09/17/14

EPA NEW ENGLAND'S TMDL REVIEW

TMDL: **2013 Freshwater Addendum to 2009 Maine Statewide Bacteria TMDL**
HUC: Multiple, statewide (see Table 1. Page 2 of this document, and Table 1 2013 Freshwater Addendum, page 3.)
2012 303(d) list: recreational use impairment.

STATUS: Final

IMPAIRMENT/POLLUTANT: Recreational use impairments are based on bacteria criteria for freshwater Classes AA, A, B, C, GPA, and estuarine & marine Classes SA, SB, SC. Sources include both point and nonpoint sources. TMDLs are established in terms of concentrations and daily loads for Eschericia Coli (freshwaters), depending on waterbody classification.

BACKGROUND: The Maine Department of Environmental Protection (ME DEP) submitted a draft *Maine Statewide Bacteria TMDL: 2013 Addendum* on October 29, 2013. A public comment period was held from October 29, 2013 to December 4, 2013, including a public hearing on November 5, 2013. ME DEP submitted to EPA Region 1 the final *2013 Freshwater Addendum to the 2009 Maine Statewide Bacteria TMDL* electronically with a transmittal letter on September 8, 2014. In addition to the 2013 TMDL Addendum itself, the submittal included the following documents:

- *Appendix A: Duck Brook Bacteria Sampling Projects Reports;*
- *Appendix B: Goosefare Brook Bacteria Sampling Project Reports;*
- *Appendix C: West Branch of the Sheepscot River, SVCA Water Quality Monitoring Program, 2012 Season Report;*
- *Appendix D: Public Comments & Response to the Maine Statewide Bacteria TMDL: 2013 Freshwater Addendum, August 2013 draft;*

The following applicable 2009 Maine Statewide Bacteria TMDL documents were included by reference:

- *Freshwater Rivers & Streams* (site-specific data), Appendix I, TMDL report.
- *TMDL Calculations & Graphs*, Appendix III, TMDL report.
- Extensive list of best management practices and educational resources for stormwater management and source-specific discharges, Section 6 TMDL report.

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 4 bacteria-impaired segments associated with three freshwater streams addressed by this TMDL Addendum are listed in Maine's 2012 303(d) list. The 2013 TMDL Addendum document and waterbody-specific appendices describe in detail the following streams and their impaired water segment(s) including each waterbody's assessment unit identifier, segment name and location, segment size, and classification, which determines the applicable water quality criteria.

Table 1. Summary information for bacteria impaired streams in need of a TMDL (ME DEP *2012 Integrated Water Quality Monitoring and Assessment Report* Appendices, and *Maine Statewide Bacteria TMDL: 2013 TMDL Freshwater Addendum* p. 3.)

Stream Segment	Town	County	Segment ID	Water Quality Class	Source Type*
Duck Brook	Arundel	York	ME0106000301_622R03	B	NPS
Goosefare Brook	Saco	York	ME0106000106_612R01 ME0106000106_612R01_01	B B	PS & NPS
West Branch Sheepscot	Windsor	Kennebec	ME0105000305_528R02	AA	NPS

* NPS=nonpoint sources; PS=point sources.

Bacteria impairments are high priorities for TMDL development in Maine. Impaired segments are added via addendum reports for coverage by the *2009 Maine Statewide Bacteria TMDL* as monitoring and assessment data are available.

B. Pollutant of Concern

The freshwater bacteria impairment listings are based on monitoring data for the presence of Eschericia Coli (E. coli). Maine's bacteria criteria for the protection of primary contact recreation include bacteria of human and domestic origin.

C. Pollutant Sources

Potential point sources of freshwater bacterial pollution include illicit discharges to stormwater systems, wastewater discharges and treatment facilities, accidental and unspecified discharges, combined sewer overflows, and stormwater. Potential non-point sources of bacterial pollution include stormwater not regulated under the NPDES program, septic systems, pet waste, wildlife wastes, agriculture, and recreational uses (swimmers, boats, and marinas). For these freshwater impaired segments, ME DEP also identifies potentials sources in terms of land use distribution in the sub-watersheds (see Appendix I).

Actual sources of bacterial pollution are identified where known, including a statewide map of active CSO locations in Section 2 (background and bacteria sources) and Section 6 (implementation plan) of the *2009 Maine Statewide Bacteria TMDL*, and watershed/site-specific information and indications of point source/nonpoint source involvement, are included for impaired segments in Appendices A-C of the *2013 Freshwater Addendum* report.

Assessment: EPA Region 1 concludes that the TMDL document meets the requirements for describing the TMDL waterbody segments, pollutants 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 or not 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.

The TMDL report defines the appropriate water quality criteria for reducing public health risk from waterborne disease-causing organisms, for protecting designated uses and for implementing the antidegradation policy (pages 19-20 2009 TMDL report). Water quality classifications and water quality standards of all surface waters of the State of Maine have been established by the Maine Legislature at Title 38 MRSA 464-469.

Water Quality Target – Bacteria Criteria

Maine's freshwater quality criteria for bacteria are used as the numeric water quality targets for

the bacteria TMDLs (pages 20-21 2009 TMDL report). The numeric targets vary depending on the specific waterbody's use (recreation) and waterbody classification. According to Maine's water classification program, bacteria-impaired waters are classified as AA, A, B, or C for freshwater rivers and streams, and the streams addressed by the 2013 TMDL Addendum are either Class AA or B, as shown in Table 1 above. Since Maine's water quality standards for recreational uses include criteria for both instantaneous bacteria counts and geometric means of bacteria data, TMDL targets are provided for both types of criteria (2013 Freshwater Addendum, page 3).

Assessment: EPA concludes that Maine DEP has properly described and interpreted the applicable water quality standards (in Section 2.0 of the 2009 TMDL document) to set the TMDL targets (as indicated in Section 4.0 of the 2009 TMDL document, and Table 3, page 5 of the 2013 TMDL Addendum). Maine DEP is directly applying the numeric criteria in its water quality standards to derive the TMDL targets.

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.

Maine's bacteria TMDLs consist of two formats of targets for allowable levels of bacteria: (1) concentrations of bacteria (expressed as bacteria counts/100 ml of water), and (2) loads of bacteria (expressed as billions of bacteria/day) (pages 23-27 and appendix III 2009 TMDL report). Maine considers both formats to be daily targets because the targets apply on any given day whenever the water quality standards are in effect in order to assure achievement of bacteria water quality criteria. Both formats express targets designed to attain the designated uses of swimming and shellfishing, and to meet the associated criteria in Maine's water quality standards. Maine DEP considers the concentration-based TMDL targets to be most useful for guiding implementation of bacteria controls because those targets are easy to understand, and achievement of those targets is more readily assessed by groups with limited resources (page 4

2009 TMDL report).

Maine's TMDLs for recreational use apply from May 15-September 30 because that is the period when Maine's water quality standards for bacteria are in effect [38 MRSA Ch.3 §464 & 465]. Critical conditions for recreational uses are limited to the warmer months when people are most likely to be swimming or boating, and thereby exposed to pathogens in the water.

These TMDLs set a goal of meeting bacteria water quality criteria at the point of discharge for all sources in order to meet water quality standards throughout the waterbody. Achievement of the goal will be assessed by ambient water quality monitoring.

Assessment: There is nothing in EPA's regulations that forbids expression of a TMDL in terms of multiple TMDL targets. TMDLs can be expressed in various ways, including in terms of toxicity, which is a characteristic of one of more pollutants, 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, and loading based on meeting ambient water quality criteria). The concentration loading capacity is based on the concentration criteria for each water body. If all sources of pathogens are at or below the water quality criteria, then it follows that the receiving water will meet the WQS for bacteria.

Both formats (concentration and load) express targets designed to attain the designated use of each waterbody segment based on a straightforward derivation of TMDL targets from the water quality criteria adopted by Maine. Both formats will achieve water quality criteria for both dry and wet weather and for all storm events whenever they occur (e.g., on any given day), whenever the bacteria criteria are in effect. These approaches have been used by states for TMDL development and approved by EPA in the past.

EPA's November 15, 2006 guidance entitled "Establishing TMDL 'Daily' Loads in Light of the Decision by the U.S. Court of Appeals for the D.C. Circuit in Friends of the Earth, Inc. v. EPA, et al., No.05-5015, (April 25, 2006) and Implications for NPDES Permits," recommends that TMDL submittals express allocations in terms of daily time increments. In this case, the daily maximum mass loads were calculated by multiplying the concentration criterion by stream flow or waterbody volume (lakes and estuaries) and are expressed in terms of billions of organisms per day.

In summary, the loading capacity targets (both concentration and load-based) are directly linked to Maine's water quality standards' bacteria criteria to achieve the designated uses of the waterbodies addressed by this TMDL report.

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 load allocation (LA) relates to existing and future nonpoint sources, natural background, and stormwater runoff not subject to NPDES permitting. LAs are allocated based on the criteria established by Maine's water quality standards, or are set at zero for prohibited discharges (see Tables 4-1, 4-2, and 4-3, (pages 25-27, 2009 TMDL report)). For example, relevant LAs for non-MS4 stormwater are established "as naturally occurs" for Class AA and A waters; as 64/100 ml for the geometric mean of E. coli and 236/100 ml instantaneous for Class B waters;

Assessment: As discussed in Section 3 of this document (under loading capacity), Maine DEP used the applicable numeric water quality criteria directly related to the use-impairment, which the TMDL is designed to address. As discussed in Section 6 of this document (under margin of safety), Maine DEP set conservative targets based on meeting criteria at the point of source discharge; the aggregate mass load allocation is derived from the applicable criteria and flow. EPA concludes that the load allocations for bacteria are adequately specified in the TMDLs at levels necessary to attain and maintain water quality standards.

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.

As with the load allocations (LAs), the wasteload allocations (WLAs) are also allocated based on the criteria established by Maine's water quality standards in Tables 4-1, 4-2, and 4-3 (pages 25-27

2009 TMDL report). For example, no point source discharges are allowed to relevant Maine Class AA, A waters, resulting in a 0 (zero) allocation for those potential sources of bacteria, nor are separate storm sewer overflow (SSO) discharges allowed to any waterbody class. Point sources such as combined sewer overflows (CSOs), overboard discharges (OBDs), wastewater treatment plants, and NPDES-regulated stormwater from municipal separate storm sewer systems (MS4s) are allocated at the criteria level of the appropriate indicator organism for the given water body classification. Specific TMDL end points are listed for each impaired waterbody addressed by the *2013 TMDL Freshwater Addendum* in Table 3 (page 5).

Assessment: Maine DEP established concentration-based WLAs by applying the numeric criteria directly to each discharge. Aggregate mass WLA s were established for the stormwater sources because it is impossible to determine with any precision or certainty the actual and projected loadings for individual discharges or groups of discharges. EPA's November 22, 2002 TMDL guidance suggests that it is acceptable in such cases to allocate stormwater by gross allotments. EPA concludes that the wasteload allocation components of the TMDLs are adequately specified at levels necessary to attain and maintain water quality standards.

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 2009 Maine Statewide Bacteria TMDLs provide two types of margins of safety (MOS) (page 23, 2009 TMDL report), depending on the TMDL format. The TMDLs expressed as concentration include an implicit MOS using conservative assumptions during the TMDL analysis. First, the TMDL targets are established at the same levels as the water quality standards for each waterbody, and do not rely on in-stream processes, such as bacteria die-off, dilution, and settling, which are know to reduce in-stream bacteria concentrations. Given this very conservative TMDL target-setting, there is a high level of confidence that the TMDLs established are consistent with water quality standards, and the entire loading capacity can be allocated among sources. The underlying assumption in establishing a concentration TMDL for bacteria is that if all sources are equal to or below the water quality standards, then the concentration of bacteria in the receiving water will attain standards.

The TMDLs expressed in terms of daily loads include an explicit 10% MOS which is applied to the appropriate state water quality criteria (SWQC) before calculating the allowable daily load and wasteload allocations for bacteria (for both instantaneous and geometric mean criteria). The mass-per-unit-time bacteria TMDLs are expressed in terms of billions of bacteria per day as a function of flow (for freshwater streams) or volume (for freshwater lakes, and estuarine and marine waters). This 10% MOS is incorporated into the TMDLs in order to account for any uncertainty involved in measurements or estimations of waterbody flow or volume used in the

daily load calculations. Formulas, tables and graphs for calculating the TMDL for any flow or volume are provided in Appendix III of the *2009 Maine Statewide Bacteria TMDL.*

Assessment: EPA concludes that the approach used in developing the concentration-based TMDLs provides for an adequate implicit MOS. There is not a lack of knowledge concerning the relationship between allocations and water quality in this case, where the TMDL applies the criteria as allocations for each source. Setting the concentration TMDL targets at the water quality criteria with no allowance for in-stream bacteria die-off and settling provides an implicit margin of safety. EPA also concludes that the approach used in developing the load-based TMDLs provides for an adequate explicit MOS in order to account for any uncertainty associated with measuring flows or estimating volumes.

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)).

ME DEP considered seasonal variations in conditions when developing the TMDL because the State acknowledges that bacteria sources to waters arise from a mixture of continuous and wet-weather-driven sources, and there may be no single critical condition that is protective for all other conditions (page 28, 2009 TMDL report). For all conditions, Maine's bacteria TMDLs have been set equal to the water quality criteria or equal to loads which assure water quality criteria are achieved. The bacteria TMDLs apply over the entire season(s) that the bacteria criteria apply.

Assessment: The bacteria TMDLs apply over the entire time that the bacteria criteria apply (seasonally for freshwater criteria; year round for fecal criteria applied to shellfish growing areas). The TMDL targets will reduce bacteria concentrations to water quality criteria levels for all seasons for which the water quality standards apply. EPA concludes that the TMDLs have 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 Maine statewide bacteria TMDL report is not a phased TMDL, but the document includes a description of a monitoring plan designed to measure attainment of water quality standards (page

28, 2009 TMDL report). ME DEP explains that progress towards attainment of water quality standards will be evaluated by ambient water quality monitoring of the appropriate bacteria criteria for the impaired waterbody. ME DEP explains that the Department relies heavily on bacteria data from quality assured volunteer monitoring programs to indicate problems and to evaluate progress towards attainment of standards. ME DEP will continue to investigate complaints and inspect potential sources of bacteria.

Assessment: EPA concludes that the anticipated monitoring by and in cooperation with ME DEP 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 Plans

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.

ME DEP explains that the goal of the *2009 Statewide Bacteria TMDL* report is to assure public confidence in the quality of shellfish harvested, and facilitate the recreational enjoyment of local waters. The Department also acknowledges that financial commitment and community drive will be required to attain the goals and TMDL allocations, including the development of plans to control sources of bacteria using both best management practices (BMPs) and education. The DEP recommends using an adaptive management approach, or iterative process to TMDL implementation, with realistic goals over a reasonable timeframe, and with ongoing adjustments based on monitoring results.

The *2009 Maine Statewide Bacteria TMDL* report provides general implementation guidance and identifies existing informational resources on BMPs for the various sources of bacteria (pages 29-30, 2009 TMDL report), and through Maine case studies of local implementation successes (pages 31-45, 2009 TMDL report). Maps and site-specific data summary tables for the three freshwater streams addressed by the *2013 TMDL Freshwater Addendum* are presented in the 2013 Appendices A-C to inform stakeholders on the location of known impairments and hotspots. Watershed characterizations and details on bacteria sources, when known, are provided. Sufficient freshwater data are also available to calculate percent reductions needed to meet the concentration-based target, and to present wet weather and dry weather bacteria assessment data (using precipitation and geographical data). This wet/dry data analysis provides valuable indications of the sources of bacteria in order to guide implementation efforts to fix the problem.

Assessment: Maine DEP has included implementation guidance and identifies existing

informational resources, although not a required element of the TMDL approval. EPA is taking no action on the implementation plan.

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."

The TMDL targets for point sources in this TMDL are not less stringent based on any assumed nonpoint source reductions, so documentation of reasonable assurance in the TMDL is not a requirement. However, ME DEP explains that a combination of regulatory and non-regulatory program support in Maine 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 (page 46 2009 TMDL report).

Assessment: Although not required, because Maine DEP did not increase WLAs based on expected LA reductions, Maine DEP has provided reasonable assurance that WQS will be met.

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.

The public participation process for the bacteria TMDLs is described (pages 5-6, 2013 TMDL Freshwater Addendum report). A draft report was made available for public review from October 29, 2013 via a public notice distributed via e-mail to interested parties and watershed stakeholder organizations, with a link to the public review draft posted on ME DEP's Internet web site. A

public hearing was scheduled, advertised in regional newspapers, and stakeholders were notified via e-mail. The hearing was held on November 5, 2013 at 2:30 PM in ME DEP's Response Training Room, 4 Blossom Lane, Augusta, ME. The public comment deadline was December 4, 2013.

ME DEP fully addressed all comments received during public comment in Appendix D of the 2013 TMDL Addendum report.

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

EPA concludes that ME DEP has done an adequate job of involving the public during the development of the TMDL, has provided sufficient opportunities for the public to comment on the TMDL, and has provided reasonable responses to the public comments.

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 September 8, 2014, Maine DEP submitted Maine's final Statewide Bacteria TMDL and four associated appendices electronically for EPA approval, along with a cover letter dated August 26, 2014. A complete version of the TMDL Addendum document was submitted to EPA on September 9, 2014. The final documents contained all of the elements necessary to approve the TMDL.
