Oxygen criterion of between 3.5 and 3.0 mg/l with an exposure allowance of no more than 2 days. That single sample did not represent an acute or chronic violation of the water quality standard. Alewife Cove meets the DO criteria and also the narrative criteria for nutrients and total nitrogen based upon the 2018 sampling.

The Mill River in Fairfield (CT-W1_006) has been listed in Category 5 for chromium. This same segment has been listed in Category 4-B for lead. Both pollutants were related to sediment contamination and remediated together. Sediment remediation of the Mill River is discussed below on page 11. The remediation is the basis for delisting of the segment from Category 5 for chromium.

As with all the State’s waters, if any designated use is determined to be impaired in the next listing cycle it will be fully or partially returned to Category 5 (the Section 303(d) list).

Category 5 in 2018 to Category 4-A in 2020

Seven of these waterbody segment/impairments were listed in Category 5 in 2018 and are now being placed in Category 4-A due to EPA’s approval of the State’s TMDLs for those waters.

Table 3: Waterbody segment/impairments on Connecticut’s 2018 Section 303(d) list (Category 5 of the IWQR) that are being placed in Category 4-A in 2020.

Waterbody ID	Waterbody Name	Parameter (Cause)	Reason for Category Change
CT-C1_001	LIS CB Inner - Patchogue and Menunketesuck Rivers	Fecal Coliform	TMDL Approved or established by EPA (4a)
CT-C2_001	LIS CB Shore - Westbrook Harbor (East), Westbrook	Fecal Coliform	TMDL Approved or established by EPA (4a)
CT-C2_002	LIS CB Shore - Westbrook Harbor (West), Westbrook	Fecal Coliform	TMDL Approved or established by EPA (4a)
CT-C3_001	LIS CB Midshore - Westbrook Harbor, Westbrook	Fecal Coliform	TMDL Approved or established by EPA (4a)
CT-E3_012	LIS EB Midshore - Westbrook	Fecal Coliform	TMDL Approved or established by EPA (4a)

CT-W1_012-SB	LIS WB Inner - Norwalk Harbor, Norwalk	Fecal Coliform	TMDL Approved or established by EPA (4a)
CT-W1_021-SB	LIS WB Inner - Greenwich Harbor, Greenwich	Fecal Coliform	TMDL Approved or established by EPA (4a)

Seven estuarine segment/bacteria impairments were delisted from Category 5 and placed in Category 4a due to EPA’s 2019 approval of *Additional Appendices to the Statewide TMDL for Bacteria Impaired Waters for Estuary 1: Norwalk, Estuary 2: Greenwich-Stamford, and Estuary 15: Westbrook, Connecticut*. These seven segment/impairments are now appropriately placed in Category 4a. EPA approvals of the State’s TMDLs and links to those TMDLs can be found at: <https://www.epa.gov/tmdl/region-1-approved-tmdls-state#tmdl-ct>.

EPA’s conclusion regarding review of the CT DEEP’s delistings from Category 5

Appendix B-5 of the IWQR provides a full detailed reconciliation of all the changes made between the 2018 and 2020 Section 303(d) lists. For each of the waterbody segment/impairments delisted from Category 5, EPA agrees that the State has reasonably concluded that the identified waterbody segment/impairments no longer need to be on the 2020 Section 303(d) list because the segment is now meeting water quality standards for the identified impairment or has an EPA-approved TMDL that addresses that impairment.

Other Changes Noted in Connecticut’s 2020 IWQR.

Waterbody Segments in Category 4

Waters that were listed in Category 4 in 2018 were not meeting water quality standards at that time but did not need a TMDL completed due to one of three reasons outlined above. EPA reviews the Category 4 list to ensure that the waters are categorized appropriately and do not belong in Category 5. Three waters are being added back into Category 4 in 2020. Two waters are being removed from Category 4 and placed in Category 2.

Waterbody Segments being added to Category 4-A

Table 4: Waterbody segment/impairments added back to Category 4-A

Waterbody ID	Waterbody Name	Parameter (Cause)	Link to EPA approval of TMDL
CT4206-00_01	Broad Brook_01	Escherichia coli (E. Coli)	https://ofmpub.epa.gov/waters10/attains_impair ed_waters.show_tmdl_document?p_tmdl_doc_blobs_id=67734
CT4319-00_01b	W. Branch Salmon Brook_01b	Escherichia coli (E. Coli)	https://ofmpub.epa.gov/waters10/attains_impair ed_waters.show_tmdl_document?p_tmdl_doc_blobs_id=67734
CT6600-00_02	Still River_02	Escherichia coli (E. Coli)	https://ofmpub.epa.gov/waters10/attains_impair ed_waters.show_tmdl_document?p_tmdl_doc_blobs_id=76406

Three water body segments were, in the past, impaired for their recreational use due to the presence of E. coli. All three were the subject of TMDLs to address those impairments. In 2018, the three waterbody segments were removed from Category 4-A and placed in Category 2. New E. coli data had verified that they were attaining bacteria criteria and safe for recreational use. Since 2018 most recent data has shown that the waterbody segments are again impaired for

bacteria. These three waters are being placed back in Category 4-A. The EPA-approved TMDLs remain unchanged and are applicable to these three segments.

Waterbody Segments being removed from Category 4-A

One waterbody segment, with its three impairment causes, included in Category 4-A in 2018 is being removed from Category 4-A and placed in Category 2 in 2020. This waterbody segment was listed on IWQR in Category 4-A because it was covered under the EPA-approved TMDL entitled, *A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound*.

Table 5: Waterbody segment/impairments being removed from Category 4-A and placed in Category 2 on the 2020 IWQR

Segment ID	Waterbody Name	Parameter (Cause)	Reason for Category Change
CT-W3_008-I	LIS WB Midshore - Norwalk Islands, Norwalk	Dissolved Oxygen, Nitrogen Total, Nutrients	Applicable WQS attained; based on new data

Harbor Watch monitors Norwalk Harbor for Save the Sound’s Unified Water Study. This segment is located from 1000 feet offshore and includes the Norwalk Islands area. This waterbody segment and three impairments is being removed from Category 4-A and placed in Category 2. CT DEEP has made this assessment based upon data from the Unified Water Study. This segment now meets the DO criteria and also the narrative criteria for nutrients and total nitrogen based upon the 2017/2018 sampling. The waterbody segment is now meeting its designated use for habitat for fish and other aquatic life and wildlife.

This waterbody is included in the IWQR and is included here for completeness sake. EPA is taking no action on the waters removed from Category 4-A.

Waterbody Segment being added to Category 4-B

No additions are being made to waters in Category 4-B of the IWQR during this listing cycle.

Waterbody Segment being removed from Category 4-B

Segments listed in Category 4-B have other required control measures which are expected to result in attainment of an applicable water quality standard in a reasonable period of time. One waterbody segment listed in Category 4-B in the past is being placed in Category 2 in 2020.

Table 6: Waterbody segment/impairments being removed from Category 4-B and placed in Category 2 on the 2020 IWQR

Waterbody ID	Waterbody Name	Parameter (Cause)	Reason for Category Change
CT-W1_006	Mill River (Fairfield)-01	Lead	Applicable WQS attained, due to restoration activities

The Mill River in Fairfield has been the focus of CT DEEP’s remediation program for many years. Metals contamination of the sediments was the reason for the listing of this segment in

Category 4-B. Section 22a-426-4. (5) of the CT's Water Quality Standards regulations require that "surface waters and sediments shall be free from chemical constituents in concentrations or combinations which will or can reasonably be expected to result in acute or chronic toxicity to aquatic organisms or otherwise impair the biological integrity of aquatic or marine ecosystems..."

Connecticut's waters may be placed in multiple categories. The Mill River in Fairfield was listed in Category 4-B for lead and Category 5 for chromium. The contamination was all related to metals contamination of the sediments. The contaminated sediments were dredged, and confirmatory sampling results for both metals were accepted by the State. The State is removing this water from Category 4-B for lead. The segment was also removed from Category 5 for chromium as discussed on page 9 above.

This waterbody is being removed from Category 4-B of the IWQR and is included here for completeness sake. EPA is taking no action on the waters removed from Category 4-B.

Waterbody Segments in Category 4-C

Category 4-C contains water segments for which the State has demonstrated that the failure to meet water quality standards is not caused by a pollutant, but rather by other types of pollution. No additions or removals are being made to waters in Category 4-C of the IWQR during this listing cycle.

Priority Ranking

EPA reviewed Connecticut's priority ranking of listed waters for TMDL development and concludes that the State properly accounted for the severity of pollution and the uses to be made of such water in establishing that ranking. The State has also identified the pollutants causing or expected to cause violations of applicable WQS. Forty CFR §130.7(b)(4) requires that "the priority ranking shall specifically include the identification of waters targeted for TMDL development in the next two years." While the CT DEEP identifies its priority waters for the next two years, EPA and CT DEEP assess yearly the State's plans for TMDL development versus the universe of impaired waters in the State. CT DEEP makes an annual commitment to EPA, as part of its Performance Partnership Agreement, as to the TMDLs the State will submit during the coming year and provides updates on its progress during the year. Appendix C-1 of the 2020 IWQR details the waters that have been ranked by CT DEEP as a priority for TMDL, TMDL alternative, or protection plan development by the State in the next two years. If a water is listed on the 303(d) list as impaired, it remains in Category 5 as a TMDL alternative is being pursued.

CT DEEP's Integrated Water Resource Management program

https://www.ct.gov/deep/cwp/view.asp?a=2719&Q=580936&deepNav_GID=1654

details the State's larger vision for addressing impaired and protecting unimpaired waters in CT. In establishing its priority ranking for development of TMDLs, as well as other action plans, the State considers factors such as ecological information, the designated use of the water, sources of potential pollution, land use conditions, existing planning efforts, and existing or potential partnerships within the watershed.

EPA concludes that CT's prioritization and identification of waters targeted for TMDL study and/or development during the next two years is reasonable and sufficient for the purposes of 40 CFR §130.7(b)(4). CT DEEP properly examined and considered the severity of pollution and uses of the listed waters, as well as other relevant factors identified in EPA regulations and described above. Further, EPA has determined that CT DEEP's priority ranking ensures reasonable progress in addressing high priority waters with challenging water quality problems (Memo from Geoffrey H. Grubbs, Supplemental Guidance on Section 303(d) Implementation, August 13, 1992).

EPA reviewed the State's identification of WQLSs targeted for TMDL development in the next two years and concludes that the targeted waters are appropriate for TMDL development in this time frame.

Water bodies on tribal lands

EPA's approval of Connecticut's 2020 Section 303(d) list extends to all waterbodies on the list with the exception of those waters, if any, that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove the State's list with respect to waters within Indian country at this time. EPA, or any eligible Indian Tribe, as appropriate, will retain responsibilities under Section 303(d) for those waters. There are two Federally recognized Indian Tribes in Connecticut. They are the Mashantucket Pequot Tribal Nation and the Mohegan Tribe.

Waters impaired by nonpoint sources of pollution

The State 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 the 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 Northern District of California held that Section 303(d) of the Clean Water Act authorizes EPA to identify and establish total maximum daily loads for waters impaired by nonpoint sources. Pronsolino v. Marcus, 91 F. Supp. 2d 1337, 1347 (N.D.CA. 2000). This decision was affirmed by the 9th Circuit court of appeals in Pronsolino v. Nastri, 291 F.3d 1123 (9th Cir. 2002). See also *EPA Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Section 303(d), 305(b), and 314 of the Clean Water Act* – EPA Office of Water, July 29, 2005. Waters identified by the State as impaired or threatened by nonpoint sources of pollution (NPS) were appropriately considered for inclusion on Connecticut's 2020 Section 303(d) list. Connecticut properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) regulations and EPA guidance.

EPA concludes that CT DEEP properly considered waters identified by the State as impaired or threatened in nonpoint assessments under Section 319 of the CWA in the development of the 2020 Section 303(d) list.