

EPA REGION 1 TOTAL MAXIMUM DAILY LOAD REVIEW

Date: February 25, 2026

State: Connecticut

Title: A Statewide Total Maximum Daily Load Analysis for Bacteria Impaired Waters and 23 TMDL Appendices

Status: Final

IMPAIRMENT/POLLUTANT: Bacteria; TMDL Core Document and 23 appendices comprising TMDLs for 101 freshwater assessment units for *Escherichia coli* (*E. coli*)

BACKGROUND:

On December 29, 2025, EPA Region 1 received the final *Statewide Total Maximum Daily Load Analysis for Bacteria Impaired Waters* and 23 final TMDL Appendices with a submittal letter dated December 12, 2025. In addition to the Final Bacteria TMDL and TMDL Appendices, the submittal included, either directly or in reference, the following documents:

- Notice for the Publication of Draft Bacteria TMDL and Appendices for Public Review - October 16, 2024 to December 13, 2024
- Registration and Attendance for October 30, 2024 Public Meetings
- Summary of Public Comments and Responses to Comments
- State of Connecticut Regulations for Connecticut Water Quality Standards, CT DEEP, November 21, 2015
- 2022 State of Connecticut Integrated Water Quality Report, CT DEEP, Final, September 15, 2022

The following review explains how the TMDL submission meets the statutory and regulatory requirements of TMDLs in accordance with § 303(d) of the Clean Water Act and EPA's implementing regulations in 40 CFR Part 130.

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REVIEW ELEMENTS OF TMDLS

Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations at 40 C.F.R. § 130 describe the statutory and regulatory requirements for approvable TMDLs. The following information is generally necessary for EPA to determine if a submitted TMDL fulfills the legal requirements for approval under Section 303(d) and EPA regulations, and should be included in the submittal package. Use of the verb "must" below denotes information that is required to be submitted because it relates to elements of the TMDL required by the CWA and by regulation.

1. Description of Waterbody Pollutant of Concern, Pollutant Sources and Priority Ranking

The TMDL analytical document must identify the waterbody as it appears on the State/Tribe's 303(d) list, the pollutant of concern and the priority ranking of the waterbody. The TMDL submittal must include a description of the point and nonpoint sources of the pollutant of concern, including the magnitude and location of the sources. Where it is possible to separate natural background from nonpoint sources, a description of the natural background must be provided, including the magnitude and location of the source(s). Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation. The TMDL submittal should also contain a description of any important assumptions made in developing the TMDL, such as: (1) the assumed distribution of land use in the watershed; (2) population characteristics, wildlife resources, and other relevant information affecting the characterization of the pollutant of concern and its allocation to sources; (3) present and future growth trends, if taken into consideration in preparing the TMDL; and, (4) explanation and analytical basis for expressing the TMDL through surrogate measures, if applicable. Surrogate measures are parameters such as percent fines and turbidity for sediment impairments, or chlorophyll a and phosphorus loadings for excess algae.

A. Description of Waterbody, Priority Ranking, and Background Information

The Connecticut Statewide TMDL for Bacteria uses a watershed-based approach to set concentration-based bacteria targets in surface waters throughout Connecticut that, if achieved, will result in consistency with the State of Connecticut Water Quality Standards (WQS). All waterbodies within each TMDL Study Area are included in TMDLs developed under this approach, including assessed and not yet assessed segments and waterbodies that have not yet been assigned a waterbody identification number (Waterbody ID). Information common to bacteria related concerns for all waterbodies in Connecticut (freshwater and marine) is contained in the main body of the report, known as the "Core Document," while information specific to each watershed is contained in the TMDL Appendices.

This submittal includes 23 watershed-specific TMDL Appendices for bacteria. These appendices include TMDLs for 101 freshwater assessment units (AUs) for *Escherichia coli*, the indicator

bacteria for Recreational Use Support in freshwaters in Connecticut. AU ID, name, inclusion in CT's 2022-2024 priority list ("commitment segment"), and TMDL Appendix name are summarized in a table included in Connecticut's submittal letter, included as Attachment 1 of this document. Connecticut's 2022 Integrated Water Quality Report indicates priority segments for development of bacteria TMDLs for freshwaters in Appendix C-1, Priority List for Action Plan Development 2022-2024 (including TMDLs).

B. Pollutant of Concern

The pollutant of concern for the 101 TMDLs included in this submittal is *Escherichia coli* (*E. coli*). Fecal indicator bacteria, groups of nonpathogenic fecal bacteria, are used to detect the presence and magnitude of fecal material since the widespread monitoring of recreational waters for all disease-causing microorganisms is not feasible. EPA's 2012 Recreational Water Quality Criteria (Office of Water 820-F-12-058) recommends *E. coli* as the indicator in fresh water and Enterococci as the indicator for both marine and fresh water.

Connecticut uses *E. coli* and Total coliform as indicator organisms of potential harmful pathogens in fresh waters and Enterococci and fecal coliform for estuarine or marine recreational waters. To determine risk in shellfish harvesting areas, fecal coliform organisms are used based on criteria recommended under the U.S. National Shellfish Sanitation Program (p. 10, Core Document).

C. Pollutant Sources

Section 4 of the TMDL Core Document generally describes the sources of bacteria to surface waters in Connecticut. Bacteria impairments in these waterbodies arise from dry and wet weather events, year-round. Potential point sources of bacterial pollution include wastewater discharges from treatment facilities, NPDES-regulated stormwater runoff including stormwater discharges authorized by the State's MS4 permits, accidental and illicit discharges, combined sewer overflows, and discharges from boats. Potential non-point sources of bacterial pollution include stormwater not regulated under the NPDES program, subsurface sewage treatment and disposal systems (such as septic systems), erosion, agriculture, pets, and wildlife. Actual segment-specific sources of bacterial pollution are identified in the Appendices when these sources are known (TMDL Appendices, Section 4). These include identified permitted point source discharges, reported illicit discharges, and sources identified in land use analysis based on land use mapping, permit reporting, and other local information and documents.

Assessment: EPA Region 1 concludes that the TMDL document meets the requirements for describing the TMDL waterbody segments, pollutant of concern, identifying and characterizing sources of impairment, and priority ranking.

2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target

The TMDL submittal must include a description of the applicable State/Tribe water quality standard, including the designated use(s) of the waterbody, the applicable numeric or narrative water quality criterion, and the antidegradation policy. Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation. A numeric water quality target for the TMDL (a quantitative value used to measure whether the applicable water quality standard is attained) must be identified. If the TMDL is based on a target other than a numeric water quality criterion, then a numeric expression, usually site specific, must be developed from a narrative criterion and a description of the process used to derive the target must be included in the submittal.

Section 2 of the TMDL Core Document (p. 13-20) describes the applicable water quality standards for bacteria. Section 22a-426 of the Connecticut General Statutes requires that the Commissioner of the CT DEEP adopt WQS consistent with the CWA. The Connecticut WQS are contained within the Regulations of Connecticut State Agencies (RCSA) 22a-426 Sections 1 through 9.

Connecticut's WQS are composed of standards, criteria, and classification maps. The standards designate use goals and set overall policy for managing surface and ground waters including antidegradation provisions (RCSA 22a-426-8(a) and 8(b)). Criteria set the narrative and numerical targets for water quality which are necessary to protect the designated uses. Classification maps indicate which classification, and designated uses and criteria, applies to each waterbody in the state.

Designated uses for surface waters are Existing or Proposed Drinking Water Supply, Potential Drinking Water Supply, Habitat for Fish and Other Aquatic Life and Wildlife, Recreation, Navigation, Industrial Water Supply, Agricultural Water Supply, Shellfish Harvesting for direct human consumption, Commercial Shellfish Harvesting, and Fish Consumption. The Statewide Bacteria TMDL focuses primarily on recreation and shellfishing uses.

Surface waters are categorized according to the Water Quality Classifications of the Connecticut WQS which assigns all surface waters to one of three freshwater (Class AA, A, B) or one of two saltwater (Class SA, SB) classifications. Applicable designated uses by Waterbody Class are given in Table 1 of the Core Document. Waterbody classifications for TMDL segments are specified in the TMDL Appendices.

Connecticut has statewide numeric criteria for bacteria in freshwater and saltwater (Core Document Tables 2 and 3). TMDLs can be expressed in terms of mass per unit of time (i.e., daily load), concentration, or other appropriate measures (40 CFR Part 103.2(i)). This TMDL consists of concentrations of indicator bacteria expressed as bacteria counts/100mL of water. WLAs and LAs are concentration-based and set equal to the water quality criteria, as established in the

WQS, or set equal to zero for non-authorized discharges (Core Document, Section 5). TMDL calculations to determine limits expressed as cfu/day are described in Appendix A of the Core Document.

Connecticut expects to submit to EPA for approval updated numeric criteria for bacteria in the state's next triennial water quality standards review (Core Document Tables 4 and 5). Connecticut is considering these updates for consistency with EPA CWA Section 304(a) recommended criteria. An approved revision to the WQC in the future would necessitate a revision to the Waste Load Allocations (WLAs) and Load Allocations (LAs) in this TMDL. For administrative efficiency, CT DEEP is providing information on the anticipated revisions to the CT WQC for bacteria and the associated changes to the WLAs and LAs for this TMDL. Specifically, CT DEEP has crafted the TMDL so that, if the 2012 304(a) recommended recreational water quality criteria are adopted into the Connecticut WQS and subsequently approved by EPA, the WLAs and LAs in Appendix C of the Core Document will go into effect, replacing those identified in Tables 6 and 7 of this TMDL with those in Tables 8 and 9.

Current and expected future WQS for bacteria in CT surface waters are outlined in Attachment 2 of this document.

Assessment: EPA concludes that CT DEEP has properly described and interpreted the applicable water quality standards to set the numeric water quality targets. CT DEEP is directly applying the numeric bacteria criteria in its water quality standards as the numeric water quality targets.

CT DEEP has included specifications of all the State's water quality bacteria criteria, for all types of water bodies, uses, and classifications, beyond those represented by the segments being proposed for TMDLs in this submission. In the future, the Core Document will be the basis for any individual bacteria TMDLs submitted by CT DEEP under the auspices of this Statewide TMDL.

In addition, CT DEEP has included the specification of the revised bacteria WQ criteria they expect to submit for approval in their next triennial water quality standards review. CT DEEP anticipates that this regulatory revision process will occur in 2026. They have stated that they will propose to adopt EPA's 2012 recreation criteria at that time. In the event those WQ criteria are adopted by CT DEEP and approved by EPA, then the new criteria form the basis for the Wasteload Allocations (WLAs) and Load Allocations (LA) in Appendix C of the Core Document, replacing the WLAs and LAs identified in Tables 6 and 7 of this TMDL with those in Tables 8 and 9. It is not anticipated that the watershed or potential contributing sources of bacteria will change significantly between now and the adoption of the new criteria (upon which the second set of WLAs/LAs take effect). Therefore, EPA does not anticipate any reason for the second set

of WLA/LAs to become outdated between this approval and when they come into effect. Both sets of WLAs and LAs set the water quality criteria at the point of discharge.

EPA is approving both the WLA/LAs using Connecticut's existing bacteria criteria (see Core Document Section 2.2), and, should the approved revised WQ criteria be identical to those specified in the Core Document at section 2.3 and Tables 4 and 5, the second set of WLA/LAs described in Core Document Section 5.2 and Tables 8 and 9. CT DEEP will not have to seek separate EPA approval in the event the new, approved WQ criteria are identical to those specified here but will inform EPA promptly via letter once the new bacteria criteria and, thus, the second set of WLA/LAs are in effect. This notice will be prepended to the TMDL documents and added to CT DEEP's website. This notice will also be provided in the subsequent listing and assessment report. The revised criteria will become the basis for any bacteria TMDLs submitted to EPA in the future.

3. Loading Capacity – Linking Water Quality and Pollutant Sources

As described in EPA guidance, a TMDL identifies the loading capacity of a waterbody for a particular pollutant. EPA regulations define loading capacity as the greatest amount of loading that a water can receive without violating water quality standards (40 C.F.R. § 130.2(f)). The loadings are required to be expressed as either mass-per-time, toxicity or other appropriate measure (40 C.F.R. § 130.2(i)). The TMDL submittal must identify the waterbody's loading capacity for the applicable pollutant and describe the rationale for the method used to establish the cause-and-effect relationship between the numeric target and the identified pollutant sources. In most instances, this method will be a water quality model. Supporting documentation for the TMDL analysis must also be contained in the submittal, including the basis for assumptions, strengths and weaknesses in the analytical process, results from water quality modeling, etc. Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation.

In many circumstances, a critical condition must be described and related to physical conditions in the waterbody as part of the analysis of loading capacity (40 C.F.R. § 130.7(c)(1)). The critical condition can be thought of as the "worst case" scenario of environmental conditions in the waterbody in which the loading expressed in the TMDL for the pollutant of concern will continue to meet water quality standards. Critical conditions are the combination of environmental factors (e.g., flow, temperature, etc.) that results in attaining and maintaining the water quality criterion and has an acceptably low frequency of occurrence. Critical conditions are important because they describe the factors that combine to cause a violation of water quality standards and will help in identifying the actions that may have to be undertaken to meet water quality standards.

This TMDL document developed TMDL daily targets as both daily concentration for all bacteria sources and by providing calculations of the total maximum daily load of organisms by day according to flow or daily replacement volume per waterbody type.

In this TMDL, CT DEEP first expresses loading capacity by the concentration of the indicator bacteria in terms of bacteria counts per 100mL sample (count / 100 mL). The targets apply on any given day to assure achievement of bacteria water quality criteria whenever the WQS are in effect. WLAs and LAs are concentration-based and set equal to the water quality criteria, as established in the WQS, or set equal to zero for non-authorized discharges. These TMDLs set a goal of meeting bacteria water quality criteria within surface waters at the point of discharge for all sources in order to meet WQS throughout the waterbody. For Connecticut, concentration based TMDLs for bacteria provide a useful format for guiding remediation and protection efforts in watersheds by virtue of being more readily understandable and easier to implement.

Additionally, Appendix A of the Core Document (“TMDLs Expressed As Daily Load”) contains graphs, tables, and equations relating concentration-based TMDLs to daily loads in terms of numbers of organisms per day (10^9 count / day) by flow or daily replacement volume. Appendix A, Tables A1-A5 and Figures A1-15 contain *E. coli* TMDLs for freshwater rivers and streams; Tables A6-A10 and Figures A6-A10 contain *E. coli* TMDLs for freshwater lakes and ponds; Tables A11-A14 and Figures A11-A14 contain Enterococci TMDLs for estuarine and marine recreational waters; and Tables A15-A18 contain Fecal coliform TMDLs for estuarine and marine shellfishing waters.

Mass per unit time TMDLs for rivers are calculated by multiplying river or stream flow under 7Q10 conditions by the allowable bacteria concentration. To calculate the TMDL as a daily load, the 7Q10 flow is multiplied by the water quality standard (geometric mean) to obtain the loading capacity or TMDL for the stream segment or watershed. For lakes and ponds or estuarine and marine segments, the daily replacement volume of the waterbody is multiplied by the WQS concentration. This volume estimate is the flushing rate for the waterbody based on 7Q10 conditions within lakes and ponds and under low tide conditions for estuarine or marine segments. This volume is then multiplied by the volume of the waterbody under 7Q10 or low tide conditions, as applicable.

CT DEEP’s use of low flow (7Q10) conditions for expressing daily loads incorporates critical conditions with an acceptably low frequency of occurrence under which the water quality criterion would be maintained in the analysis of loading capacity. This is a conservative assumption since, except for treated sewage, most discharges that convey bacteria to receiving waters occur during storm events that also cause increased streamflow above low flow conditions. For discharges of treated sewage, conservatism is maintained as these

discharges are required to disinfect the effluent which effectively eliminates bacteria in the treated effluent to levels at or below the water quality criteria.

Assessment: TMDLs can be expressed in various ways, including in terms of multiple TMDL targets, or by some “other appropriate measure.” 40 C.F.R. § 130.2(i). The target loading capacities expressed in the TMDL document are set at levels which assure WQS will be met (criteria at point of discharge). The concentration loading capacity is based on the concentration criteria for each water body. If all sources of bacteria are below the water quality criteria, then it follows that the receiving water will meet the WQS for bacteria.

4. Load Allocations (LAs)

EPA regulations require that a TMDL include LAs, which identify the portion of the loading capacity allocated to existing and future nonpoint sources and to natural background (40 C.F.R. § 130.2(g)). Load allocations may range from reasonably accurate estimates to gross allotments (40 C.F.R. § 130.2(g)). Where it is possible to separate natural background from nonpoint sources, load allocations should be described separately for background and for nonpoint sources.

If the TMDL concludes that there are no nonpoint sources and/or natural background, or the TMDL recommends a zero load allocation, the LA must be expressed as zero. If the TMDL recommends a zero LA after considering all pollutant sources, there must be a discussion of the reasoning behind this decision, since a zero LA implies an allocation only to point sources will result in attainment of the applicable water quality standard, and all nonpoint and background sources will be removed.

The LA refers to the portion of loading capacity allocated to nonpoint source pollution and natural background, such as diffuse overland runoff, septic systems, groundwater seepage, internal loading, atmospheric deposition, and waterfowl. In practice, ambient water quality data are usually not sufficiently detailed to allow a precise separation of point and nonpoint source pollution. In this TMDL, bacteria LAs are concentration-based and set equal to the water quality criteria, as established in the WQS, or set equal to zero for non-authorized discharges. See Core Document Table 6 for freshwater LAs per waterbody classification and bacteria source. Table 8 describes anticipated future freshwater LA by per waterbody classification and bacteria source should those WQS be approved by EPA. Corresponding daily load allocations based on flow or daily replacement volumes under 7Q10 conditions (the lowest 7-day average flow that is expected to occur on average once every 10 years) are presented per waterbody type in Appendix A of the Core Document.

Assessment: EPA concludes that the TMDL document sufficiently addresses the calculation of the load allocations, as demonstrated by the foregoing and by the TMDL’s administrative record.

5. Wasteload Allocations (WLAs)

EPA regulations require that a TMDL include WLAs, which identify the portion of the loading capacity allocated to existing and future point sources (40 C.F.R. § 130.2(h)). If no point sources are present or if the TMDL recommends a zero WLA for point sources, the WLA must be expressed as zero. If the TMDL recommends a zero WLA after considering all pollutant sources, there must be a discussion of the reasoning behind this decision, since a zero WLA implies an allocation only to nonpoint sources and background will result in attainment of the applicable water quality standard, and all point sources will be removed.

In preparing the wasteload allocations, it is not necessary that each individual point source be assigned a portion of the allocation of pollutant loading capacity. When the source is a minor discharger of the pollutant of concern or if the source is contained within an aggregated general permit, an aggregated WLA can be assigned to the group of facilities. But it is necessary to allocate the loading capacity among individual point sources as necessary to meet the water quality standard.

The TMDL submittal should also discuss whether a point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur. In such cases, the State/Tribe will need to demonstrate reasonable assurance that the nonpoint source reductions will occur within a reasonable time.

The WLA refers to the portion of loading capacity allocated to permitted point source discharges, such as piped stormwater, construction runoff, and pollution from other regulated activities. In practice, ambient water quality data are usually not sufficiently detailed to allow a precise separation of point and nonpoint source pollution. In this TMDL, bacteria WLAs are concentration-based and set equal to the water quality criteria, as established in the WQS, or set equal to zero for non-authorized discharges. See Core Document Table 6 for freshwater WLAs per waterbody classification and bacteria source. Core Document Table 8 describes anticipated future freshwater WLA by per waterbody classification and bacteria source should those WQS be approved by EPA. Corresponding daily load allocations based on flow or daily replacement volumes under 7Q10 conditions (the lowest 7-day average flow that is expected to occur on average once every 10 years) are presented in Appendix A of the Core Document.

Assessment: EPA concludes that the TMDL document sufficiently addresses the calculation of the wasteload allocations, as demonstrated by the foregoing and by the TMDL's administrative record.

6. Margin of Safety (MOS)

The statute and regulations require that a TMDL include a margin of safety to account for any lack of knowledge concerning the relationship between load and wasteload allocations and

water quality (CWA § 303(d)(1)(C), 40 C.F.R. § 130.7(c)(1)). EPA guidance explains that the MOS may be implicit, i.e., incorporated into the TMDL through conservative assumptions in the analysis, or explicit, i.e., expressed in the TMDL as loadings set aside for the MOS. If the MOS is implicit, the conservative assumptions in the analysis that account for the MOS must be described. If the MOS is explicit, the loading set aside for the MOS must be identified.

The TMDLs contain an implicit MOS by using conservative assumptions during the analysis. The TMDLs are set equal to the appropriate WQS for each waterbody segment and include the goal of meeting bacteria water quality criteria at the point of discharge for all sources. This means the TMDLs do not rely on dilution in the waterbody to meet WQS. In addition, the TMDLs do not rely on in-stream processes such as bacteria die-off and settling, which are known to reduce in-stream bacteria concentrations. Additionally, the daily loads are calculated based on low flow conditions. This is a conservative assumption since, except for treated sewage, most discharges that convey bacteria to receiving waters occur during storm events that also cause increased streamflow above low flow conditions. For discharges of treated sewage, conservatism is maintained as these discharges are required to disinfect the effluent which effectively eliminates bacteria in the treated effluent to levels at or below the water quality criteria. Consequently, the Connecticut bacteria TMDLs represent conservative TMDL target-setting, so there is a high level of confidence that the TMDLs established are consistent with WQS, and the entire loading capacity can be allocated among sources. For these reasons, the MOS is implicit, and the explicit MOS in the TMDL formula is set equal to zero.

Assessment: EPA concludes that the approach used in developing the concentration-based TMDLs provides for an adequate implicit MOS. Setting the concentration targets at the water quality criteria, with the goal of meeting those criteria at the point of discharge with no allowance for bacteria die-off and settling, provides an implicit margin of safety.

7. Seasonal Variation

The statute and regulations require that a TMDL be established with consideration of seasonal variations. The method chosen for including seasonal variations in the TMDL must be described (CWA § 303(d)(1)(C), 40 C.F.R. § 130.7(c)(1).

Bacteria sources to waters arise from a mixture of continuous and wet-weather driven sources, and there may be no single measure that is protective under all conditions. These bacteria TMDLs have set WLAs and LAs for all allowable known and suspected source categories equal to the water quality criteria or equal to loads which assure water quality criteria are achieved. In Connecticut the criteria to protect shellfish uses apply through the full year and all recreation criteria apply during the disinfection season, specified in section 22a-426-4(a)(9)(E) of the CTWQS, currently from May 1 – October 1. The TMDLs apply during these times to protect

designated uses. Furthermore, any of the recommended measures that are implemented to meet the TMDL targets will result in reductions of bacteria concentrations and daily loads to water quality criteria levels for all seasons for which WQS apply. Therefore, the TMDL adequately accounts for seasonal variability.

Assessment: These bacteria TMDLs apply over the entire recreational season that the bacteria criteria apply, such that when implemented, the TMDL targets will reduce bacteria concentrations equal to water quality standards. EPA concludes that the TMDL documents adequately addressed seasonal variability.

8. Monitoring Plan

EPA's 1991 document, Guidance for Water Quality-Based Decisions: The TMDL Process (EPA 440/4-91-001), and EPA's 2006 guidance, Clarification Regarding "Phased" Total Maximum Daily Loads, recommend a monitoring plan when a TMDL is developed using the phased approach. The guidance indicates that a State may use the phased approach for situations where TMDLs need to be developed despite significant data uncertainty and where the State expects that the loading capacity and allocation scheme will be revised in the near future. EPA's guidance provides that a TMDL developed under the phased approach should include, in addition to the other TMDL elements, a monitoring plan that describes the additional data to be collected, and a scheduled timeframe for revision of the TMDL.

The TMDLs are not phased TMDLs. CT DEEP describes a comprehensive water quality monitoring program necessary to guide TMDL implementation efforts, including source detection and tracking water quality improvements (Core Document, Section 5.5). Facilities, municipalities, and other NPDES permitted entities that discharge stormwater to areas covered by an approved TMDL are required to follow their permit which may include monitoring for the indicator pollutant. Source detection monitoring will include visual inspection of storm sewer outfalls under dry weather conditions, event sampling of individual storm sewer outfalls, and should be expanded to include monitoring of ambient in-stream conditions at closely spaced intervals to identify areas for more detailed investigations leading to specific sources of high bacteria loads. For fixed station ambient monitoring programs, CT DEEP strongly recommends that routine monitoring be performed at the same sites used to generate the data to perform the TMDL calculations. CT DEEP recommends samples also be collected at other key locations within the watershed, such as above and below potential contributing sources or areas slated for BMP implementation.

CT DEEP will continue periodic monitoring of pollutants in impaired segments across the state, primarily through its beach monitoring, as well as targeted sampling conducted by the CT DEEP Monitoring Program and shellfish bed monitoring conducted by the CT Department of Agriculture Bureau of Aquaculture. Through implementation of this TMDL, data may be

collected through monitoring of permitted discharges and development of watershed-based plans, in association with implementation of BMPs within the watershed, or for general evaluation of water quality conditions.

Assessment: EPA concludes that the anticipated monitoring is sufficient to evaluate the adequacy of the TMDL and attainment of water quality standards, although is not a required element of EPA's TMDL approval process.

9. Implementation Plan

On August 8, 1997, Bob Perciasepe (EPA Assistant Administrator for the Office of Water) issued a memorandum, "New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs)," that directs Regions to work in partnership with States/Tribes to achieve nonpoint source load allocations established for 303(d)-listed waters impaired solely or primarily by nonpoint sources. To this end, the memorandum asks that Regions assist States/Tribes in developing implementation plans that include reasonable assurances that the nonpoint source load allocations established in TMDLs for waters impaired solely or primarily by nonpoint sources will in fact be achieved. The memorandum also includes a discussion of renewed focus on the public participation process and recognition of other relevant watershed management processes used in the TMDL process. Although implementation plans are not approved by EPA, they help establish the basis for EPA's approval of TMDLs.

The Statewide Bacteria TMDL provides implementation guidance and identifies existing informational resources on BMPs to address the various sources of bacteria (Statewide Bacteria TMDL, Section 7). It also includes a description of the implementation process (Section 6) and information about applicable management programs and plans. Maps, waterbody-specific data summary tables, and other information specific to each watershed are presented in the Appendices to inform stakeholders on the location of known impairments in their estuary. Data were used to calculate percent reductions needed to meet the concentration-based targets. Where sufficient precipitation information was available, the Appendices also present wet weather and dry weather bacteria counts. This analysis provides indications of the level of effort needed for pollution abatement and potential sources of bacteria to guide implementation efforts.

Additionally, with this 2024 revision to the CT Statewide Bacteria TMDL Core Document, CT DEEP is incorporating a comprehensive approach to the water quality planning, restoration, and protection process to address bacteria in surface waters. CT DEEP has integrated portions of the required nine elements of a Watershed Based Plan (WBP) into the Core Document and TMDL Appendices. CT DEEP recommends the development of a WBP as an addendum to each TMDL to identify and implement approaches to address nonpoint source pollution sources that may

be contributing bacteria to surface water bodies. By addressing some of the elements required for WBPs within the Core Document and TMDL appendices, CT DEEP is providing a platform to support a more efficient development of WBPs. WBPs developed after the updated Core and TMDL documents can build on the information provided in these documents and focus WBP development on the elements that need further watershed-specific information and analyses, particularly as it pertains to identifying implementation activities to address nonpoint sources that may contribute bacteria to surface water bodies.

Combining these planning requirements helps to streamline environmental protection and restoration efforts because the Core Document, watershed-specific appendices, and watershed-specific WBP addendums can be approvable, collectively, as a WBP, which is needed to qualify for CWA Section 319 funding. These elements are incorporated generally in the Core Document and specifically (as available) in the watershed-specific appendices. WBP addendums will provide more specific information not included in the TMDL appendices, such as schedules and implementation strategies based on field assessments and stakeholder engagement.

Assessment: CT DEEP has addressed the implementation plan. Although EPA is not approving the implementation plan, EPA has concluded that it outlines a reasonable approach to implementation, as demonstrated by the foregoing and by the TMDL's administrative record.

10. Reasonable Assurances

EPA guidance calls for reasonable assurances when TMDLs are developed for waters impaired by both point and nonpoint sources. In a water impaired by both point and nonpoint sources, where a point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur, reasonable assurance that the nonpoint source reductions will happen must be explained in order for the TMDL to be approvable. This information is necessary for EPA to determine that the load and wasteload allocations will achieve water quality standards.

In a water impaired solely by nonpoint sources, reasonable assurances that load reductions will be achieved are not required in order for a TMDL to be approvable. However, for such nonpoint source-only waters, States/Tribes are strongly encouraged to provide reasonable assurances regarding achievement of load allocations in the implementation plans described in section 9, above. As described in the August 8, 1997 Perciasepe memorandum, such reasonable assurances should be included in State/Tribe implementation plans and "may be non-regulatory, regulatory, or incentive-based, consistent with applicable laws and programs."

EPA has evaluated whether the submission demonstrates reasonable assurance that allocations identified in the TMDL (which addresses point and nonpoint sources) will be achieved, per section 303(d)(1)(c) of the Clean Water Act and 40 C.F.R. § 130.2(i) and 130.7(c)(1). CT DEEP

explains that a combination of regulatory and nonregulatory program support in Connecticut will provide reasonable assurances that both point and non-point allocations will be achieved, including regulatory enforcement, availability of financial incentives, and local, State, and federal programs for pollution control (Statewide Bacteria TMDL, Section 5.6). CSOs are regulated under an existing federal and State program. MS4 permitted communities and entities are required to address bacteria in stormwater systems through permit requirements. Actions to control non-point source sources of pollution include local implementation of Connecticut's Nonpoint Source Management Program. The CT DEEP Watershed Management Program encourages development of water quality based WBPs to support implementation of established TMDLs. Descriptions of existing watershed-specific management activities by municipalities, permit holders, and other responsible parties, as well as volunteer monitoring groups, homeowners associations, research organizations, and other engaged stakeholders, are provided in each watershed-specific TMDL appendix.

Assessment: EPA finds that the TMDL submitted by CT DEEP satisfies the requirements of this element.

11. Public Participation

EPA policy is that there must be full and meaningful public participation in the TMDL development process. Each State/Tribe must, therefore, provide for public participation consistent with its own continuing planning process and public participation requirements (40 C.F.R. § 130.7(c)(1)(ii)). In guidance, EPA has explained that final TMDLs submitted to EPA for review and approval must describe the State/Tribe's public participation process, including a summary of significant comments and the State/Tribe's responses to those comments. When EPA establishes a TMDL, EPA regulations require EPA to publish a notice seeking public comment (40 C.F.R. § 130.7(d)(2)).

Inadequate public participation could be a basis for disapproving a TMDL; however, where EPA determines that a State/Tribe has not provided adequate public participation, EPA may defer its approval action until adequate public participation has been provided for, either by the State/Tribe or by EPA.

CT DEEP described the public participation process for the Statewide Bacteria TMDL and Appendices in their TMDL submittal letter to EPA. The draft TMDL and appendices were noticed for public comment on October 16, 2024. The notice was published on that date in the *Connecticut Post*, *The Hartford Courant*, *The New Haven Register*, *The Day*, *Waterbury Republican-American*, and *The Advocate*. The draft documents were also published on CT DEEP's Bacteria TMDL webpage at <https://portal.ct.gov/deep/water/surface-water-quality/total-maximum-daily-loads-bacteria>.

Two public meetings were held on October 30, 2024, via ZOOM from 11:00 p.m.-12:30 p.m. Eastern Time (US and Canada) and from 6:00 p.m. to 7:30 p.m. and recorded. Recordings of these meetings were made available on the Bacteria TMDL webpage.

Environmental groups, municipal officials within the TMDL area, and other interested parties maintained on CT DEEP's general mailing list were notified by mail of the comment period; CT provided a list of all people notified by mail in the submittal package. At the close of the public comment period on December 20, 2024, 16 comments and 5 official comment letters were received by CT DEEP and summarized in CT's response document. CT DEEP provides a listing of the changes made to the TMDL in response to public comment, including regarding the consideration and use of all available data.

Assessment: EPA concludes that CT DEEP has done a sufficient job of involving the public in the development of the TMDL, provided opportunities for the public to comment, and has addressed the comments received as set forth in the response to comment section of the TMDL document.

12. Submittal Letter

A submittal letter should be included with the TMDL analytical document, and should specify whether the TMDL is being submitted for a technical review or is a final submittal. Each final TMDL submitted to EPA must be accompanied by a submittal letter that explicitly states that the submittal is a final TMDL submitted under Section 303(d) of the Clean Water Act for EPA review and approval. This clearly establishes the State/Tribe's intent to submit, and EPA's duty to review, the TMDL under the statute. The submittal letter, whether for technical review or final submittal, should contain such information as the name and location of the waterbody, the pollutant(s) of concern, and the priority ranking of the waterbody.

Assessment: On December 29, 2025, CT DEEP submitted the final Statewide Bacteria TMDL, 23 TMDL Appendices, and associated documents for EPA review. The documents contained all the elements necessary to approve the TMDL.

Attachment 1:

Assessment Unit ID	Assessment Unit Name	Commitment	TMDL
CT Statewide Bacteria Core Document			
CT2202-00_01	Latimer Brook (East Lyme)-01	Commitment Segment	2202 FW Bacteria TMDL
CT2202-00_02	Latimer Brook (East Lyme/Montville)-02	All Waters Segment	2202 FW Bacteria TMDL
CT2202-00_03	Latimer Brook (Montville/Salem)-03	All Waters Segment	2202 FW Bacteria TMDL
CT2202-08_01	Cranberry Meadow Brook (East Lyme)-01	All Waters Segment	2202 FW Bacteria TMDL
CT2204-03_01	Stony Brook (Waterford)-01	Commitment Segment	2204 FW Bacteria TMDL
CT2204-03_02	Stony Brook (Waterford)-02	All Waters Segment	2204 FW Bacteria TMDL
CT2204-03_03	Stony Brook (Waterford)-03	All Waters Segment	2204 FW Bacteria TMDL
CT3300-00_01	French River (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-00_02	French River (Thompson)-02	All Waters Segment	3300 FW Bacteria TMDL
CT3300-00-3+L3_01	North Grosvenordale Pond Impoundment (Thompson)	All Waters Segment	3300 FW Bacteria TMDL
CT3300-02_01	Long Branch Brook (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-02_02	Long Branch Brook (Thompson)-02	All Waters Segment	3300 FW Bacteria TMDL
CT3300-04_01	Knowlton Brook (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-05_01	Backwater Brook (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-06_01	Sunset Hill Brook (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-08_01	Stoud Brook (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-09_01	Little Mountain Brook (Thompson)-01	All Waters Segment	3300 FW Bacteria TMDL
CT3300-10_01	Quinatissett Brook (Thompson)-01	Commitment Segment	3300 FW Bacteria TMDL
CT3708-00_01	Little River (Putnam/Woodstock)-01	Commitment Segment	3708 FW Bacteria TMDL

CT3708-00_02	Little River (Putnam)-02	All Waters Segment	3708 FW Bacteria TMDL
CT3708-00-1-L1_01	Roseland Lake (Woodstock)	All Waters Segment	3708 FW Bacteria TMDL
CT3708-01_01	Muddy Brook (Woodstock)-01	All Waters Segment	3708 FW Bacteria TMDL
CT3708-01_02	Muddy Brook (Woodstock)-02	All Waters Segment	3708 FW Bacteria TMDL
CT3708-01_03	Muddy Brook (Woodstock)-03	All Waters Segment	3708 FW Bacteria TMDL
CT3708-01-1-L1_01	Muddy Pond (Woodstock)	All Waters Segment	3708 FW Bacteria TMDL
CT3708-06_01	Gravelly Brook (Woodstock)-01	All Waters Segment	3708 FW Bacteria TMDL
CT3708-08_01	Peckham Brook (Woodstock)-01	All Waters Segment	3708 FW Bacteria TMDL
CT3708-10_01	North Running Brook (Woodstock)-01	All Waters Segment	3708 FW Bacteria TMDL
CT3708-10_02	North Running Brook-02	All Waters Segment	3708 FW Bacteria TMDL
CT3708-14_01	Peake Brook (Woodstock/Pomfret)-01	All Waters Segment	3708 FW Bacteria TMDL
CT3708-18_01	Wheatons Brook (Putnam/Thompson)-01	Commitment Segment	3708 FW Bacteria TMDL
CT3709-00_01	Wappaquoia Brook-01	Commitment Segment	3709 FW Bacteria TMDL
CT3709-02_01	Day Brook (Pomfret)-01	Commitment Segment	3709 FW Bacteria TMDL
CT4013-00_01	Sumner Brook (Middletown)-01	All Waters Segment	4013 FW Bacteria TMDL
CT4013-00_02	Sumner Brook (Middletown)-02	All Waters Segment	4013 FW Bacteria TMDL
CT4013-00_03	Sumner Brook (Middletown)-03	All Waters Segment	4013 FW Bacteria TMDL
CT4013-00_04	Sumner Brook (Middletown)-04	All Waters Segment	4013 FW Bacteria TMDL
CT4013-00-1-L1_01	Millers Pond (Durham)	All Waters Segment	4013 FW Bacteria TMDL
CT4013-05-1-L1_01	Crystal Lake (Middletown)	Commitment Segment	4013 FW Bacteria TMDL
CT4013-06_01	Unnamed tributary Summer Brook (Middletown)-01	All Waters Segment	4013 FW Bacteria TMDL

CT4013-08_01	Long Hill Brook (Middletown)-01	All Waters Segment	4013 FW Bacteria TMDL
CT4013-08_02	Long Hill Brook (Middletown)-02	All Waters Segment	4013 FW Bacteria TMDL
CT4013-08-1-L1_01	Dooley Pond (Middletown)	All Waters Segment	4013 FW Bacteria TMDL
CT4200-00_01	Scantic River-01	Commitment Segment	4200 FW Bacteria TMDL
CT4200-00_02	Scantic River-02	Commitment Segment	4200 FW Bacteria TMDL
CT4200-00_03	Scantic River-03	Commitment Segment	4200 FW Bacteria TMDL
CT4200-00-4-L2_01	Somersville Pond (Somers)	All Waters Segment	4200 FW Bacteria TMDL
CT4200-15_01	Thrasher Brook (Somers)-01	Commitment Segment	4200 FW Bacteria TMDL
CT4200-28_01	Dry Brook (South Windsor/East Windsor)-01	Commitment Segment	4200 FW Bacteria TMDL
CT4202-00_01	Gillettes Brook (Somers)-01	Commitment Segment	4202 FW Bacteria TMDL
CT4202-00_02	Gillettes Brook (Somers)-02	All Waters Segment	4202 FW Bacteria TMDL
CT4203-00_01	Gulf Stream (Somers)-01	Commitment Segment	4203 FW Bacteria TMDL
CT4203-00_02	Gulf Stream (Somers)-02	All Waters Segment	4203 FW Bacteria TMDL
CT4204-00_01	Abbey Brook (Somers)-01	Commitment Segment	4204 FW Bacteria TMDL
CT5206-00_01	Harbor Brook (Meriden)-01	All Waters Segment	5206 FW Bacteria TMDL
CT5206-00_02	Harbor Brook (Meriden)-02	All Waters Segment	5206 FW Bacteria TMDL
CT5206-00_03	Harbor Brook (Meriden)-03	All Waters Segment	5206 FW Bacteria TMDL
CT5206-01_01	Spoon Shop Brook (Meriden)-01	Commitment Segment	5206 FW Bacteria TMDL
CT5206-01-1-L2_01	Black Pond (Meriden/Middlefield)	All Waters Segment	5206 FW Bacteria TMDL
CT5206-02_01	Willow Brook (Meriden)-01	All Waters Segment	5206 FW Bacteria TMDL
CT5208-00_01	Muddy River (North Haven)-01	All Waters Segment	5208 FW Bacteria TMDL

CT5208-00_02a	Muddy River (North Haven)-02a	Commitment Segment	5208 FW Bacteria TMDL
CT5208-00_02b	Muddy River (Wallingford)-02b	All Waters Segment	5208 FW Bacteria TMDL
CT5208-00_03	Muddy River (Wallingford)-03	All Waters Segment	5208 FW Bacteria TMDL
CT5208-00_04	Muddy Brook (Wallingford)-04	All Waters Segment	5208 FW Bacteria TMDL
CT5208-10_01	Eightmile Brook (North Haven/North Branford)-01	All Waters Segment	5208 FW Bacteria TMDL
CT5208-11_01	Fivemile Brook (North Haven)-01	All Waters Segment	5208 FW Bacteria TMDL
CT5301-00_01	Willow Brook (Hamden)-01	Commitment Segment	5301 FW Bacteria TMDL
CT5301-00_02	Willow Brook (Cheshire)-02	All Waters Segment	5301 FW Bacteria TMDL
CT5301-01-trib_01	Unnamed tributary Roaring Brook (Prospect)-01	All Waters Segment	5301 FW Bacteria TMDL
CT5301-02_01	Sanford Brook (Cheshire)-01	All Waters Segment	5301 FW Bacteria TMDL
CT5304-00_01	Wintergreen Brook (New Haven)-01	Commitment Segment	5304 FW Bacteria TMDL
CT5304-00_02	Wintergreen Brook (New Haven)-02	All Waters Segment	5304 FW Bacteria TMDL
CT5304-00_03	Wintergreen Brook (New Haven)-03	All Waters Segment	5304 FW Bacteria TMDL
CT5306-00_01	Indian River (Orange)-01	All Waters Segment	5306 FW Bacteria TMDL
CT5306-00_02	Indian River (Orange)-02	Commitment Segment	5306 FW Bacteria TMDL
CT5306-01_01	Silver Brook (Orange)-01	Commitment Segment	5306 FW Bacteria TMDL
CT5306-01_02	Silver Brook (Orange)-02	Commitment Segment	5306 FW Bacteria TMDL
CT6014-00_01	Bog Hollow Brook (Kent)-01	Commitment Segment	6014 FW Bacteria TMDL
CT6026-00_01	Pumpkin Ground Brook-01	All Waters Segment	6026 FW Bacteria TMDL
CT6026-03_01	Cemetery Pond Brook (Stratford/Shelton)-01	Commitment Segment	6026 FW Bacteria TMDL
CT6806-00_01	Transylvania Brook (Southbury)-01	Commitment Segment	6806 FW Bacteria TMDL

CT6806-00_02	Transylvania Brook (Southbury)-02	All Waters Segment	6806 FW Bacteria TMDL
CT6806-00_03	Transylvania Brook (Southbury/Woodbury/Roxbury)-03	All Waters Segment	6806 FW Bacteria TMDL
CT6806-01_01	Unnamed tributary to Transylvania Brook (Southbury/Woodbury/Roxbury)-01-01	All Waters Segment	6806 FW Bacteria TMDL
CT6806-04_01	Unnamed tributary to Transylvania Brook (Southbury/Roxbury)-04-01	All Waters Segment	6806 FW Bacteria TMDL
CT6806-05_01	Spruce Brook (Southbury)-01	All Waters Segment	6806 FW Bacteria TMDL
CT6919-00_01	Bladens River (Seymour)-01	Commitment Segment	6919 FW Bacteria TMDL
CT6919-00_02	Bladens River-02	All Waters Segment	6919 FW Bacteria TMDL
CT6919-03_01	Hopp Brook (Bethany)-01	All Waters Segment	6919 FW Bacteria TMDL
CT6919-04_01	Unnamed tributary to Bladens River-01	All Waters Segment	6919 FW Bacteria TMDL
CT7000-16_01	Muddy Brook (Westport)-01	Commitment Segment	7000 FW Bacteria TMDL
CT7000-16-trib_01	Unnamed tributary, Muddy Brook (Westport)-01	Commitment Segment	7000 FW Bacteria TMDL
CT7000-17_01	Unnamed trib, Muddy Brook (Westport)-01	Commitment Segment	7000 FW Bacteria TMDL
CT7000-18_01	Unnamed tributary Sherwood Millpond LIS (Westport)-01	Commitment Segment	7000 FW Bacteria TMDL
CT7107-00_01	Cricker Brook (Fairfield)-01	Commitment Segment	7107 FW Bacteria TMDL
CT7107-00_02	Cricker Brook (Easton)-02	All Waters Segment	7107 FW Bacteria TMDL
CT7301-00_01	Comstock Brook (Wilton)-01	Commitment Segment	7301 FW Bacteria TMDL
CT7301-00_02	Comstock Brook (Wilton)-02	All Waters Segment	7301 FW Bacteria TMDL
CT7301-02_01	East Branch Comstock Brook (Wilton)-01	All Waters Segment	7301 FW Bacteria TMDL
CT7301-04-1-L2_01	Popes Pond (Wilton)	All Waters Segment	7301 FW Bacteria TMDL

Attachment 2: Current and Future Proposed Freshwater Bacteria Water Quality Criteria

Table 2. Current CT Water Quality Criteria for Bacteria in Freshwater

Table 2. Current CT Water Quality Criteria for Bacteria in Freshwater				
Designated Use: Freshwater Recreation	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 ml)	
Designated Swimming ¹	AA, A, B ³	<i>Escherichia coli</i>	Geometric mean less than 126/100 ml	Single sample maximum less than or equal to 235/100 ml
Non-Designated Swimming ²				Single sample maximum less than or equal to 410/100 ml
All Other Recreational Uses				Single sample maximum less than or equal to 576/100 ml
Designated Use: Drinking Water	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 ml)	
Drinking Water Supply ⁴	AA	Total Coliform	Monthly moving average < 100/100 ml	Single Sample Maximum 500/100 ml
¹ Procedures for monitoring and closure of bathing areas by State and Local Health Authorities are specified in the <i>Guidelines for Monitoring Swimming Water and Closure Protocol</i> adopted jointly by CT DEEP and CT DPH, as updated. Available on the CT DEEP State Bathing Beach Monitoring Program webpage.				
² Includes areas otherwise suitable for swimming but which have not been designated by State or Local authorities as bathing areas, waters which support tubing, water skiing, or other recreational activities where full body contact is likely. When a municipal or state designated swimming area is not identified along the waterbody route, Non-Designated Swimming is the default criteria applied to a fresh waterbody.				
³ Criteria for the protection of recreational uses in Class B waters do not apply when disinfection of WPCF effluents is not required, consistent with the WQS, as outlined in RCSA 22a-426-4(a)(9)(E).				
⁴ Criteria applies only at the drinking water supply intake structure.				

Table 3. Current CT Water Quality Criteria for Bacteria in Saltwater

Table 3. Current CT Water Quality Criteria for Bacteria in Saltwater				
Designated Use: Saltwater Recreation	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 ml)	
Designated Swimming ¹	SA, SB	Enterococci	Geometric mean less than 35/100 ml	Single sample maximum less than or equal to 104/100 ml
All Other Recreational Uses ²				Single sample maximum less than or equal to 500/100 ml
Designated Use: Saltwater Shellfishing	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 mL)	
Direct Consumption ³	SA	Fecal coliform	Geometric mean less than 14/100 ml	90% samples less than 31/100 ml
Indirect Consumption ³	SB		Geometric mean less than 88/100 ml	90% samples less than 260/100 ml
¹ Procedures for monitoring and closure of bathing areas by State and Local Health Authorities are specified in the <i>Guidelines for Monitoring Swimming Water and Closure Protocol</i> adopted jointly by CT DEEP and CT DPH, as updated. Available on the CT DEEP State Bathing Beach Monitoring Program webpage.				
² If a municipal or state designated swimming area is not identified along the segment route, CT applies the All Other Recreational Uses criteria.				
³ Shellfishing criteria are based on utilizing the mTec method as specified in the U.S. Food and Drug Administration National Shellfish Sanitation Program-Model Ordinance (NSSP-MO) document titled <i>Guide for the Control of Molluscan Shellfish</i> .				

Table 4. Potential Future CT Water Quality Criteria for Bacteria in Freshwater

Table 4. Potential Future CT Water Quality Criteria for Bacteria Freshwater				
Designated Use: Freshwater Recreation	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 ml)	
Freshwater Recreation Water Quality Criteria ^{1, 2}	AA, A, B ³	<i>Escherichia coli</i>	Geometric mean less than or equal to 126/100 ml	90% samples less than or equal to 410/100 ml
<p>¹ Potential criteria values are based on the 2012 US EPA national recommendations outlined in the 2012 Recreational Water Quality Criteria Document (US EPA 820-F-12-058). These criteria are applicable to this TMDL only after they are proposed and adopted by CT DEEP through a public review and regulatory amendment process for the WQS consistent with CT state law and subsequent approval by US EPA.</p>				
<p>² Procedures for monitoring and closure of bathing areas by State and Local Health Authorities are specified in the Guidelines for Monitoring Swimming Water and Closure Protocol adopted jointly by CT DEEP and CT DPH, as updated. Available on the CT DEEP State Bathing Beach Monitoring Program webpage.</p>				
<p>³ Criteria for the protection of recreational uses in Class B waters do not apply when disinfection of WPCF effluents is not required, consistent with the WQS, as outlined in RCSA 22a-426-4(a)(9)(E).</p>				

Table 5. Potential Future CT Water Quality Criteria for Bacteria in Saltwater

Table 5. Potential Future CT Water Quality Criteria for Bacteria in Saltwater				
Designated Use: Saltwater Recreation	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 ml)	
Saltwater Recreation Water Quality Criteria ^{1,2}	SA, SB	Enterococci	Geometric mean less than or equal to 35/100 ml	90% samples less than or equal to 130/100 ml
Designated Use: Saltwater Shellfishing	Water Quality Class	Indicator Bacteria	Numeric Criteria (# colonies/100 mL)	
Direct Consumption ³	SA	Fecal coliform	Geometric mean less than 14/100 ml	90% samples less than 31/100 ml
Indirect Consumption ³	SB		Geometric mean less than 88/100 ml	90% samples less than 260/100 ml
¹ Potential criteria values are based on the 2012 US EPA national recommendations outlined in the 2012 Recreational Water Quality Criteria Document (US EPA 820-F-12-058). These criteria are applicable to this TMDL only after they are proposed and adopted by CT DEEP through a public review and regulatory amendment process for the WQS consistent with CT state law and subsequent approval by US EPA.				
² Procedures for monitoring and closure of bathing areas by State and Local Health Authorities are specified in the Guidelines for Monitoring Swimming Water and Closure Protocol adopted jointly by CT DEEP and CT DPH, as updated. Available on the CT DEEP State Bathing Beach Monitoring Program webpage.				
³ Shellfishing criteria are based on utilizing the mTec method as specified in the U.S. Food and Drug Administration National Shellfish Sanitation Program-Model Ordinance (NSSP-MO) document titled Guide for the Control of Molluscan Shellfish . No change to these criteria expected at this time.				