



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
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June 5, 2008
Alicia Good, Assistant Director of Water Resources
Rhode Island Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, RI 02908

SUBJECT: Approval of Point Judith Pond Waters TMDL

Dear Ms. Good:

Thank you for your submission of Rhode Island's Total Maximum Daily Loads (TMDLs) for five Point Judith Pond Waters, South Kingstown and Narragansett, RI, for fecal coliform bacteria. These water bodies were included on the State's 2006 303(d) list and were prioritized for TMDL development. The purpose of these TMDLs for Rhode Island waters is to address bacteria-related impairments to shellfishing use and primary contact recreation use from point and nonpoint source pollution.

The U.S. Environmental Protection Agency (EPA) hereby approves Rhode Island's TMDLs for Point Judith Pond Waters, received by EPA on May 9, 2008. EPA has determined that this TMDL meets the requirements of §303(d) of the Clean Water Act (CWA), and of EPA's implementing regulations (40 CFR Part 130). Attached is a copy of our approval documentation.

My staff and I look forward to continued cooperation with the RI DEM in exercising our shared responsibility of implementing the requirements under Section 303(d) of the CWA.

If you have any questions, please contact Stephen Silva (617-918-1561) or Steven Winnett (617-918-1687) of my staff.

Sincerely,

/s/

Stephen S. Perkins, Director
Office of Ecosystem Protection

cc Angelo Liberti, RI DEM
Elizabeth Scott, RI DEM
Nick Cristofori, RI DEM
Heidi Travers, RI DEM
Stephen Silva, EPA
Steven Winnett, EPA

EPA NEW ENGLAND'S TMDL REVIEW

TMDL: **Point Judith Pond Waters**

Lower Saugatuck River	RI0010045R-05C
Point Judith Pond, segment B	RI0010043E-06B
Point Judith Pond, segment C	RI0010043E-06C
Billington Cove	RI0010043R-06D
Champlin Cove	RI0010043R-06K

Location: Towns of South Kingstown and Narragansett, Rhode Island.

STATUS: Final

IMPAIRMENT/POLLUTANT: These five water body segments are not meeting criteria for fecal coliform concentration and are not supporting the designated use of contact recreation. In addition, the Class SA and SA{b} segments are not supporting the designated use of shellfish harvesting for direct human consumption, and the Class SB segments are not supporting the designated use of shellfish harvesting for controlled relay and depuration. Upper Point Judith Pond, segment C and Champlin Cove are designated Class SA segments, while Billington Cove is designated Class SA{b} with nearby marinas and/or mooring fields. Upper Judith Pond, segment B and the Lower Saugatuck River are designated Class SB, although the Judith Pond segment B must meet the Class SA standard where it connects with segment C. A year-around TMDL submission is presented for fecal coliform bacteria.

BACKGROUND: The Rhode Island Department of Environmental Management (DEM) submitted to EPA New England the final Total Maximum Daily Load Analysis for *Point Judith Pond Waters* (the “TMDL,” “submission,” or “Report”) with a transmittal letter dated May 7, 2008. DEM addressed EPA’s January 17, 2008 written comments.

The submission included:

- Final TMDL report for pathogens in Point Judith Pond waters;
- Implementation plan for achieving TMDL reductions, Chapter 5, pp. 39-49;
- Shellfish Station Locations and Data, Appendix A, pp. 54-61;
- Other Instream Monitoring Locations and Data, Appendix B, pp. 62-64;
- Shoreline Survey data, Appendix C, pp. 65-67;
- Public comments and response to comments, Appendix D, pp 68-82; and
- References set out in Chapter 8, pp. 52-53.

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.

REVIEWERS: Steven Winnett (617-918-1687) E-mail: winnett.steven@epa.gov

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 Water Body, Pollutant of Concern, Pollutant Sources and Priority Ranking

The TMDL analytical document must identify the water body as it appears on the State/Tribe's 303(d) list, the pollutant of concern and the priority ranking of the water body. 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.

The Point Judith Pond waters are located in the Towns of South Kingstown and Narragansett, Rhode Island. The Report describes the pollutant of concern (fecal coliform bacteria), a surrogate for pathogen-caused impairment of the designated uses for primary contact recreation and shellfish harvesting (TMDL p. 11). It lists the water bodies as they appear on the State's 2006 303(d) list (TMDL pp. 9-10), and explains that these waters have the highest priority for TMDL development (TMDL p.11). The document also describes the TMDL study area, its demographics, its soils and land uses, and a brief history of water quality and enforcement activities (TMDL pp. 14-19).

Bacteria impairments arise mostly, from wet weather events and during the warmer weather around the summer months. In addition, the Saugatuck River to the north is a significant source of bacteria pollution, and its impairment was addressed in a TMDL approved in 2003.

DEM changed summer seasonal closures for shellfishing to permanent closures in parts of Point Judith Pond in the mid-1980s, although the closure lines have changed several times over the past 30 or so years. The line settled farther to the south in the mid 2000s, as water quality has increasingly degraded.

The submission includes a detailed discussion of the point and nonpoint sources that contribute to the water quality impairments (TMDL pp. 25-33), as well as in-depth discussions of the data that indicate the sources and what methods were used to acquire them (TMDL pp. 20-25, and appendices).

Assessment: DEM has adequately identified the water bodies, the pollutant of concern, the magnitude and location of the sources of pollution.

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 water body, 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 numeric water quality target is set for all waters at the appropriate numeric water quality standard for bacteria. DEM explains that the applicable water quality standards (and therefore, TMDL targets) vary depending on the classification of each water body, and that the Point Judith Pond waters covered by these TMDLs, including its coves and tributaries, are composed of three different water quality classifications (TMDL pp. 9-10). The designations of the five water body segments are detailed above. The fecal coliform water quality standard for Class SA and SA{b} waters is a geometric mean value of 14 fc/100 ml, with not more than 10% of the samples exceeding a value of 49 fc/100 ml. SA{b} waters have marinas and mooring fields, and must therefore require seasonal shellfish closures. The standard for Class SB waters is a geometric value of 50 fc/100 ml, with not more than 10% of the samples exceeding a value of 400 fc/100 ml. Designated uses, numeric water quality criteria, and anti-degradation are all addressed in the submission (TMDL pp. 12-13).

Assessment: EPA New England concludes that DEM has properly presented its water quality standards when setting a numeric water quality target.

3. Loading Capacity - Linking Water Quality and Pollutant Sources

As described in EPA guidance, a TMDL identifies the loading capacity of a water body 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 water body'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 water body 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 water body 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.

DEM sets the numeric water quality targets at the applicable water quality criteria or standard for each of the segments in the TMDL study area, depending on each water segment's classification, as outlined in the TMDL report.

DEM describes the rationale for the methods used to establish the cause-and-effect relationship between the numeric targets (WQS) and the identified pollutant sources. DEM sets a reduction goal for each impaired water body area or segment (as a whole) by comparing current fecal coliform concentrations to the applicable water quality target, then calculating the percent reduction required to reach that target (TMDL Table 4.2, p. 37). The water quality standards specify both geometric mean and 90th percentile criteria, and DEM uses the higher percent reduction to set each segment's necessary percent reduction. DEM explains the process for calculating the reduction goals (TMDL pp. 34-36) and provides a discussion of the strengths and weakness in the analytical process for linking water quality to sources of pollutants (TMDL p. 38).

DEM also states that where an up-gradient segment with a lower classification (Class SB) discharges to a segment with a higher classification, the upper segment must meet the stricter Class SA water quality criteria for shellfishing so the down-gradient segment will support its designated uses (TMDL, p. 34).

DEM has said that it considers the pollutant concentrations and percent reduction targets in these TMDLs to apply daily. The allowable daily load is the criteria concentration times the daily flow in the receiving water.

Assessment: EPA New England concludes that the loading capacities, having been set equal to the WQSs, have been appropriately set at levels necessary to attain and maintain applicable water quality standards. The TMDL is based on a reasonable approach for establishing the relationship between pollutant loading and water quality in the pond segments, coves, and tributaries.

EPA New England also concurs with expressing the bacteria TMDLs as concentrations in lieu of mass-per time because these units are the same as the state water quality standards. In addition, concentration is mathematically related to per time loading (concentration multiplied by flow volume per time results in mass per time), so that the daily load is the daily concentration times the flow volume per time.

EPA's regulations at 40 C.F.R. §130.7(c)(1) require that TMDLs identify water quality targets that are consistent with all applicable water quality standards. EPA New England has accepted

the percent reduction approach for bacteria TMDLs in some rivers and streams under an assumption that the reductions needed to meet applicable water quality standards (WQS) at ambient stations are representative of the reductions needed to meet the applicable standards throughout the water body.

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.

Information to support the development of separate allocations for load and wasteload allocations for wet weather discharges do not exist. Consequently, the LA is included in the WLA (TMDL p. 36). Note that this approach does not affect the regulation of storm water that is subject to Phases I or II of EPA's storm water program.

Assessment: EPA New England concludes that it is unnecessary to include a specific load allocation, as the information to support separate load and wasteload allocations does not exist. Consequently, the load allocation is included in the wasteload allocation, below.

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 submission contains a wasteload allocation that is expressed as the percent reduction for fecal coliform bacteria required to meet the water quality standards. As mentioned in the LA review (above) because information to support the development of separate allocations for load and wasteload allocations do not exist, the LA is included in the WLA for each segment.

The WLA is expressed as the percent reduction required for the water bodies to meet the water quality criteria. Because the criteria contain both a geometric mean and 90th percentile component, DEM compared the current conditions for each of the water bodies to both components. The station data with the largest violation of the criteria were used to set the current conditions for each segment. The higher percent reductions resulting from the comparison of the bacteria data to the geometric mean and 90th percentile criteria were then used to set each segment's required reduction.

For the Class SB segment which borders a Class SA segment, its data were compared to the Class SA criteria to set its reduction, thus ensuring that water quality in the Class SA segment would be met at the border.

Assessment: EPA New England concludes that the WLAs for this submission are acceptable and reasonable, and have sufficiently addressed all sources of pollution.

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.

An explicit MOS of 5% is included in the TMDL for bacteria loads, which sets a percent reduction target for these water bodies 5% higher than is required in order to meet the State's numeric water quality standards for fecal coliform bacteria (TMDL Table 4.2, p. 37).

Assessment: EPA New England concurs that an adequate MOS is provided by the explicit 5% MOS for bacteria.

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).

This TMDL addresses seasonal variation because the required reductions were calculated for the critical conditions during the summer, when bacteria levels are highest. The reductions required for summer bacteria levels are applied year round, even when bacteria levels are much less. Therefore, the TMDL allocations protect designated uses during the entire year.

Assessment: EPA New England concludes that seasonal variations have been adequately accounted for in the TMDLs because the TMDLs were developed to be protective during the critical summer period, and will therefore be more than adequately protective during the other seasons.

8. Monitoring Plan for TMDLs Developed Under the Phased Approach

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.

This is not a phased TMDL. The document includes a description of monitoring to ensure that plans for implementing water quality improvement activities are adjusted as monitoring indicates changes in the water quality of the impaired segments. The State discusses its plans for monitoring as and after the TMDL is implemented (TMDL p. 51).

Assessment: EPA concludes that the anticipated monitoring by DEM is sufficient to evaluate the adequacy of progress toward attainment of WQS, although 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.

A detailed implementation plan is provided in the submission (TMDL pp. 39-49). DEM describes an implementation program which includes management of stormwater from municipal and industrial activities, management of wastewater through continued sewerage of non-sewered areas and improving performance of septic systems, getting boaters to use pump-out facilities, and minimizing contamination from domestic and farm animals, and waterfowl and wildlife. DEM also discusses its recommendations for dealing with future development of the area.

In the plan, DEM details the Stormwater Phase II requirements that will likely be part of its implementation plan, including required amendments to municipal stormwater management program plans (SWMPPs), the six minimum measures, site-specific structural BMP requirements, and MS4-specific requirements. DEM also identifies holders of RIPDES Multi-Sector General Permits (MSGPs) whose stormwater discharges will have to be in compliance with the approved TMDL. DEM identifies specific farms which may be contributing to pathogen pollution and suggests mitigating measures they should take. The plan also includes specification of necessary actions regarding marine pump-out facilities, and participation in various government programs mandated by statute.

Assessment: Addressed, though not required.

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 body 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.”

Reasonable assurance is not required because point sources are not given less stringent wasteload allocations based on the assumption of future nonpoint source load reductions. However, DEM addresses reasonable assurances that stormwater runoff reductions will occur by providing information about past and current surveys, and past work in the watershed which point to a long term commitment to improving water quality. The report offers recommendations for future work needed in its implementation section (TMDL pp. 39-49).

Assessment: Addressed, though not required.

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.

DEM provided a comment period from December 5, 2007 to January 11, 2008. Notice of this comment period and a public meeting to present the draft TMDL to stakeholders and the general public on December 5, 2007 was sent to the affected communities and others, and posted on its website. DEM received numerous public comments during the comment period. DEM has provided EPA with copies of all submitted comments and the Department's responses as an attachment to the final TMDL submission.

Assessment: EPA New England has reviewed all comments and DEM's responses to comments. EPA concludes that DEM involved the public during the development of the TMDL for the *Point Judith Pond Waters*, has provided adequate opportunities for the public to comment on the TMDL, and has provided reasonable responses to the comments received.

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 water body, the pollutant(s) of concern, and the priority ranking of the water body.

Comment: A letter with appropriate information was included with the final submission.

APPENDIX

(Table reprinted and edited from the submitted TMDL by permission of DEM⁰)

Table 4.2 – Geometric Means, 90th Percentile Values, and Percent Reductions¹

Station	Segment ID	Location	WQ Class	Geometric Mean (fc/100 mL)		Percentile (fc/100 mL)		Percent Reduction
				Target	2002-2006	Target	2002-2006	
SR06-D	RI0010045R-05C	Saugatucket River	SB	50	581.7*	400	4000	(91.4%) ⁵ 96.4%
49		Saugatucket River	SB	50	112.4	400	887	
SR-1		Saugatucket River	SB	50	334.2	400	1600	
SR-0		Saugatucket River	SB	50	290.1	400	1328	
GA10-1	RI0010043E-06B	Point Judith Pond	SB ²	14	93.9	49	1100*	(95.5%) ⁵ >100%
GA10-2	RI0010043E-06C	Point Judith Pond	SA	14	63.9	49	507	(90.3%) ⁵ 95.3%
GA10-3		Point Judith Pond	SA	14	32.3	49	309	
GA10-5		Point Judith Pond	SA	14	19.4	49	240	
GA10-7 ³		Point Judith Pond	SA	14	12.8	49	240	
GA10-5	RI0010043E-06D	Billington Cove	SA{b}	14		49		(90.3%) ^{4,5} 95.3%
PJ-15	RI0010043E-06K	Champlin Cove	SA	14	22.2	49	130*	(62.3%) ⁵
PJ-16		Champlin Cove	SA	14	18.0	49	130*	67.3%

⁰ US EPA note: Rows with data for non-TMDL segments were deleted from the table for this approval document.

¹ Results denoted with a * show that data for that station was used to set the reduction for the segment.

² This station is located on the Class SA line and needs to meet Class SA standards.

³ Station GA10-7 is on the line between waterbody ID RI0010043E-06A and RI0010043E-06C. It has been placed in the latter for assessment purposes.

⁴ Waterbody ID RI0010043E-06D, Billington Cove has no in-stream stations associated with it, however since it is entirely surrounded by waterbody RI0010043E-06C, reductions have been set equal for both segments. Station GA10-5 is the closest instream station.

⁵ An additional margin of safety of 5% has been added to these segments. The actual percent reduction is shown in parentheses. The modified percent reduction is shown in bold.

Data for entry in EPA's National TMDL Tracking System							
TMDL Name		Point Judith Pond Waters (5 segments)					
Number of TMDLs*		5					
Type of TMDLs*		Bacteria					
Number of listed causes (from 303(d) list)		5					
Lead State		Rhode Island (RI)					
TMDL Status		Final					
Individual TMDLs listed below							
TMDL Segment name	TMDL Segment ID #	TMDL Pollutant ID# & name	TMDL Impairment Cause(s)	Pollutant endpoint	Unlisted?	RIPDES Point Source & ID#	Listed for anything else?
Lower Saugatuck River	RI0010045R-05C	259 (Fecal coliform bacteria)	Pathogens	SB: 50 fc/100 ml; 400 fc /100 ml		RIPDES General Stormwater & Multi-Sector Permits	
Point Judith Pond, segment B	RI0010043E-06B	259 (Fecal coliform bacteria)	Pathogens	SA: 14 fc /100 ml; 49 fc /100 ml		RIPDES General Stormwater & Multi-Sector Permits	
Point Judith Pond, segment C	RI0010043E-06C	259 (Fecal coliform bacteria)	Pathogens	SA: 14 fc /100 ml; 49 fecal fc /100 ml		RIPDES General Stormwater & Multi-Sector Permits	
Billington Cove	RI0010043R-06D	259 (Fecal coliform bacteria)	Pathogens	SA {b}: 14 fc /100 ml;; 49 fc /100 ml		RIPDES General Stormwater & Multi-Sector Permits	
Champlin Cove	RI0010043R-06K	259 (Fecal coliform bacteria)	Pathogens	SA: 14 fc /100 ml; 49 fc /100 ml		RIPDES General Stormwater & Multi-Sector Permits	
TMDL Type		Point & Nonpoint Sources					
Establishment Date (approval)*		June 5, 2008					
EPA Developed		No					
Towns affected*		South Kingstown and Narragansett, RI					