STATE OF RHODE ISLAND

2012 303(d) LIST

LIST OF IMPAIRED WATERS

FINAL

August 2012

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OVERVIEW AND EXPLANATION

Clean Water Act Requirements

This list of impaired waters is developed by the Rhode Island Department of Environmental Management (DEM) in response to requirements of Section 303(d) of the federal Clean Water Act (CWA). The 303(d) list is part of a process detailed in the CWA, which requires all states to do the following:

- 1. Establish water quality standards (WQS) (including Water Designated Uses and Water Quality Criteria to protect those uses) for the state's surface waters;
- 2. Monitor water quality conditions of the state's waters;
- 3. Assess water quality conditions of the state's waters and develop biennial reports describing the water quality conditions (CWA section 305(b));
- 4. Identify and list impaired waters (that is those waters that do not meet WQS with existing required technology-based pollution controls alone) in the state's 303(d) list;
- 5. Set priority rankings (a schedule for development of total maximum daily loads (TMDLs))¹ for all impaired waters included on the 303(d) list;
- 6. Determine TMDLs that establish acceptable pollutant loads from both point and non point sources of pollution which allow the impaired waterbody to meet WQS for each listed waterbody and each cause of impairment;
- 7. Submit the 303(d) list and all TMDLs to U.S. Environmental Protection Agency for approval; and
- 8. Incorporate TMDLs into the state's continuing planning process.

305(b) Water Quality Assessment Process

In accordance with Section 305(b) of the CWA, states are required to survey their water quality for attainment of the fishable/swimmable goals of the Act, and to report the water quality assessments biennially (every even year). The attainment of the CWA goals is measured by determining how well waters support their designated uses (defined as the most sensitive and therefore governing water uses which the class is intended to protect). For the purposes of the 305(b) water quality assessments, seven designated uses are evaluated:

- fish and wildlife habitat (aquatic life use),
- drinking water supply,
- shellfish consumption,
- shellfish controlled relay and depuration,
- fish consumption,
- primary contact recreation and,
- secondary contact recreation.

¹ **TMDL** is Total Maximum Daily Load and refers to the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. The term also refers to the waterbody specific studies completed to determine the allowable pollutant levels and the pollution control activities needed to restore water quality.

In the assessments, use support status is determined by comparing available water quality information to the water quality standards established in the Rhode Island Water Quality Regulations. The methodology for this assessment process is outlined in RI's Consolidated Assessment and Listing Methodology (CALM), June 2009:

http://www.dem.ri.gov/programs/benviron/water/quality/pdf/finlcalm.pdf). The results of this comparison are then used to categorize each waterbody's specific designated uses as "Fully Supporting", or "Not Supporting". If data is considered insufficient or no data is available to evaluate a designated use, it is considered "Not Assessed". Waterbodies that are Not Supporting their criteria or designated uses as determined during the 305(b) assessment process, are placed on the state's List of Impaired Waters which is developed in accordance with Section 303(d) of the CWA.

Integrated Water Quality Monitoring and Assessment

Beginning in 2008, DEM integrated the state's Section 305(b) water assessment report and Section 303(d) Impaired Waters List into one document, the Integrated Water Quality Monitoring and Assessment Report. Following US EPA issued guidance², the Integrated Report (IR) provides a streamlined approach to assessing and reporting on water quality. The report format provides five lists/categories of water quality assessment information.

The Integrated Report Guidance emphasizes the importance of monitoring and assessing waterbodies in each category to obtain the information needed to evaluate progress toward attainment of water quality standards, to address data gaps, and to ensure that waterbodies which currently meet water quality standards, continue to do so. While each waterbody is placed into only one of the five reporting categories, the attainment status of each designated use for each waterbody is documented to facilitate tracking of information and to assist in addressing data gaps and directing water quality monitoring efforts. For example, a waterbody may be Fully Supporting swimming use, but there may be insufficient data to develop an aquatic life use support status.

The Integrated Report Categories are presented below with a description of how the results of the individual assessments for each designated use on a waterbody are integrated to determine the final Integrated Reporting Category for each waterbody. In general, the integration of assessment determinations follows a hierarchical approach where a determination of impairment for any cause (pollutant), for any of the waterbody's designated uses will result in placement of the waterbody in Category 5. Similarly, there is a hierarchical approach to placement of a waterbody into Category 4A over 4B over 4C.

Each waterbody or waterbody segment is assigned a waterbody identification (WBID) number for purposes of tracking - for example, to assist with water quality assessments, mapping, reporting, or ultimately, trend analysis. The waterbodies are organized according to Rhode Island's ten major drainage basins. Based on the state's consolidated assessment and listing methodology (CALM), each surface waterbody of the state will be placed into <u>one</u> of the following five assessment categories:

² Memorandum from Suzanne Schwartz. Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. May 5, 2009. (<u>http://www.epa.gov/owow/tmdl/guidance/final52009.html</u>)

- **Category 1** Attaining all designated uses. Waterbodies will be placed into this Category if, in accordance with the requirements of the CALM, the assessment results indicate that the waterbody is attaining <u>all</u> water quality standards for <u>all</u> designated uses.
- **Category 2** Attaining some of the designated uses; and insufficient or no data and information is available to determine if the remaining uses are attained. Waterbodies will be placed in this Category if there are data and information which, in accordance with the CALM, support a determination that some, but not all, uses are attained and attainment status of the remaining uses is unknown because there is insufficient or no data or information.
- **Category 3 Insufficient or no data and information are available to determine if any designated use is attained or impaired.** Waterbodies will be placed in this Category where the data or information to support an attainment determination for all uses are not sufficient, consistent with the requirements of the CALM. In general, these uses and waterbodies are considered Not Assessed.
- Category 4 Impaired or threatened for one or more designated uses but does not require development of a TMDL. (Three subcategories):
 - **A. TMDL has been completed.** Waterbodies will be placed in this subcategory once all TMDLs for the waterbody have been developed and approved by EPA.
 - **B.** Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future. Waterbodies will be placed in this subcategory where other pollution control requirements are stringent enough to attain applicable water quality standards.
 - **C. Impairment is not caused by a pollutant.** Waterbodies will be placed in this subcategory if pollution (e.g., flow) rather than a pollutant causes the impairment.
- Category 5 Impaired or threatened for one or more designated uses by a pollutant(s), and requires a TMDL. This Category constitutes the 303(d) List of waters impaired or threatened by a pollutant(s) for which one or more TMDL(s) are needed.

Waterbodies can be moved from Category 5, and Category 4, to Category 1 if, in accordance with the CALM, recent data indicates that the waterbody is now meeting <u>all</u> water quality standards for all uses, or Category 2 if, in accordance with the CALM, recent data indicates that the waterbody is now meeting water quality standards for some designated uses and is not assessed for other designated uses.

As described above, the five Integrated Report Categories represent assessment status under Section 305(b) and Category 5 represents the reporting requirements under Section 303(d) of the Clean Water Act. Only Category 5 (Impaired Waters List) of the Integrated Report is subject to US EPA approval and public participation requirements. Therefore, while all the lists (Categories 1-5) are made available for public information and education purposes, RIDEM seeks comments only on the Category 5 list (303(d) List of Impaired Waters).

Summary of Ambient Water Quality Monitoring Data

As noted in the CALM, DEM strives to consider all readily available water quality data and related information in developing the 305(b) water quality assessments and 303(d) impaired waters list. For development of the 2012 Integrated Report, a special emphasis was placed on obtaining and considering data and information for Narragansett Bay – particularly data collected from 2009 through 2011. Data and information from outside of Narragansett Bay will be considered for future surface water quality assessments (2014 Integrated Report), RIPDES permitting decisions, TMDL development and/or other environmental management and regulatory-decision making needs.

In general, the primary source of data generated for assessments is developed from programs that fall under the umbrella of Rhode Island's Water Monitoring Strategy (<u>http://www.ci.uri.edu/Projects/RI-Monitoring/Docs/DEM_WQ_Oct_14_05.pdf</u>). The RIDEM Office of Water Resources (RIDEM OWR) has a primary role in implementing the strategy by both conducting monitoring programs and supporting monitoring by other entities. Collectively, the monitoring programs are aimed at gathering the ambient water quality data needed to assess water quality conditions and support management decision-making.

The DEM-OWR conducts both ambient and programmatic monitoring programs. With respect to ambient monitoring, the DEM -OWR has involvement statewide in both fresh and coastal waters. Beginning in 2004, RIDEM/OWR adopted a rotating basin approach to sampling rivers and streams (http://www.dem.ri.gov/pubs/qapp/ambirivr2.pdf) to address large data gaps and in response to EPA's requirement that states increase the percentage of assessed waters. This approach integrates biological, chemical and physical monitoring and involves an intensive data collection effort using a geometric design of locating stations in addition to targeted sampling stations to bracket known or suspected pollution sources. Following this approach, the Office of Water Resources completed the first statewide rotating monitoring cycle of rivers and streams between 2004 and 2009. A second statewide rotational monitoring cycle began in 2011. Almost 200 stations have been sampled via this program providing a statewide dataset that supported a more complete assessment of water quality conditions in rivers and streams during the 2010 assessment cycle than has ever been possible before. The significant jump in the number of impaired waters from 2008 to 2010 was a reflection of this monitoring effort. DEM continues to follow the rotating basin approach to sampling the state's rivers and streams.

Quality assurance (QA) is an important component of the major monitoring programs relied upon by state water protection programs. It is important to ensure that the data generated by monitoring and used to support decision-making in water protection programs is valid and appropriate. DEM maintains a goal of generating and compiling data of acceptable quality for use in the water quality assessment program. To achieve this goal, certain data quality assurance and quality control procedures must be met. QA is defined as the overall management system of a project including the organization, planning, data collection, quality control, documentation, evaluation, and reporting activities. QA provides the information needed to determine the data's quality and whether it meets the project's requirements. Quality control (QC) is defined as the routine technical activities intended primarily to control errors. Since errors can occur in either the field, the laboratory, or in the office, QC must be a part of each of these activities.

To comply with EPA regulations, monitoring projects funded by federal money are required to develop, submit, and implement an EPA approved Quality Assurance Project Plan (QAPP). QAPPs define the scope of work for the project, including the data quality objectives (DQOs), and QA/QC. Not all monitoring programs, however, operate with QAPPs oriented to EPA guidance. DEM may receive and use data from such programs, but is obligated to document quality assurance if the data is relied upon for making decisions in the assessment of water quality, most notably, for development of the category 5 list of impaired waters. Water quality monitoring data and information must follow EPA's Quality Assurance/Quality Control (QA/QC) guidelines as documented in EPA New England's *Quality Assurance Project Plan Program Guidance* (USEPA 2005b), to be utilized in the development of RI's Impaired Waters List (category 5).

Consistent with RIDEM's Quality Management Plan and EPA requirements, the Office of Water Resources has prepared a QAPP for the ambient river monitoring program which implements clean sampling techniques using trained personnel (including clean metals sampling protocol). The Office has also contracted with the RI HEALTH State Laboratories (HEALTH) to conduct the analyses which are performed in accordance with strict scientific standards set by the U.S. Environmental Protection Agency (EPA) and Food and Drug Administration (FDA). RIDEM/OWR and HEALTH have coordinated to obtain extremely low detection limits, especially for dissolved metals, to allow for a comprehensive review of data results.

Another area of considerable investment by RIDEM-OWR in recent years has been in the state's biological monitoring program. With EPA assistance and outside contractor support, a review of the Office of Water Resources' biological monitoring programs was completed in 2008. This review, which produced a number of recommendations, prompted the Office of Water Resources to accelerate action to advance its biological monitoring approach by moving from a reference station approach to a biological condition gradient approach to assess the biological conditions of the state's rivers and streams. As part of the 2010 assessment cycle, a systematic review of all biological monitoring data (collected between 2001 and 2008) along with habitat, flow, and watershed size information, was conducted to more accurately assess the biological (macroinvertebrate) conditions of RI rivers and streams. During this time RIDEM-OWR has been working with outside contractor support and EPA assistance, to develop a multi-metric biological condition index for RI rivers and streams. This recently completed project will allow for further refinement in assessments of the biological (macroinvertebrate) conditions of RI rivers and streams.

Much of the data available on the quality of the state's lakes is generated from the University of Rhode Island Watershed Watch program which has coordinated volunteer-based monitoring in lakes for 24 years. RIDEM-OWR financially supports this sizable volunteer-based water quality monitoring effort which also collects data on selected tributary streams and coastal waters. Using this and other information collected by RIDEM staff, RIDEM contractors, and other organizations, RIDEM's Office of Water Resources has recently released a comprehensive report on the water quality of lakes, the occurrence of aquatic invasive species in lakes and the feasibility of instituting a boat sticker program as a means to generate funding for lake management. This report, completed pursuant to Rhode Island General Laws Section 42-17.1-2-34, entitled, "Rhode Island Freshwater Lakes and Ponds: Aquatic Invasive Plants and Water Quality Concerns", can be found on RIDEM's website at:

http://www.dem.ri.gov/programs/benviron/water/quality/surfwq/pdfs/lakes012.pdf

The RIDEM-OWR also conducts program-specific monitoring activities including targeted water quality investigations of impaired waters, conducted in support of Total Maximum Daily Load (TMDLs), bacteriological monitoring of shellfish growing areas and effluent monitoring of wastewater discharges. Since 2004 the RIDEM-OWR has also provided support to sustain fixed-site monitoring stations in Narragansett Bay via agreements with URI-Graduate School of Oceanography (URI-GSO). RIDEM-OWR along with the RI Water Resources Board also supports water quality and stream flow gage measurements via an agreement with USGS.

There is a variety of other data generated by programs outside of the Water Monitoring Strategy framework that are also used in the assessment process. With each 305(b) assessment cycle, the RIDEM Office of Water Resources actively solicits submittal of such data and information for consideration in developing the Integrated Report. For the 2012 assessment cycle the Department utilized data from the Narragansett Bay Commission, City of Newport, RIDEM-OWR TMDL program, RIDEM-OWR Aquatic Invasive Species monitoring, RIDEM-OWR Shellfish Monitoring Program, and the fixed-site monitoring network in Narragansett Bay. With release of the draft 2012 Integrated Lists for public review, the Department considers the 2012 assessment cycle to be completed. Any new data or information made available to the Department during the public comment period will be considered for inclusion in this cycle on a case by case basis. In general, data and information made available at this time will be evaluated for use during the 2014 assessment cycle and development of the 2014 Integrated Report.

Terminology Used to Describe Impairments and Causes

A general explanation of the terminology used to describe impairments/causes is provided below:

• <u>Biodiversity Impairments</u> are characterized according to the type of biological data and evaluation that led to the listing. The cause terms used include: *Aquatic Macroinvertebrate Bioassessment; Benthic Macroinvertebrate Bioassessment; Sediment Toxicity Tests; Whole Effluent Toxicity (WET) Tests.* The two macroinvertebrate bioassessment terms are differentiated according to the evaluation that led to the listing: Benthic Macroinvertebrate Bioassessment is determined by sampling of riffles in wadeable streams/rivers, using the Rapid Bioassessment Protocol (RBP) whereas, Aquatic Macroinvertebrate Bioassessment is determined in deeper/non-wadeable rivers from the deployment of artificial substrates.

- <u>Nutrient Impairments</u> are specified according to the element causing the impairment. For freshwaters, *Total Phosphorus* is listed as the cause of the impairment and for saltwaters, *Total Nitrogen* is listed as the cause of the impairment.
- <u>Pathogen Impairments</u> are listed as *Enterococcus, fecal coliform* or *E. coli* to reflect the actual bacteria indicator that led to the listing.
- <u>Mercury Impairments</u> are characterized according to the media impacted as either fish tissue (*mercury in fish tissue*), water column (*mercury in water column*) or sediments (*mercury*).
- <u>Total Toxics and Unknown Toxicity</u> Impairments are characterized according to the type of biological data and evaluation that led to the listing. The cause terms used include: *Sediment Bioassays for Estuarine and Marine Waters, WET Tests, Ambient Bioassays – Chronic Aquatic Toxicity.*

Observed Effects

The Integrated Report format and ADB (EPA's Microsoft Access Assessment Database) allow for tracking monitoring observations that may indicate a decline in water quality. These monitoring observations, called Observed Effects, represent responses to pollutants or other stressors causing impairment. Such Observed Effects can include excess algal growth, chlorophyll a, taste and odor, color, sedimentation/ siltation, and noxious aquatic plants. In 303(d) Lists prepared prior to 2008, these terms were shown as causes of impairment. Beginning with the 2008 303(d) List, these terms were moved from causes of impairment to Observed Effects. There are two deviations to this general rule: (1) for waterbodies where the TMDL has been approved by US EPA for this cause, it is maintained as a cause to represent that the TMDL has or will address the effect; and (2) for some waterbodies the impairment is not related to a pollutant (for example, non-native aquatic plants and organisms, and flow); such effects are listed as Impairments Not Caused by a Pollutant (Category 4C) as outlined below. Many of the observed effects are responses to stressors associated with nutrient enrichment. In all cases, where the response term was redefined as an Observed Effect, the nutrient related cause (Total Phosphorus or Total Nitrogen) was maintained as a cause of impairment for the waterbody.

Impairments Not Caused by a Pollutant

In some instances a waterbody may be considered impaired for causes that are not pollutants and therefore a TMDL is not required nor the appropriate approach to address the impairment. Such causes include flow, aquatic plants – native and non-native aquatic plants, and non-native fish, shellfish or zooplankton. These impairments have been identified for tracking purposes and will be addressed by other programs. Waters that have one of the observed impairments described above and no other causes of impairment are placed in Category 4C (Waters impaired but not by a pollutant).

303(d) List Overview

The 303(d) List identifies waterbodies within the State, which are not currently meeting Rhode Island Water Quality Standards, and require a TMDL be developed addressing the identified

water quality impairment or pollutant. This list is compiled by RIDEM's Office of Water Resources (OWR) and is based upon the most recent comprehensive assessment of water quality conditions, as described above. The 303(d) list establishes a scheduled time frame for development of TMDLs. As such, the 303(d) list is used to help prioritize the State's water quality monitoring and restoration planning activities. It is important to note that the scheduling is not necessarily representative of the severity of water quality impacts, but rather reflective of the priority given for TMDL development with consideration to shellfishing waters, drinking water supplies and other priority areas identified by partner agencies and organizations, or the public.

The 303(d) list reflects the dynamic process of managing the quality of the state's waters. As data gaps have been filled and the geographic coverage and/or scope of monitoring efforts expanded, both the number of new waterbodies and new impairments (for waterbodies previously listed for other pollutants) on the 303d list has increased. Concurrently, actual water quality improvements in response to upgrades at wastewater treatment facilities or other pollution control efforts as well as refinements in sampling and analytical techniques, and assessment protocol have resulted in removing or de-listing of waterbody impairments. Because many of the state's waterbodies are impaired for multiple parameters, waterbodies may still appear on the 303d list despite these improvements. Additions to and deletions from the 303(d) list are made as new monitoring data become available - revealing whether water quality standards are being met or not.

Broad Observations on the 2012 303(d) list

Assessments were completed on a total of 880 assessment units (AUs or WBIDs) in the 2012 assessment cycle. Of these, 120 assessment units or 96 named waterbodies have at least one impairment in need of a TMDL, and are included on the state's 2012 303(d) list. This compares with 162 assessment units and 133 named waterbodies identified on the 2010 303(d) list. For 2012, the majority of the impaired waters are rivers (61 WBIDs), followed by estuarine waters (34 WBIDs) and lakes (25 WBIDs). As previously mentioned, the 303d list reflects ongoing water quality management activities and priorities. Changes from the 2010 303d list to the 2012 303d list include the removal (or de-listing) of several waterbody impairments as described in greater detail below, the addition of several impairments, and the shifting of time schedules for completion of TMDLs. The TMDL schedules presented in the 2012 303d list reflect the state's ongoing water pollution control strategies, as well as the state's current capacity to collect the necessary data and information needed to develop TMDLs.

De-listed Impairments

The reasons for "de-listing" a waterbody impairment and removing it from the 303(d) list (Category 5) include:

- TMDL for the impairment has been completed and approved by EPA.
- Other pollution control requirements are reasonably expected to result in attainment of the water quality standard associated with the impairment.
- The impairment is not caused by a pollutant.
- Current monitoring data indicated that the water quality standard for the impairment is now being met; or
- Original basis for listing was incorrect.

As described previously, if other impairments exist, the waterbody will continue to appear on the 303(d) list (Category 5), and any approved TMDLs and/or pollution control requirements in place which address the waterbody's other identified impairments are noted. The following tables list the waterbody impairments de-listed during the 2012 assessment cycle because current data indicate the water quality standard for the impairment is now being met. These are further described in the Delisting Document.

Impairments De-Listed Because Water Quality Standard Is Now Being Met					
Waterbody Name	Waterbody ID Number	Cause of Impairment			
Sandy Pond (S. of Airport) (Little Pond	RI0007024L-01	Fecal Coliform			
Unnamed Tribs to Slack Reservoir	RI0002007R-15	Enterococcus			

Progress in Water Quality Restoration - Rhode Island's TMDL Program

To date, the Office of Water Resources has completed TMDLs addressing a total of 168 related impairments/causes on 159 assessment units (WBIDs) which account for 134 distinctly named waterbodies. Since 2010, RIDEM-OWR working with an EPA contractor has completed a Statewide Bacteria TMDL addressing 57 bacteria impaired rivers, streams, and ponds. Current TMDL development activities are focused on water quality impairments on the Blackstone River (and Mill River, Peters River, Cherry Brook, and Scott Pond), Ten Mile River (and Slaters Park Pond, Central Pond, Turner Reservoir, and Omega Pond), and Buckeye Brook. All of these TMDLs are scheduled for completion in either 2012 or 2013.

The goal of RIDEM's TMDL program is to develop and implement studies aimed at restoring impaired waterbodies to an acceptable condition that meets water quality standards and supports their designated uses (e.g., shellfish harvesting, primary contact (swimming) and aquatic life support). There are several steps that are common to the development of most TMDLs:

- Identify the impaired waterbodies and pollutant(s) not meeting water quality standards.
- Assemble and review available data and information on the waterbody and its watershed.
- Identify stakeholders having an interest in the waterbody and/or watershed.
- Identify data gaps that need to be addressed to satisfactorily characterize water quality conditions and pollution sources causing the identified impairment, and other factors affecting the extent and severity of the impairment.
- If needed, develop and implement a monitoring plan (and Quality Assurance Project Plan [QAPP]) to collect additional data to further characterize water quality and pollution sources. As part of the assessment process, pollution sources are identified and their significance assessed including point sources, such as wastewater treatment facility discharges and stormwater outfalls, and non-point sources, such as septic systems and un-channelized runoff from agricultural and urbanized areas.
- Estimate the current amount of point and non-point sources entering the waterbody.
- Establish the TMDL water quality target (typically the applicable water quality standard) and estimate the allowable load of the pollutant that the waterbody can receive and still meet water quality standards (i.e., the total maximum daily load). A water quality model, based on

either computer simulations or empirical equations, may be used. For bacteria TMDLs, a concentration -based approach may be applied whereby a percentage reduction in fecal coliform concentrations is determined to represent necessary pollutant reductions.

- Allocate allowable loads between point and non-point sources, and a margin of safety.
- Develop an implementation plan identifying the specific actions necessary to achieve the waterbody's water quality target(s).
- Conduct public meeting(s) and formally solicit and respond to public comments.
- Submit the draft TMDL to EPA for formal approval.

Public participation is vital to making the TMDL process a success. Wherever possible, DEM utilizes a "watershed approach" in developing TMDLs - evaluating watersheds as a whole, and partnering with local officials and environmental organizations to identify problem areas, collect relevant water quality data, and identify potential pollution sources and solutions. DEM seeks input from stakeholders at key points in the TMDL development process. In the initial stages of developing the TMDL, stakeholders can play an important role by contributing both water quality data and their in-depth local knowledge of the watershed. This information helps DEM to better characterize conditions in the waterbody and more easily identify pollution sources in the watershed. At the midpoint of the process, typically after supplemental water quality monitoring has been completed, DEM may host a meeting to discuss the monitoring results and to identify potential pollution sources and possible solutions. Finally, once a draft TMDL document is completed, it is made available for public review and comment for a 30-day period, and a public meeting is held to present the TMDL report and to seek public input on the report's findings and implementation plan.

The following table shows the impairments de-listed during the 2012 assessment cycle, that is moved from Category 5/303(d) List to Category 4A, because a TMDL for the impairment has been completed and approved by EPA.

Impairments De-Listed Due to TMDL Approval by EPA (Category 4A)					
Waterbody Name	Waterbody ID	Cause of Impairment	TMDL Approval Date		
Ashaway River & Tribs	RI0008039R-02A	Enterococcus	9/22/2011		
Bailey's Brook & Tribs	RI0007035R-01	Enterococcus	9/22/2011		
Belleville Upper Pond Inlet	RI0007027R-02	Enterococcus	9/22/2011		
Boyd Brook	RI0006013R-01	Enterococcus	9/22/2011		
Branch River & Tribs	RI0001002R-01A	Enterococcus	9/22/2011		
Branch River & Tribs	RI0001002R-01B	Enterococcus	9/22/2011		
Breakheart Brook & Tribs	RI0008040R-02	Enterococcus	9/22/2011		
Brushy Brook & Tribs	RI0008040R-03B	Fecal Coliform	9/22/2011		
Burnt Swamp Brook & Tribs	RI0001006R-06	Enterococcus	9/22/2011		
Canonchet Brook & Tribs	RI0008040R-04B	Enterococcus	9/22/2011		
Chepachet River & Tribs	RI0001002R-03	Enterococcus	9/22/2011		
Chickasheen Brook	RI0008039R-05A	Enterococcus	9/22/2011		

Impairments De-Listed Due to TMDL Approval by EPA (Category 4A))
(continued)	

		Cause of	TMDL
Waterbody Name	Waterbody ID	Impairment	Approval Date
Clear River	RI0001002R-05D	Enterococcus	9/22/2011
Clear River & Tribs	RI0001002R-05C	Enterococcus	9/22/2011
Crookfall Brook & Tribs	RI0001004R-01	Enterococcus	9/22/2011
Cutler Brook & Tribs	RI0002007R-02	Enterococcus	9/22/2011
Dry Brook & Tribs	RI0006018R-02A	Enterococcus	9/22/2011
Dutemple Brook	RI0008039R-30	Enterococcus	9/22/2011
East Sneech Brook	RI0001006R-03	Enterococcus	9/22/2011
Frenchtown Brook & Tribs	RI0007028R-01	Enterococcus	9/22/2011
Fresh Meadow Brook & Tribs	RI0010045R-01	Enterococcus	9/22/2011
Hunt River	RI0007028R-03D	Enterococcus	9/22/2011
Huntinghouse Brook	RI0006015R-11	Enterococcus	9/22/2011
Jamestown Brook	RI0007036R-01	Fecal Coliform	9/22/2011
Latham Brook & Tribs	RI0002007R-05	Enterococcus	9/22/2011
Long Brook & Tribs	RI0001006R-02	Enterococcus	9/22/2011
Maidford River	RI0007035R-02A	Fecal Coliform	9/22/2011
Maidford River	RI0007035R-02B	Fecal Coliform	9/22/2011
Mashapaug Pond	RI0006017L-06	Fecal Coliform	9/22/2011
Meadow Brook & Tribs	RI0008039R-13	Enterococcus	9/22/2011
Meshanticut Brook & Tribs	RI0006017R-02	Enterococcus	9/22/2011
Mile Brook	RI0008039R-14	Enterococcus	9/22/2011
Moosup River & Tribs	RI0005011R-03	Enterococcus	9/22/2011
Moshassuck River & Tribs	RI0003008R-01A	Enterococcus	9/22/2011
Moshassuck River & Tribs	RI0003008R-01B	Enterococcus	9/22/2011
Moswansicut Stream	RI0006015R-16	Escherichia coli	9/22/2011
Nooseneck River & Tribs	RI0006012R-05	Enterococcus	9/22/2011
Paradise Brook	RI0007035R-03	Fecal Coliform	9/22/2011
Parmenter Brook & Tribs	RI0008039R-37	Enterococcus	9/22/2011
Pascoag River	RI0001002R-09	Enterococcus	9/22/2011
Pawcatuck River & Tribs	RI0008039R-18B	Enterococcus	9/22/2011
Pawcatuck River & Tribs	RI0008039R-18C	Enterococcus	9/22/2011
Pawtuxet River South Branch	RI0006014R-04B	Enterococcus	9/22/2011
Phillips Brook & Tribs	RI0008040R-14	Enterococcus	9/22/2011
Roger Williams Park Ponds	RI0006017L-05	Fecal Coliform	9/22/2011
Sandhill Brook & Tribs	RI0007028R-05	Fecal Coliform	9/22/2011
Simmons Brook & Tribs	RI0006018R-04	Enterococcus	9/22/2011
Stillwater River & Tribs	RI0002007R-09	Enterococcus	9/22/2011
Sucker Brook	RI0007037R-01	Enterococcus	9/22/2011
Taney Brook	RI0008039R-23	Enterococcus	9/22/2011
Tarkiln Brook & Tribs	RI0001002R-13B	Enterococcus	9/22/2011
Tomaquag Brook & Tribs	RI0008039R-24	Enterococcus	9/22/2011

Impairments De-Listed Due to TMDL Approval by EPA (Category 4A) (continued)					
Waterbody Name	Waterbody ID	Cause of Impairment	TMDL Approval Date		
Tribs to Tiogue Lake	RI0006014R-05	Enterococcus	9/22/2011		
West River & Tribs	RI0003008R-03B	Enterococcus	9/22/2011		
White Horn Brook & Tribs	RI0008039R-27B	Enterococcus	9/22/2011		
Windsor Brook & Tribs	RI0006015R-30	Enterococcus	9/22/2011		
Wood River & Tribs	RI0008040R-16A	Enterococcus	9/22/2011		

New Impairments

The new waterbody impairments added to the 2012 303d list are as follows:

New Impairments included on the 2010 303(d) List				
Waterbody Name	Waterbody ID number	Cause of Impairment		
Blackstone River	RI0001003R-01B	Lead		
Clear River & Tribs	RI0001002R-05C	Lead		
Ten Mile River & Tribs	RI0004009R-01A	Fecal Coliform		
Tell Mile River & Tribs	K10004009K-01A	Phosphorus (Total)		

Re-assessment of impairments listed in Category 4B

In the 2008 assessment cycle, the Office of Water Resources moved two impairments associated with four waterbody segments in Mt. Hope Bay from Category 5 (303(d) list) to Category 4B (Other pollution control requirements are reasonably expected to result in attainment of the water quality standard associated with the impairment). The impairments and associated waterbody segments are listed below. Note, while these impairments are considered Category 4B, these four waterbody segments are listed in Category 5 due to other impairments needing a TMDL.

Impairments De-listed in 2008 because Attainment of Water Quality Standards is Expected with Implementation of Other Pollution Control Requirements (4B)					
Waterbody Name	Waterbody ID number	Cause of Impairment			
Mt. Hope Bay	RI0007032E-01A	Water Temperature, Fishes bioassessments			
Mt. Hope Bay	RI0007032E-01B	Water Temperature, Fishes bioassessments			
Mt. Hope Bay	RI0007032E-01C	Water Temperature, Fishes bioassessments			
Mt. Hope Bay	RI0007032E-01D	Water Temperature, Fishes bioassessments			

As described in detail in the 4B documentation provided with the 2008 Integrated Report, various water quality studies and trawling surveys conducted in Mt. Hope Bay documented the cause and effect relationship between Brayton Point Station's operations and thermal modifications and biodiversity impairments in Mt. Hope Bay.

On Oct. 6, 2003, Region I renewed Brayton Point Station's CWA permit. The permit set strict limits for the facility's withdrawal of cooling water from, and its discharges of heated wastewater to, Mount Hope Bay. The permit was appealed to EPA's Environmental Appeals Board (EAB) and on September 27, 2007, the EAB issued its decision upholding EPA's final permit. The company subsequently appealed the EAB ruling to the Federal Court in the Fourth Circuit, but on December 17, 2007 Dominion Power withdrew its legal challenges to the final permit issued in 2003 by EPA and the Commonwealth of Massachusetts. The Brayton Point NPDES Permit (No. MA0003654) specifically requires Brayton Point Station to:

- reduce total annual heat discharge to the bay by 96%, from 42 trillion BTUs/year to 1.7 trillion BTUs/year, and
- reduce water withdrawal from the bay by approximately 94%, from nearly 1 billion gallons/day to 56 million gallons/day.

Compliance with these permit limits will eliminate annual fishery losses by an estimated 94% and improve habitat quality.

EPA has issued an administrative order containing a schedule for meeting all NPDES permit limits within 36 months of obtaining all of the required construction and operating permits and approvals. Under this schedule, Brayton Point Station may comply with its NPDES permit limits as early as the spring of 2012. The administrative order sets interim effluent limits and milestones that the company will be responsible for meeting until full permit compliance is achieved. According to EPA Region 1 NPDES Permit Branch (e-mail communications with Damien Houlihan, April 4, 2012), Dominion is on track for completion by May 13, and is in compliance with its administrative order. This page intentionally left blank

2012 Category 5 Waters 303(d) List of Impaired Waters

Blackstone River Basin

Slatersville Reservoir	• RI0001002	2L-09	Waterbody Size: 218.9 A	Waterbody	Classification: B
Slatersville Reservoir. Burrillville	e, North Smithfield				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper	2020		
		Lead	2020		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Branch River and tributaries from the outlet of the Slatersville Reservoir to the confluence with the Blackstone River. North Smithfield

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Aquatic Macroinvertebrate Bioassessments	2020		
		Copper	2020		
		Lead	2020		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	

Clear River & Tribs RI000100

RI0001002R-05C

Waterbody Size: 9.737 M

Waterbody Classification: B

Clear River and tributaries from 1/2 mile upstream of Wilson Reservoir to 1 mile upstream of confluence with the Chepachet River (upstream of the Burrillville WWTF discharge point). Glocester, Burrillville

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Lead Non-Native Aquatic Plants	2018		No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Assessed				-
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Clear River	RI0001002	2R-05D	Waterbody Size: 0.891 M	Waterbody	Classification: B1

Clear River from the Burrillville WWTF discharge point to the confluence with the Chepachet River. Glocester, Burrillville

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate	2018		
		Bioassessments			
		Cadmium	2018		
		Copper	2018		
		Lead	2018		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
				0/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation Pascoag River	Not Supporting RI0001002		Waterbody Size: 0.848 M		Classification: B
0			Waterbody Size: 0.848 M		Classification: B
			Waterbody Size: 0.848 M	Waterbody (Classification: B
Pascoag River Pascoag River. Burrillville			Waterbody Size: 0.848 M <u>TMDL Schedule</u>		Classification: B
Pascoag River	RI000100	2R-09		Waterbody (TMDL Approval	
Pascoag River Pascoag River. Burrillville Use Description	RI0001002	2R-09 <i>Cause/Impairment</i> Benthic-Macroinvertebrate	TMDL Schedule	Waterbody (TMDL Approval	
Pascoag River Pascoag River. Burrillville Use Description Fish and Wildlife habitat	RI0001002 <u>Use Attainment Status</u> Not Supporting	2R-09 <i>Cause/Impairment</i> Benthic-Macroinvertebrate	TMDL Schedule	Waterbody (TMDL Approval	

Scott Pond	RI000100	3L-01	Waterbody Size: 42.13 A	Waterbody Classification: B	
Scott Pond. Lincoln				TMDL Annual	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper Oxygen, Dissolved Phosphorus (Total)	2013 2013 2013		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Valley Falls Pond	RI000100	3L-02	Waterbody Size: 37.97 A	Waterbody	Classification: B1
Valley Falls Pond. Cumberland					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Aquatic Macroinvertebrate Bioassessments	2018		Determine need for TMDL post WWTF upgrades.
		Lead	2022		Compliance with Consent Agreement fo CSO abatement expected to negate need for TMDL.
		Oxygen, Dissolved	2018		Determine need for TMDL post WWTF upgrades.
			2018		Determine need for TMDL post WWTF
		Phosphorus (Total)	2018		upgrades.
Fish Consumption	Not Assessed	Phosphorus (Total)	2018		upgrades.
Fish Consumption Primary Contact Recreation	Not Assessed Not Supporting	Phosphorus (Total) Fecal Coliform	2018		upgrades. Compliance with Consent Agreement fo CSO abatement expected to negate need for TMDL.

Blackstone River

RI0001003R-01A

Waterbody Size: 18.05 M

Waterbody Classification: B1

Blackstone River from the MA-RI border to the CSO outfall located at River and Samoset Streets in Central Falls. Woonsocket, North Smithfield, Cumberland, Lincoln and Central Falls.

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		Determine need for TMDL post WWTF upgrades.
		Cadmium	2012		
		Eurasian Water Milfoil, Myriophyllum spicatum			No TMDL required. Impairment is not a pollutant.
		Lead	2012		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Oxygen, Dissolved	2018		Determine need for TMDL post WWTF upgrades.
		Phosphorus (Total)	2018		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Not Supporting	Mercury in Fish Tissue	2022		
		PCB in Fish Tissue	2022		
Primary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		
Secondary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		

Blackstone River

RI0001003R-01B

Waterbody Size: 1.639 M

Waterbody Classification: B1{a}

TMDL Annroval

Blackstone River from the CSO outfall located at River and Samoset streets in Central Falls to the Slater Mill Dam. Central Falls, Pawtucket.

				I MDL Approvai	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		Determine need for TMDL post WWTF upgrades.
		Cadmium	2012		
		Lead	2012		
		Oxygen, Dissolved	2018		Determine need for TMDL post WWTF upgrades.
		Phosphorus (Total)	2018		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Not Supporting	Mercury in Fish Tissue	2022		
		PCB in Fish Tissue	2022		
Primary Contact Recreation	Not Supporting	Enterococcus	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
		Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Secondary Contact Recreation	Not Supporting	Enterococcus	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
		Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.

Cherry Brook & Tribs

Cherry Brook and tributaries. North Smithfield, Woonsocket

RI0001003R-02

Waterbody Size: 3.133 M

Waterbody Classification: B

TMDL Approval Date Cause/Impairment TMDL Schedule **Comment** Use Description **Use Attainment Status** Fish and Wildlife habitat Not Supporting Copper 2012 **Fish Consumption** Not Assessed Primary Contact Recreation Enterococcus 2012 Not Supporting Fecal Coliform 2012 Secondary Contact Recreation Not Supporting Enterococcus 2012 2012 Fecal Coliform

Mill River	RI000100	3R-03	Waterbody Size: 0.918 M	Waterbody Classification: B	
Mill River. Woonsocket					
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Fully Supporting				
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2012		
·		Fecal Coliform	2012		
Secondary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		
Peters River	RI000100	3 R- 04	Waterbody Size: 0.783 M	Waterbody Classifi	cation: B
Peters River. Woonsocket					
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper	2012		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		
Secondary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		
Abbott Run Brook N	North & RI000100	6R-01A	Waterbody Size: 4.353 M	Waterbody Classifi	cation: AA
Tribs			·		
Abbott Run Brook North and trib	butaries. Cumberland				
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Cadmium	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Public Drinking Water Supply	Not Assessed				

Abbott Run Brook South &	RI0001006R-01B	Waterbody Size: 1.753 M	Waterbody Classification: AA
Tribs			
Abbott Run Brook South and tributaries. Cumb	erland		

<i>Use Description</i> Fish and Wildlife habitat	Use Attainment Status Not Supporting	<u>Cause/Impairment</u> Cadmium	TMDL Schedule	TMDL Approval Date	Comment
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Public Drinking Water Supply	Not Assessed				
Secondary Contact Recreation	Fully Supporting				

Greenhill Pond	RI001004.	3E-02	Waterbody Size: 0.657 S	Waterbody	Classification: SA
Green Hill Pond. South Kingstor	wn and Charlestown				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Oxygen, Dissolved	2020		
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform		2/16/2006	
Silver Spring Lake	RI0010044	4L-02	Waterbody Size: 18.75 A	Waterbody	Classification: B
Silver Spring Lake. North King	stown				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Phosphorus (Total)	2016		ponutant
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Saugatucket Pond	RI001004:	5L-01	Waterbody Size: 40.68 A	Waterbody	Classification: B
Saugatucket Pond. South Kingst	own				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2016		Record of Decision in place for Rosehill Landfill.
		Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Silver Lake	RI001004	5L-05	Waterbody Size: 44.78 A	Waterbody	Classification: B
Silver Lake. South Kingstown					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Mitchell Brook	RI001004	5R-03B	Waterbody Size: 0.679 M	Waterbody	Classification: B
Mitchell Brook from the Rose H	ill Landfill to the confluence wit	h the Saugatucket River. South Kingsto	own		
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2016		Record of Decision in place for Rosehill Landfill.
		Iron	2016		Record of Decision in place for Rosehill Landfill.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		7/31/2003	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		7/31/2003	
Saugatucket River &	Tribs RI001004	5R-05B	Waterbody Size: 4.006 M	Waterbody	Classification: B
-		operty to the dam at Main Street in Wa	kefield. South		
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2016		Record of Decision in place for Rosehill Landfill.
		Iron	2016		Record of Decision in place for Rosehill Landfill.
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
Fish Consumption	Fully Supporting				

Secondary Contact Recreation

Not Supporting

Fecal Coliform

Final August 2012

7/31/2003

Great Salt Pond, Trim's Pond RI0010046E-01C and Harbor Pond		Waterbody Size: 0.11 S	Waterbody (Classification: SA{b}	
Trim's Pond and Harbor Pond. N	Jew Shoreham				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Fully Supporting	Cause/Impairment	IMDL Schedule	Duit	Comment
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform	2018		
Lily Pond	RI001004	7L-02	Waterbody Size: 29.13 A	Waterbody (Classification: A
Lily Pond. Newport					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
•					
Fish and Wildlife habitat	Not Supporting	Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Round Pond (Little	Compton) RI001004	8L-02	Waterbody Size: 34.25 A	Waterbody (Classification: A
Round Pond. Little Compton					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Coastal Waters

Fish Consumption

Primary Contact Recreation

Secondary Contact Recreation

Dundery Brook	RI0010048R-02C		Waterbody Size: 1.072 M	Waterbody Classification: B	
Dundery Brook from 1 mile do	ownstream of Meetinghouse Lane to	Briggs Marsh Pond. Little Compton			
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
			2010		
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate	2018		

Bioassessments

Not Assessed

Not Assessed

Not Assessed

Moshassuck River Basin **Barney Pond** Waterbody Size: 23.84 A Waterbody Classification: B RI0003008L-02 Barney Pond. Lincoln TMDL Approval Date **Use Description Use Attainment Status** Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat Not Supporting Non-Native Aquatic Plants No TMDL required. Impairment is not a pollutant. 2016 Phosphorus (Total) **Fish Consumption** Not Assessed Primary Contact Recreation Not Assessed Secondary Contact Recreation Not Assessed Waterbody Size: 2.138 M Waterbody Classification: B Moshassuck River & Tribs RI0003008R-01B Moshassuck River and tributaries from Barney Pond outlet to first CSO discharge point at Weeden Street Bridge. Lincoln, Central Falls, Pawtucket, **TMDL** Approval Date Use Description **Use Attainment Status** Cause/Impairment TMDL Schedule Comment Fish and Wildlife habitat 2018 Not Supporting Benthic-Macroinvertebrate Bioassessments **Fish Consumption** Not Assessed 9/22/2011 Primary Contact Recreation Not Supporting Enterococcus 9/22/2011 Secondary Contact Recreation Not Supporting Enterococcus Waterbody Size: 4.562 M Waterbody Classification: B{a} RI0003008R-01C Moshassuck River & Tribs Moshassuck River and tributaries from the first CSO discharge point at Weeden Street Bridge to the confluence with the Woonasquatucket River. Central Falls, Pawtucket, Providence **TMDL** Approval Date Cause/Impairment TMDL Schedule **Comment** Use Description **Use Attainment Status** Fish and Wildlife habitat Not Supporting Benthic-Macroinvertebrate 2022 Bioassessments **Fish Consumption** Not Assessed 2022 Primary Contact Recreation Not Supporting Enterococcus Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL. Secondary Contact Recreation 2022 Compliance with Consent Agreement for Not Supporting Enterococcus CSO abatement expected to negate need for TMDL.

Moshassuck River Basin West River & Tribs RI0003008R-03B Waterbody Size: 9.038 M Waterbody Classification: B West River and tributaries from the outlet of Wenscott Reservoir, including Geneva and Whipple ponds, to the first CSO discharge point located south of the Branch Avenue crossing, off of Vandewater Street. North Providence, Providence TMDL Approval Date Use Description Use Attainment Status Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat Not Supporting Benthic-Macroinvertebrate 2018 Bioassessments Fish Consumption Not Assessed Primary Contact Recreation Not Supporting Enterococcus 9/22/2011 9/22/2011 Secondary Contact Recreation Not Supporting Enterococcus Waterbody Size: 3.414 M Waterbody Classification: B{a} West River & Tribs RI0003008R-03C West River and tributaries from the first CSO discharge point located south of the Branch Avenue crossing, off of Vandewater Street to the confluence with the Moshassuck River. Providence TMDL Approval Date **TMDL** Schedule **Comment** Use Description **Use Attainment Status** Cause/Impairment Fish and Wildlife habitat Not Supporting Benthic-Macroinvertebrate 2022 Bioassessments

Fish Consumption	Not Assessed			
Primary Contact Recreation	Not Supporting	Enterococcus	2022	Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Secondary Contact Recreation	Not Supporting	Enterococcus	2022	Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.

Seekonk River

RI0007019E-01

Waterbody Size: 1.015 S

Waterbody Classification: SB1{a}

Seekonk River from the Slater Mill Dam at Main Street in Pawtucket to India Point in Providence. Pawtucket, Providence and East Providence.

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Secondary Contact Recreation	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Providence River	RI000702	0E-01A	Waterbody Size: 4.73 S	Waterbody	Classification: SB{a}

Providence River south of a line from a point on shore due east of Naushon Avenue in Warwick to the western terminus of Beach Road in East Providence and north of a line from Conimicut Point in Warwick to Old Tower at Nayatt Point in Barrington. East Providence, Warwick, Barrington

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016	Duit	Determine need for TMDL post WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Secondary Contact Recreation	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Shellfish Controlled Relay and	Fully Supporting				

Depuration

Providence River

RI0007020E-01B

Waterbody Size: 3.61 S

Waterbody Classification: SB1{a}

Providence River from its confluence with the Moshassuck and Woonasquatucket Rivers in Providence south and south of a line from India Point to Bold Point (across the mouth of the Seekonk River), to a line extending from a point on shore due east of Naushon Avenue in Warwick to the western terminus of Beach Road in East Providence, including Watchemoket Cove. East Providence, Providence, Cranston and Warwick

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Secondary Contact Recreation	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Prince's Pond (Tiffa	nv Pond) RI000702	DE-02	Waterbody Size: 0.013 S	Waterbody	Classification: SA

Prince's Pond (Tiffany Pond) RI0007020E-02

Prince's Pond (Tiffany Pond). Barrington

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Oxygen, Dissolved	2018		Re-classified with a saltwater classification. Previously identified as WBID# RI0007020L-06.
		Phosphorus (Total)	2018		Re-classified with a saltwater classification. Previously identified as WBID# RI0007020L-06.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				

Secondary Contact Recreation Fully Supporting Shellfish Consumption Not Assessed

Runnins River & Tribs RI0007021R-01

Waterbody Size: 5.179 M

Waterbody Classification: B

Runnins River and tributaries from the MA-RI border to the Mobil Dam in East Providence. Providence, East Providence

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
		Lead	2018		
		Oxygen, Dissolved	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		9/30/2002	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		9/30/2002	
	DIOOS		W (1 1 8: 0.722.8		

Palmer River

RI0007022E-01A

Waterbody Size: 0.733 S

Waterbody Classification: SA

Palmer River from the MA-RI border to the East Bay Bike Path trestle in Warren, approximately 2500 feet north of the confluence with the Barrington River. Warren, Barrington

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		5/15/2002	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		5/15/2002	
Shellfish Consumption	Not Supporting	Fecal Coliform		5/15/2002	

Upper Narragansett Bay RI0007024E-01

Waterbody Size: 14.93 S

Waterbody Classification: SA

Upper Narra. Bay from Conimicut Pt-Nayatt Pt boundary south, including waters south of a line from Adams Pt, Barrington to Jacobs Pt, Warren, to a line from Warwick Point in Warwick through Providence Point on Prudence Island, to Popasquash Point in Bristol. Warwick, Barrington, Bristol, Portsmouth, Warren

Fecal Coliform

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform	2022		Compliance with Consent Agreement for CSO abatement expected to negate need
					for TMDL.
Buckeye Brook & T	ribs RI0007024	4R-01	Waterbody Size: 3.687 M	Waterbody (for TMDL. Classification: B
Buckeye Brook & Tu Buckeye Brook and tributaries.		4R-01	Waterbody Size: 3.687 M	Waterbody (
·		4R-01 Cause/Impairment	Waterbody Size: 3.687 M <u>TMDL Schedule</u>	Waterbody (TMDL Approval Date	
Buckeye Brook and tributaries.	Warwick			TMDL Approval	Classification: B
Buckeye Brook and tributaries. <i>Use Description</i> Fish and Wildlife habitat	Warwick <u>Use Attainment Status</u>	<i>Cause/Impairment</i> Benthic-Macroinvertebrate	TMDL Schedule	TMDL Approval	Classification: B
Buckeye Brook and tributaries. <i>Use Description</i> Fish and Wildlife habitat Fish Consumption	Warwick <u>Use Attainment Status</u> Not Supporting	<i>Cause/Impairment</i> Benthic-Macroinvertebrate	TMDL Schedule	TMDL Approval	Classification: B
Buckeye Brook and tributaries.	Warwick <u>Use Attainment Status</u> Not Supporting Not Assessed	<i>Cause/Impairment</i> Benthic-Macroinvertebrate Bioassessments	TMDL Schedule	TMDL Approval Date	Classification: B

12/23/2008

Apponaug Cove

RI0007025E-01

Waterbody Size: 0.316S

Waterbody Classification: SB

Apponaug Cove waters north and west of a line from the RIDEM range marker located at the end of Neptune Lane in Chepiwanoxet to the RIDEM range marker located at Cedar Tree Point. Warwick

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	
Shellfish Controlled Relay and Depuration	Fully Supporting				
Brushneck Cove	RI000702:	5E-02	Waterbody Size: 0.118 S	Waterbody	Classification: SA
Brushneck Cove. Warwick					
				TMDL Approval	
	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Brushneck Cove. Warwick	<u>Use Attainment Status</u> Not Supporting	<i>Cause/Impairment</i> Nitrogen (Total)	TMDL Schedule 2016		<i>Comment</i> Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Brushneck Cove. Warwick Use Description					Determine need for TMDL post SAM Plan implementation and WWTF
Brushneck Cove. Warwick <i>Use Description</i> Fish and Wildlife habitat		Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades. Determine need for TMDL post SAM Plan implementation and WWTF
Brushneck Cove. Warwick Use Description	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades. Determine need for TMDL post SAM Plan implementation and WWTF
Brushneck Cove. Warwick <i>Use Description</i> Fish and Wildlife habitat Fish Consumption	Not Supporting Fully Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades. Determine need for TMDL post SAM Plan implementation and WWTF

Narragansett Basin Waterbody Size: 0.077 S Waterbody Classification: SA **Buttonwoods Cove** RI0007025E-03 Buttonwoods Cove. Warwick TMDL Approval Date Use Description **Use Attainment Status** Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat Not Supporting Nitrogen (Total) 2016 Determine need for TMDL post SAM Plan implementation and WWTF upgrades. Oxygen, Dissolved Determine need for TMDL post SAM 2016 Plan implementation and WWTF upgrades. Fish Consumption Fully Supporting Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting Shellfish Consumption 2/16/2006 Not Supporting Fecal Coliform RI0007025E-04A Waterbody Size: 3.04 S Waterbody Classification: SA **Greenwich Bay**

Greenwich Bay waters north and west of a line from the eastern extremity of Sandy Pt. on Potowomut Neck, East Greenwich, to the flag pole located at the Warwick Country Club on Warwick Neck, east of a line from the northerly point of Long Point to the southerly point of Chepiwanoxet Point, and east of a line from the northern extremity of Chepiwanoxet Point to the extension of Cooper Road located in the Buttonwoods section of Warwick. Warwick, East Greenwich

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform		2/16/2006	

Greenwich Bay

RI0007025E-04B

Waterbody Size: 0.459 S

Waterbody Classification: SA

TMDI Approval

Greenwich Bay waters west of a line from the northern extremity of Chepiwanoxet Point to the extension of Cooper Road located in the Buttonwoods section of Warwick, and east of a line from the RIDEM range marker located at the end of Neptune Lane in Chepiwanoxet to the RIDEM range marker located at Cedar Tree Point. Warwick

				I MDL Approvai	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform		2/16/2006	
Greenwich Cove	RI000702	5E-05A	Waterbody Size: 0.3 S	Waterbody	Classification: SB1

Greenwich Cove south of Long Point. East Greenwich, Warwick

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	

Greenwich Cove

RI0007025E-05B

Waterbody Size: 0.149 S

Waterbody Classification: SB

Greenwich Cove north of Long Point and west of a line extending from the northerly point of Long Point to the southerly point of Chepiwanoxet Peninsula. East Greenwich, Warwick

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Controlled Relay and Depuration	Fully Supporting				
Warriel Care	D1000702	5E 06A	Waterbody Size: 0 199 S	Waterbody	Classification: SB

Warwick Cove

RI0007025E-06A

Waterbody Size: 0.199 S

Waterbody Classification: SB

Warwick Cove north of a line from the easternmost extension of Burr Avenue on Horse Neck to the westernmost extension of Meadow Avenue on the east shore. Warwick

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	
Shellfish Controlled Relay and	Fully Supporting				

Depuration

Narragansett Basin Warwick Cove RI0007025E-06B Waterbody Size: 0.034 S Waterbody Classification: SA Warwick Cove south of a line from the easternmost extension of Burr Avenue on Horse Neck to the southernmost point of the Harbor Light marina parking lot on the east shore and north of a line from the southeastern most riprap jetty at the entrance of Warwick Cove, located at the southeastern end of Oakland Beach to the southern (landward) end of Dorr's Dock on Warwick Neck, excluding the waters noted in RI0007025E-06C. Warwick

Fecal Coliform

RI0007025R-03

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Nitrogen (Total)	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
		Oxygen, Dissolved	2016		Determine need for TMDL post SAM Plan implementation and WWTF upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform		2/16/2006	
Hardig Brook & Tribs RI0007025R-01		Waterbody Size: 5.477 M	Waterbody Classification: B		
Hardig Brook and tributaries. W	vest Warwick, Warwick				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
	Use Allalinment Status	Cause/Impairment	Timbl Schedule		
Fish and Wildlife habitat	Not Supporting	Lead	2018		
A					

Maskerchugg River

Secondary Contact Recreation

Maskerchugg River. Warwick, East Greenwich

Not Supporting

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Cadmium	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		2/16/2006	

Waterbody Size: 4.003 M

2/16/2006

Waterbody Classification: B

Allen's Harbor

RI0007027E-01A

Waterbody Size: 0.092 S

Waterbody Classification: SA{b}

TMDI Ammonial

Allen's Harbor waters north of a line extending from the westernmost indentation of the cove which is immediately north of the easternmost curve of Westcott Road to the northernmost point of land on the south side of the mouth of Allen's Harbor. North Kingstown

				IMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Assessed				
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2022		
Bissel Cove	RI000702	7E-02A	Waterbody Size: 0.107 S	Waterbody Classification:	SA

Bissel Cove waters west of a line from the RIDEM Range marker on the north shore of Bissel Cove in the vicinity of "The Homestead", to the range marker on the southern shore of Bissel Cove. North Kingstown

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Assessed				
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Assessed				
Secondary Contact Recreation	Not Assessed				
Shellfish Consumption	Not Supporting	Fecal Coliform	2018		
West Passage	RI000702	7E-03J	Waterbody Size: 6.05 S	Waterbody Classif	fication: SA

West Passage waters south of a line from the eastern extremity of Sandy Point on Potowomut Neck, East Greenwich, to the flagpole located at the Warwick Country club on Warwick Neck; south of a line from the southernmost extremity of Warwick Point on Warwick Neck, to the northernmost point on Prudence Island (Providence Point); north of a line extending from the shore in the vicinity of High Bank Ave, North Kingstown, running due east through buoy N"6" and terminating at the shoreline of Prudence Island. Warwick, East Greenwich, North Kingstown, Portsmouth.

Date Comment Determine need for TMDL post WWT upgrades.
1

Narragansett Basin Waterbody Size: 0.016S Waterbody Classification: SA West Passage RI0007027E-03K Fox Hill Pond in its entirety. Jamestown TMDL Approval Date Use Description Use Attainment Status Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat Fully Supporting Fish Consumption Fully Supporting Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting Shellfish Consumption Not Supporting Fecal Coliform 2018 West Passage RI0007027E-03L Waterbody Size: 0.079 S Waterbody Classification: SA Sheffield Cove waters in Jamestown south of a line from the range marker located at the western extension of Maple Avenue to the range marker located at the northernmost point of land on the opposite western shore at the entrance to the cove. Jamestown. TMDI Approval

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	IMDL Approval Date	Comment
Fish and Wildlife habitat	Fully Supporting				
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform	2018		
Wickford Harbor	RI000702	7E-04B	Waterbody Size: 0.338 S	Waterbody Classification: S	SB

Wickford Harbor including Mill Cove and the estuarine portion of Mill Creek, west of a line extending from the northern extremity of Big Rock Point to the southern extremity of Cornelius Island, and west and south of a line extending from the northern extremity of Cornelius Island, to a point 1000 feet north of Calf Neck. North Kingstown

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Oxygen, Dissolved	2018		
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Controlled Relay and Depuration	Fully Supporting				

Narragansett Basin **Potowomut River** RI0007028E-01A Waterbody Size: 0.194 S Waterbody Classification: SA The waters of the Potowomut River west of a line from the RIDEM range marker (41 39.364' N and 71 24.947' W) on the northern shoreline to the southwestern landward end of the stone jetty and CRMC Dock #1971 on the opposite southern shoreline at 51 Pojac Point Road North Kingstown. East Greenwich, North Kingstown TMDL Approval Date Use Description Cause/Impairment **TMDL** Schedule **Comment Use Attainment Status** Fish and Wildlife habitat Not Assessed **Fish Consumption** Fully Supporting Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting Shellfish Consumption Fecal Coliform 2018 Not Supporting RI0007028R-07 Waterbody Size: 1.689 M Waterbody Classification: B **Pierce Brook** Pierce Brook. East Greenwich TMDL Approval Date Use Description Use Attainment Status Cause/Impairment TMDL Schedule Comment Fish and Wildlife habitat Not Assessed Fish Consumption Not Assessed Primary Contact Recreation Not Supporting Fecal Coliform 2014

2014

Secondary Contact Recreation

Not Supporting

Fecal Coliform

East Passage	RI000702	9E-01C	Waterbody Size: 0.026 S	Waterbody Classification: SA	
East Passage waters in the vicinit	y of McAlister Point. Middletov	vn			
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2016		Remedial Action dredging of highly contaminated sediments completed for McAlister Point landfill. ROD in place which requires long term monitoring.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2016		Remedial Action dredging of highly contaminated sediments completed for McAllister Point landfill. ROD in place which requires long term monitoring.
Secondary Contact Recreation	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2016		Remedial Action dredging of highly contaminated sediments completed for McAllister Point landfill. ROD in place which requires long term monitoring.
Shellfish Consumption	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2016		Remedial Action dredging of highly contaminated sediments completed for McAllister Point landfill. ROD in place which requires long term monitoring.
East Passage	RI0007029E-01O		Waterbody Size: 1.57 S	Waterbody	Classification: SA

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Oxygen, Dissolved	2016		Determine need for TMDL post WWTF
					upgrades.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				

Secondary Contact Recreation

Shellfish Consumption

Fully Supporting

Fully Supporting

Potter Cove	RI000702	9E-03	Waterbody Size: 0.154 S	Waterbody	Classification: SA{b}
Potter Cove. Prudence Island, Po	ortsmouth				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Oxygen, Dissolved	2016		Determine need for TMDL post WWTF
Fish Consumption Primary Contact Recreation Secondary Contact Recreation Shellfish Consumption	Fully Supporting Fully Supporting Fully Supporting Fully Supporting				upgrades.
Melville Ponds	RI000702	9L-01	Waterbody Size: 13.59 A	Waterbody	Classification: A
Melville Ponds. Portsmouth Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
					Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
	f a line from buoy (FLR) bell 14 16 at Coddington point and its e	DE-01A to Bishop Rock and southeast of a line fro stension to the end of the Coddington Co		Waterbody	Classification: SB
L .				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	<u>TMDL Schedule</u>	Date	Comment
Fish and Wildlife habitat	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2016		Hazardous waste site remediation underway. ROD expected fall 2014.
Fish Consumption	Fully Supporting				
Tsii Consumption	Fully Supporting				
Primary Contact Recreation	Tuny Supporting				
-	Fully Supporting				

Newport Harbor/Coddington RI0007030E-01D Cove

Coaster's Harbor waters east of a line from Bishop Rock to the northernmost point of Coaster's Harbor Island and north of the Training Station Road bridge. Newport

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Sediment Bioassays for Estuarine and Marine Water	2016		Hazardous waste site remediation underway. ROD established fall 2010 requires monitoring of sediments.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Controlled Relay and Depuration	Fully Supporting				
Mt. Hope Bay	RI0007032	2E-01A	Waterbody Size: 4.276 S	Waterbody	Classification: SA

Waterbody Size: 0.147 S

Waterbody Classification: SB

Mt. Hope Bay south and west of the MA/RI border, and east of a line from Touisset Point to the channel marker buoy R "4" and south and east of a line from buoy R "4" to the southernmost landward end of Bristol Point and south of a line from Bristol Point to the Hog Island shoal light, to the southwestern extremity of Arnold Point in Portsmouth where a RIDEM range marker has been established; and west of a line from the end of Gardiner's Neck Road, Swansea to buoy N"2, through buoy C"3" to Common Fence Point, Portsmouth, excluding the waters defined in RI0007032E-01E. Warren, Portsmouth

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Fishes Bioassessments			NPDES permit for Brayton Point issued. Category 4B.
		Nitrogen (Total)	2018		Pending EPA/MA action.
		Oxygen, Dissolved	2018		Pending EPA/MA action.
		Temperature, water			NPDES permit for Brayton Point issued. Category 4B.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform		1/14/2010	

Mt. Hope Bay

RI0007032E-01B

Waterbody Size: 2.01 S

Waterbody Classification: SA

Mt. Hope Bay waters north and west of a line from the southernmost landward end of Bristol Point to buoy R "4" and west of a line from buoy R "4" to the DEM range marker on Touisset Point, and south of the Bristol Narrows. Bristol, Warren

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Fishes Bioassessments			NPDES permit for Brayton Point issued. Category 4B.
		Nitrogen (Total)	2018		Pending EPA/MA action.
		Oxygen, Dissolved	2018		Pending EPA/MA action.
		Temperature, water			NPDES permit for Brayton Point issued. Category 4B.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Shellfish Consumption	Not Supporting	Fecal Coliform		1/14/2010	
Mt. Hope Bay	RI0007032	2E-01C	Waterbody Size: 3.047 S	Waterbody	Classification: SB

Mt. Hope Bay waters south of a line from Borden's Wharf, Tiverton, to buoy R "4" and west of a line from buoy R "4" to Brayton Point, Somerset, MA., and east of a line from the end of Gardiner's Neck Road in Swansea to buoy N "2", through buoy C "3" to Common Fence Point, Portsmouth, and north of a line from Portsmouth to Tiverton at the railroad bridge at "The Hummocks" on the northeast point of Portsmouth. Portsmouth, Tiverton

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Fishes Bioassessments			NPDES permit for Brayton Point issued. Category 4B
		Nitrogen (Total)	2018		Pending EPA/MA action.
		Oxygen, Dissolved	2018		Pending EPA/MA action.
		Temperature, water			NPDES permit for Brayton Point issued. Category 4B.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		1/14/2010	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		1/14/2010	
Shellfish Controlled Relay and Depuration	Fully Supporting				

Mt. Hope Bay

RI0007032E-01D

Waterbody Size: 0.483 S

Waterbody Classification: SB1

Mt. Hope Bay waters south and west of the MA-RI border and north of a line from Borden's Wharf, Tiverton to buoy R "4" and east of a line from buoy R "4" to Brayton Point in Somerset, MA. Tiverton.

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Fishes Bioassessments			NPDES permit for Brayton Point issued. Category 4B.
		Nitrogen (Total)	2018		Pending EPA/MA action.
		Oxygen, Dissolved	2018		Pending EPA/MA action.
		Temperature, water			NPDES permit for Brayton Point issued. Category 4B.
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		1/14/2010	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		1/14/2010	

Bailey's Brook & Tribs

Bailey's Brook and tributaries. Middletown

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
		Lead	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Public Drinking Water Supply	Not Assessed				
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	

Maidford River	RI0007035R-02A	Waterbody Size: 3.213 M	Waterbody Classification: AA	
Maidford River from the headwaters to	o the confluence with Paradise Brook. Middletown			

TMDL Approval Date TMDL Schedule **Comment** Use Description Use Attainment Status Cause/Impairment Fish and Wildlife habitat Not Supporting Benthic-Macroinvertebrate 2018 Bioassessments Lead 2018 Fish Consumption Not Assessed Primary Contact Recreation Not Supporting Fecal Coliform 9/22/2011 Public Drinking Water Supply Not Assessed Secondary Contact Recreation Not Supporting Fecal Coliform 9/22/2011 Waterbody Size: 1.092 M RI0007035R-02B Waterbody Classification: AA

Maidford River

Maidford River from the confluence with Paradise Brook to the end of the river at Third Beach, Middletown.

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		9/22/2011	
Public Drinking Water Supply	Not Assessed				
Secondary Contact Recreation	Not Supporting	Fecal Coliform		9/22/2011	
Lawton Brook	RI000703	5R-04	Waterbody Size: 0.379 M	Waterbody Cla	ssification: A
Lawton Brook. Portsmouth				TMDL Approval	

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Narragansett Basin					
Jamestown Brook	RI000703	6R-01	Waterbody Size: 1.432 M	Waterbody Classif	ication: AA
Jamestown Brook. Jamestown				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper	2018		
		Iron	2018		
		Lead	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		9/22/2011	
Public Drinking Water Supply	Not Assessed				
Secondary Contact Recreation	Not Supporting	Fecal Coliform		9/22/2011	

Pawcatuck River Ba	sin				
Tidal Pawcatuck Riv	er RI0008033	8E-01A	Waterbody Size: 0.321 S	Waterbody	Classification: SB1
Tidal Pawcatuck River from Rout	e 1 highway bridge to Pawcatuc	k Rock. Westerly			
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Oxygen, Dissolved	2020		
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Supporting	Fecal Coliform		12/1/2010	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		12/1/2010	
Chapman Pond	RI0008039	9L-01	Waterbody Size: 172.8 A	Waterbody	Classification: B
Chapman Pond. Westerly					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Eurasian Water Milfoil, Myriophyllum spicatum Lead Non-Native Aquatic Plants	2018		No TMDL required. Impairment is not a pollutant. No TMDL required. Impairment is not a
Fish Consumption	Fully Supporting				pollutant.
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Hundred Acre Pond	RI000803	9L-13	Waterbody Size: 84.16 A	Waterbody	Classification: B
Hundred Acre Pond. South King	stown				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Supporting	Oxygen, Dissolved Mercury in Fish Tissue	2016	12/20/2007	pontanit.
Primary Contact Recreation	Fully Supporting				

White Brook Pond	RI0008039L-26		Waterbody Size: 6.4 A	Waterbody Classifi	ication: B
White Brook Pond. Richmond Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Alewife Brook	RI0008039R-01		Waterbody Size: 1.081 M	Waterbody Classification: B	
Alewife Brook. South Kingstow	n				
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper	2018		
		Iron	2018		
Fish Consumption	Not Assessed	Lead	2018		
Primary Contact Recreation Secondary Contact Recreation	Fully Supporting Fully Supporting				
Ashaway River & Tr	ribs RI000803	9R-02A	Waterbody Size: 1.774 M	Waterbody Classifi	ication: A
·		away Road highway bridge. Hopkinto	n		
	Ç	,,		TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Cadmium	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	

Pawcatuck River Basin **Chipuxet River & Tribs** RI0008039R-06B Waterbody Size: 8.161 M Waterbody Classification: B Chipuxet River and tributaries from outlet of Yawgoo Mill Pond to the entrance of Hundred Acre Pond. Exeter, South Kingstown TMDL Approval Date Use Description Use Attainment Status Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat Not Supporting Cadmium 2018 2018 Copper Iron 2018 Fish Consumption Not Assessed Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting Waterbody Size: 1.974 M Waterbody Classification: B RI0008039R-14 **Mile Brook**

Mile Brook. Hopkinton

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Iron	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Pawcatuck River &	Tribs RI000803	9R-18B	Waterbody Size: 2.156 M	Waterbody Classification: B1	

Pawcatuck River & Tribs

RI0008039R-18B

Pawcatuck River and tributaries from the dam at Kenyon to the beginning of the Carolina Mill Pond in Carolina. Richmond, Charlestown

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Whole Effluent Toxicity (WET)	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	

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Pawcatuck River Basin

Pawcatuck River & Tribs

RI0008039R-18D

Waterbody Size: 5.529 M

Waterbody Classification: B1

Pawcatuck River and tributaries from the Bradford Dyeing Associates WWTF discharge point to the Route 3 bridge crossing. Hopkinton, Westerly

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2014		
Secondary Contact Recreation	Not Supporting	Enterococcus	2014		
Pawcatuck River &	Tribs RI000803	9R-18E	Waterbody Size: 13.76 M	Waterbody Clas	ssification: B

RI0008039R-18E Waterbody Size: 13.76 M **Pawcatuck River & Tribs**

Pawcatuck River and tributaries from the Route 3 bridge crossing to the Route 1 highway bridge at the junction of Main Street and Broad Street in Westerly. Westerly

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Iron	2018		
		Lead	2018		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2014		
Secondary Contact Recreation	Not Supporting	Enterococcus	2014		

Perry Healy Brook & Tribs RI0008039R-19

Perry Healy Brook and tributaries. Westerly, Charlestown

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper	2018		
		Lead	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Pawcatuck River Basin

Queens Fort Brook & Tribs RI0008039R-31B

Waterbody Size: 4.219 M

Waterbody Classification: B

Queens Fort Brook and tributaries from 3/4 mile south of Victory Highway (Route 102) to the confluence with the Queens River. Exeter

se Description sh and Wildlife habitat	Use Attainment Status Not Supporting	<i>Cause/Impairment</i> Iron Lead Turbidity	TMDL Schedule 2018 2018 2018	TMDL Approval Date	Comment
sh Consumption rimary Contact Recreation econdary Contact Recreation	Not Assessed Fully Supporting Fully Supporting	rubulty	2018		
Deep Pond (Exeter)	RI0008040	DL-12	Waterbody Size: 17.39 A	Waterbody Classifi	cation: A
Deep Pond. Exeter	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
sh and Wildlife habitat	Not Supporting	Oxygen, Dissolved Phosphorus (Total)	2016 2016		
sh Consumption	Not Assessed	1 ()			
rimary Contact Recreation	Not Assessed				
econdary Contact Recreation	Not Assessed				
Acid Factory Brook &		DR-01	Waterbody Size: 4.298 M	Waterbody Classifi	cation: A
se Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
sh and Wildlife habitat	Fully Supporting				
sh Consumption	Not Assessed				
rimary Contact Recreation	Not Supporting	Enterococcus	2014		
econdary Contact Recreation	Not Supporting	Enterococcus	2014		

Pawcatuck River Basin RI0008040R-04A Waterbody Size: 5.308 M Waterbody Classification: B **Canonchet Brook & Tribs** Canonchet Brook headwaters including tributaries, excluding all ponds, to Route 3 in Hopkinton. Hopkinton TMDL Approval Date Use Description Use Attainment Status Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat 2018 Not Supporting Copper Iron 2018 Fish Consumption Not Assessed Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting RI0008040R-04B Waterbody Size: 4.555 M Waterbody Classification: B **Canonchet Brook & Tribs** Canonchet Brook and tributaries from Route 3 in Hopkinton to the confluence with the Wood River. Hopkinton **TMDL** Approval Cause/Impairment Date Use Description **Use Attainment Status** TMDL Schedule **Comment** Fish and Wildlife habitat Not Supporting Cadmium 2018 Copper 2018 2018 Lead **Fish Consumption** Not Assessed Primary Contact Recreation 9/22/2011 Not Supporting Enterococcus Secondary Contact Recreation Not Supporting Enterococcus 9/22/2011 RI0008040R-05 Waterbody Size: 3.909 M Waterbody Classification: A **Coney Brook & Tribs** Coney Brook and tributaries. West Greenwich **TMDL** Approval Date Use Description **Use Attainment Status** Cause/Impairment TMDL Schedule **Comment** Fish and Wildlife habitat 2018 Not Supporting Copper Fish Consumption Not Assessed Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting

Pawcatuck River Basin

Wood River & Tribs

RI0008040R-16D

Waterbody Size: 0.725 M

Waterbody Classification: B

Wood River and tributaries from the Alton Pond dam to the confluence with the Pawcatuck River. Richmond, Hopkinton, Charlestown

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Ambient Bioassays	2018		Comment
	II 5	Chronic Aquatic Toxicity			
		Benthic-Macroinvertebrate Bioassessments	2018		
		Copper	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Baker Brook	RI000804	0R-18	Waterbody Size: 1.359 M	Waterbody Classifi	ication: B
Baker Brook. Richmond					
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Fully Supporting				
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2014		
Secondary Contact Recreation	Not Supporting	Enterococcus	2014		
Canob Brook	RI000804	0R-23	Waterbody Size: 0.292 M	Waterbody Classifi	ication: B
Canob Brook. Richmond					
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Iron	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Pawtuxet River Basin

Pawtuxet River South Branch RI0006014R-04B

Waterbody Size: 5.165 M

Waterbody Classification: B1

Waterbody Classification: A

Pawtuxet River South Branch from the Quidnick Dye Mill dam to its confluence with the North Branch of the Pawtuxet River. Coventry, West Warwick, Warwick

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Lead	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Secondary Contact Recreation	Not Supporting	Enterococcus		9/22/2011	
Unnamed Trib #3 to Branch Pawtuxet Riv		4R-08	Waterbody Size: 0.617 M	Waterbody Cla	assification: B
Unnamed Tributary #3 to South E	Branch Pawtuxet River. Coventry	,		TMDL Approval	

Use Description Fish and Wildlife habitat	Use Attainment Status Not Supporting	Cause/Impairment	TMDL Schedule2018	Date	Comment
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Pawtuxet River North Branch RI0006016R-06A

Waterbody Size: 0.485 M

waterbody Size. 0.485 W

Pawtuxet River North Branch from Gainer Memorial Dam to 0.5 mile downstream. Scituate

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Assessed				
Fish Consumption	Not Supporting	Mercury in Fish Tissue	2022		
Primary Contact Recreation	Not Assessed				
Secondary Contact Recreation	Not Assessed				

Pawtuxet River Basin

Pawtuxet River North Branch RI0006016R-06B

Waterbody Size: 3.73 M

Waterbody Classification: B

Pawtuxet River North Branch from 0.5 mile downstream of the Gainer Memorial Dam to the Arkwright Dam. Scituate, Cranston, Coventry

Use Description Fish and Wildlife habitat Fish Consumption	Use Attainment Status Not Supporting Not Supporting	<i>Cause/Impairment</i> Lead Mercury in Fish Tissue	<i>TMDL Schedule</i> 2018 2022	TMDL Approval Date	Comment
Primary Contact Recreation Secondary Contact Recreation	Fully Supporting Fully Supporting				
Three Ponds	RI000601	7L-02	Waterbody Size: 21.42 A	Waterbody	Classification: B
Three Ponds. Warwick Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Copper Lead Non-Native Aquatic Plants	2018 2018		No TMDL required. Impairment is not a pollutant.
Fish Consumption Primary Contact Recreation	Not Assessed Not Assessed	Oxygen, Dissolved Phosphorus (Total)	2016 2016		
Secondary Contact Recreation Mashapaug Pond	Not Assessed RI000601	7L-06	Waterbody Size: 76.75 A	Waterbody	Classification: B
Mashapaug Pond. Providence	<u>Use Attainment Status</u>	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Excess Algal Growth Oxygen, Dissolved Phosphorus (Total)		9/27/2007 9/27/2007 9/27/2007	
Fish Consumption	Not Supporting	PCB in Fish Tissue	2022		
Primary Contact Recreation Secondary Contact Recreation	Not Supporting Not Supporting	Fecal Coliform Fecal Coliform		9/22/2011 9/22/2011	

Pawtuxet River Basin Waterbody Size: 19.47 A Waterbody Classification: B **Fenner Pond** RI0006017L-08 Fenner Pond. Cranston TMDL Approval Date Use Description Cause/Impairment TMDL Schedule **Comment Use Attainment Status** Fish and Wildlife habitat Not Supporting Phosphorus (Total) 2016 Fish Consumption Not Assessed Primary Contact Recreation Fully Supporting Secondary Contact Recreation Fully Supporting Waterbody Size: 11.02 M Waterbody Classification: B1 **Pawtuxet River Main Stem** RI0006017R-03

Pawtuxet River from the confluence of the North and South Branches at Riverpoint to the Pawtuxet Cove Dam at Pawtuxet. West Warwick, Warwick, Cranston

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
		Cadmium	2018		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Phosphorus (Total)	2018		Determine need for TMDL post WWTF upgrades.
Fish Consumption	Not Supporting	Mercury in Fish Tissue	2022		
Primary Contact Recreation	Not Supporting	Enterococcus	2018		
Secondary Contact Recreation	Not Supporting	Enterococcus	2018		
Three Pond Brook	RI000601	7R-04	Waterbody Size: 2.045 M	Waterbody	Classification: B
Three Pond Brook. Warwick					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Lead	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Assessed				
Secondary Contact Recreation	Not Assessed				

Simmons Reservoir	RI000601	8L-03	Waterbody Size: 109 A	Waterbody Classifi	cation: B
Simmons Reservoir. Johnston Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total) Turbidity	2020 2020		
Fish Consumption	Fully Supporting				
Primary Contact Recreation	Not Assessed				
Secondary Contact Recreation	Not Assessed				
Print Works Pond	RI000601	8L-05	Waterbody Size: 26.26 A	Waterbody Classifi	cation: B
Print Works Pond. Cranston					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Chloride Lead	2018 2018		
Fish Consumption	Not Assessed	Total Suspended Solids (TSS)	2018		
Primary Contact Recreation	Not Supporting	Fecal Coliform	2018		
Secondary Contact Recreation	Not Supporting	Fecal Coliform	2018		
Blackamore Pond	RI000601	8L-06	Waterbody Size: 20.44 A	Waterbody Classifi	cation: B
Blackamore Pond. Cranston					
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Pawtuxet River Basin

RI0006018R-01 Cedar Swamp Brook & Tribs

Waterbody Size: 3.469 M Waterbody Classification: B Cedar Swamp Brook and tributaries. Johnston TMDL Approval Date TMDL Schedule Use Description **Use Attainment Status** Cause/Impairment **Comment** Fish and Wildlife habitat Not Supporting 2020 Iron Oxygen, Dissolved 2020 Fish Consumption Not Assessed Primary Contact Recreation Not Supporting Fecal Coliform 2020 Secondary Contact Recreation Fecal Coliform 2020 Not Supporting **Pocasset River & Tribs** RI0006018R-03A Waterbody Size: 17.37 M Waterbody Classification: B

Pocasset River and tributaries from the headwaters to the inlet of Printworks Pond. Cranston, Johnston

			1	TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
		Chloride	2018		
		Copper	2018		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2018		
Secondary Contact Recreation	Not Supporting	Enterococcus	2018		
Pocasset River & Tr	ibs RI000601	8R-03B	Waterbody Size: 4.462 M	Waterbody	Classification: B

Pocasset River and tributaries from the outlet of Printworks Pond to the confluence with the Pawtuxet River. Cranston

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2018		
Secondary Contact Recreation	Not Supporting	Enterococcus	2018		

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Pawtuxet River Basin Waterbody Size: 2.79 M Waterbody Classification: B **Simmons Brook & Tribs** RI0006018R-04 Simmons Brook and tributaries. Johnston TMDL Approval Use Description Cause/Impairment Date TMDL Schedule **Comment** Use Attainment Status Fish and Wildlife habitat Not Supporting Benthic-Macroinvertebrate 2020 Bioassessments Fish Consumption Not Assessed Primary Contact Recreation Not Supporting 9/22/2011 Enterococcus Secondary Contact Recreation Not Supporting 9/22/2011 Enterococcus

Ten Mile River Basin

Turner Reservoir (CentralRI0004009L-01AWaterbody Size: 129.7 AWaterbody Classification: B1Pond)

Turner Reservoir North of Newman Avenue Dam (Central Pond). East Providence

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Aluminum	2012		
		Cadmium	2012		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Oxygen, Dissolved	2012		
		Phosphorus (Total)	2012		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Turner Reservoir	RI0004009	9L-01B	Waterbody Size: 85.08 A	Waterbody	Classification: B
Turner Reservoir South of Newn	nan Avenue Dam. East Provider	ce			
				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Aluminum	2012		
Fish and Wildlife habitat	Not Supporting	Aluminum Cadmium	2012 2012		
Fish and Wildlife habitat	Not Supporting				No TMDL required. Impairment is not a pollutant.
Fish and Wildlife habitat	Not Supporting	Cadmium			1 1
Fish and Wildlife habitat	Not Supporting	Cadmium Non-Native Aquatic Plants	2012		1 1
	Not Supporting Not Assessed	Cadmium Non-Native Aquatic Plants Oxygen, Dissolved	2012 2012		1 1
Fish and Wildlife habitat Fish Consumption Primary Contact Recreation		Cadmium Non-Native Aquatic Plants Oxygen, Dissolved	2012 2012		1 1
sh Consumption	Not Assessed	Cadmium Non-Native Aquatic Plants Oxygen, Dissolved	2012 2012		1 1

Ten Mile River Basin

Omega Pond	RI0004009	9L-03	Waterbody Size: 30.20 A	Waterbody Classif	ication: B
Omega Pond. East Providence Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Aluminum	2012		
		Cadmium	2012		
		Oxygen, Dissolved	2012		
		Phosphorus (Total)	2012		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform	2012		
Secondary Contact Recreation	Not Supporting	Fecal Coliform	2012		

Ten Mile River and tributaries from the MA-RI border to the inlet to Turner Reservoir North, including Slater Park Pond. Pawtucket

				TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Aluminum	2012		
		Cadmium	2012		
		Iron	2012		
		Lead	2012		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Phosphorus (Total)	2012		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		
Secondary Contact Recreation	Not Supporting	Enterococcus	2012		
		Fecal Coliform	2012		

Ten Mile River Basin

Ten Mile River & Tribs RI0004009R-01B

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Waterbody Size: 3.152 M

Waterbody Classification: B

Ten Mile River and tributaries downstream of Turner Reservoir South to the Omega Pond inlet. East Providence

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Aluminum	2012		
		Benthic-Macroinvertebrate Bioassessments	2016		
		Cadmium	2012		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				

Lake Washington	RI0005047L-04		Waterbody Size: 40.89 A	Waterbody Classification: B	
Lake Washington. Glocester Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Non-Native Aquatic Plants			No TMDL required. Impairment is not a
		Phosphorus (Total)	2016		pollutant.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Fully Supporting				
Secondary Contact Recreation	Fully Supporting				
Keach Brook & Trib	RI000504	7R-02	Waterbody Size: 5.232 M	Waterbody	Classification: B
Keach Brook & Trik Keach Brook and tributaries. Bu		7R-02	Waterbody Size: 5.232 M		Classification: B
Keach Brook and tributaries. Bu		7R-02 Cause/Impairment	Waterbody Size: 5.232 M TMDL Schedule	Waterbody TMDL Approval Date	Classification: B <u>Comment</u>
	ırrillville			TMDL Approval	
Keach Brook and tributaries. Bu <i>Use Description</i>	urrillville <u>Use Attainment Status</u>	Cause/Impairment	TMDL Schedule	TMDL Approval	
Keach Brook and tributaries. Bu <i>Use Description</i>	urrillville <u>Use Attainment Status</u>	<i>Cause/Impairment</i> Cadmium	<i>TMDL Schedule</i> 2018	TMDL Approval	

Secondary Contact Recreation

Not Assessed

Lower Sprague Rese	ervoir RI0002007	7L-06	Waterbody Size: 25.12 A	Waterbody	Classification: B
Lower Sprague Reservoir. Smit	hfield			TMDL Approval	
Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	Date	Comment
Fish and Wildlife habitat	Not Supporting	Phosphorus (Total)	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Assessed				
Secondary Contact Recreation	Not Assessed				
Latham Brook & Tr		7R-05	Waterbody Size: 3.974 M	Waterbody	Classification: B
Latham Brook & Tr Latham Brook and tributaries. S Use Description		7R-05 Cause/Impairment	Waterbody Size: 3.974 M TMDL Schedule	Waterbody TMDL Approval Date	Classification: B
Latham Brook and tributaries. S	mithfield		·	TMDL Approval	<i>Comment</i> ROD in place and remedial action underway for Davis Industrial landfill.
Latham Brook and tributaries. S Use Description	mithfield <u>Use Attainment Status</u>	<i>Cause/Impairment</i> Ambient Bioassays	TMDL Schedule	TMDL Approval	<i>Comment</i> ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate
Latham Brook and tributaries. S <i>Use Description</i> Fish and Wildlife habitat	mithfield <u>Use Attainment Status</u> Not Supporting	<i>Cause/Impairment</i> Ambient Bioassays Chronic Aquatic Toxicity Benthic-Macroinvertebrate	<u>TMDL Schedule</u> 2018	TMDL Approval	<i>Comment</i> ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate remediation. ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate
Latham Brook and tributaries. S <u>Use Description</u> Fish and Wildlife habitat Fish Consumption	mithfield <u>Use Attainment Status</u> Not Supporting Not Assessed	<i>Cause/Impairment</i> Ambient Bioassays Chronic Aquatic Toxicity Benthic-Macroinvertebrate Bioassessments Lead	<u>TMDL Schedule</u> 2018 2018	TMDL Approval Date	<i>Comment</i> ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate remediation. ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate
Latham Brook and tributaries. S <i>Use Description</i> Fish and Wildlife habitat	mithfield <u>Use Attainment Status</u> Not Supporting	<i>Cause/Impairment</i> Ambient Bioassays Chronic Aquatic Toxicity Benthic-Macroinvertebrate Bioassessments	<u>TMDL Schedule</u> 2018 2018	TMDL Approval	<i>Comment</i> ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate remediation. ROD in place and remedial action underway for Davis Industrial landfill. ROD amended fall 2010 for groundwate

Woonasquatucket River Basin

Woonasquatucket River & RI0002007R-10B Tribs

Woonasquatucket River including tributaries from the Georgiaville Pond outlet to the Smithfield WWTF discharge point at Esmond Mill Drive. Smithfield

Fish and Wildlife habitat	Use Attainment Status Not Supporting	Cause/Impairment Mercury in Water Column	<u>TMDL Schedule</u> 2022	Date	Comment
	Not Supporting	Non-Native Aquatic Plants	2022		No TMDL required. Impairment is not a pollutant.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	

Waterbody Size: 4.602 M

Waterbody Classification: B

Tribs

Woonasquatucket River and tributaries from the Smithfield WWTF discharge point at Esmond Mill Drive to the CSO outfall at Glenbridge Avenue in Providence. Smithfield, North Providence, Providence, Johnston

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
		Dioxin (including 2,3,7,8-TCDD)	2022		
		Mercury	2022		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Oxygen, Dissolved	2018		
		Polychlorinated biphenyls	2022		
Fish Consumption	Not Supporting	Dioxin (including 2,3,7,8-TCDD)	2022		
		Mercury in Fish Tissue	2022		
		PCB in Fish Tissue	2022		
Primary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	

Woonasquatucket River Basin

Woonasquatucket River RI0002

RI0002007R-10D

Waterbody Size: 3.572 M

Waterbody Classification: B1{a}

Woonasquatucket River from the CSO outfall at Glenbridge Avenue to the confluence with the Moshassuck River. Providence

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Benthic-Macroinvertebrate Bioassessments	2018		
		Copper		7/3/2007	
		Dioxin (including 2,3,7,8-TCDD)	2022		
		Lead		7/3/2007	
		Mercury	2022		
		Non-Native Aquatic Plants			No TMDL required. Impairment is not a pollutant.
		Oxygen, Dissolved	2018		
		Polychlorinated biphenyls	2022		
		Zinc		7/3/2007	
Fish Consumption	Not Supporting	Dioxin (including 2,3,7,8-TCDD)	2022		
		Mercury in Fish Tissue	2022		
		PCB in Fish Tissue	2022		
Primary Contact Recreation	Not Supporting	Enterococcus	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.
Secondary Contact Recreation	Not Supporting	Enterococcus	2022		Compliance with Consent Agreement for CSO abatement expected to negate need for TMDL.

1. Sandy Pond (South of Airport) (Little Pond) RI0007024L-01

• <u>Fecal Coliform</u> – Fecal coliform was originally listed as an impairment in 1992 when this was the indicator to evaluate primary and secondary contact use. The current primary and secondary contact indicator is Enterococcus. Recent Enterococcus data collected in Sandy Pond by the URI Watershed Watch Program indicates that the primary and secondary contact uses are being met with the attainment of the Enterococcus geometric mean criteria of 54 colonies/100 ml.

Date	Enterococci Reported Result (colonies/100 ml)	Annual Geometric means (colonies/100 ml)
10/15/2011	25.4	
9/6/2011	12.4	21.00
7/17/2011	5.0	21.00
5/10/2011	123.6	
10/14/2010	9.8	
9/2/2010	4.1	7.31
7/17/2010	11.1	7.51
5/10/2010	6.4	
10/14/2009	5.3	
9/8/2009	3.0	4.09
7/17/2009	4.2	4.09
5/1/2009	4.2	
10/21/2008	1.0	
9/19/2008	36.4	4.95
8/16/2008	3.1	4.90
5/10/2008	5.3	
Geometric mean	7.47	

2. Unnamed Tribs to Slack Reservoir (RI0002007R-15)

• <u>Enterococcus</u> – These tributaries were first listed as impaired for Enterococcus on the 2008 303(d) List. Review of recent data collected at 4 stations by the URI Watershed Watch Program indicates that Enterococcus is now meeting the primary and secondary recreational use geometric mean criteria of 54 colonies/100 ml at each station.

Station WW123		
Date	Reported Result (colonies/100 ml)	Annual Geometric Means (colonies/100 ml)
10/15/2011	15	
9/6/2011	3.1	3.60
5/10/2011	1.0	
10/14/2010	2.0	18.64
7/5/2010	173.8	10.04
10/2/2008	5.2	
8/15/2008	32.7	2 5 9
7/10/2008	9.7	3.58
5/9/2008	0.1	
10/1/2007	6.1	
7/21/2007	9.7	3.90
5/10/2007	1.0	
Geometric mean	4.82	

Station WW123

Station WW124

Date	Reported Result (colonies/100 ml)	Annual Geometric Means (colonies/100 ml)
10/15/2011	201	
9/6/2011	6.4	15.86
5/10/2011	3.1	
10/14/2010	2.0	
9/9/2010	3.1	9.15
7/15/2010	123.6	
10/2/2008	12.1	
8/15/2008	76.8	17.46
7/10/2008	13.5	17.40
5/9/2008	7.4	
10/1/2007	9.6	
7/21/2007	8.6	5.49
5/10/2007	2.0	
Geometric mean	11.26	

Unnamed Tribs to Slack Reservoir (RI0002007R-15) continued

Date	Reported Result (colonies/100 ml)	Annual Geometric Means (colonies/100 ml)
10/15/2011	47.8	
9/6/2011	4.2	8.54
5/10/2011	3.1	
10/14/2010	3.0	
9/9/2010	5.1	12.65
7/15/2010	132.2	
10/2/2008	21.6	
8/15/2008	29.0	9.39
7/10/2008	6.2	9.59
5/9/2008	2.0	
10/1/2007	9.4	
7/21/2007	24.7	10.65
5/10/2007	5.2	
Geometric mean	10.13	

Station WW125

Station WW126

Date	Reported Result (colonies/100 ml)	Annual Geometric Means (colonies/100 ml)
10/15/2011	59.1	
9/6/2011	6.4	12.53
5/10/2011	5.2	
10/14/2010	0.1	
9/9/2010	2.0	3.12
7/15/2010	151.8	
10/2/2008	82.0	
8/15/2008	124.9	25.89
7/10/2008	10.7	23.89
5/9/2008	4.1	
10/1/2007	9.6	
7/21/2007	4.1	1.58
5/10/2007	0.1	
Geometric mean	7.05	

3. Slater Park Pond (RI0004009L-02)

• Proposal to remove this as a separate WBID and incorporate the previously identified impairments associated with this area into the upper Ten Mile River segment. The Upper Ten Mile River (Waterbody ID#: RI0004009R-01A) extends from the MA/RI state line to the inflow of Central Pond also referred to as Turner Reservoir North (Figure 1). The segment is separated by a small impoundment, historically referred to as Slater Park Pond. In the early 1990s, as WBID#s were being assigned to the waters of the state under the RIDEM 305(b) Program, this small impoundment was assigned a lake WBID# (RI 0004009L-02). During this time, the identification of run-of-the river impoundments as lake waterbody types was made without field verification or any definition of what constituted a lake. In fact many run-of-the river impoundments across the state are *not* identified with separate lake WBID#s but as continuations of the river WBID#.

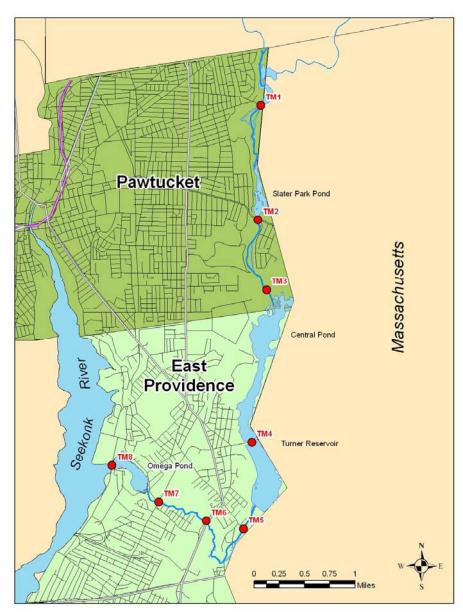


Figure 1. Lake and River Segments in the Ten Mile River Watershed.

Slater Park Pond, located in Pawtucket, RI, is a 24 acre run-of-the-river impoundment of the Ten Mile River. According to the RIDEM Dam Safety program's dam inventory

database, the impoundment was created in 1926 by the State of Rhode Island Metropolitan Park Commission, transforming a former large swampy area into a shallow impoundment. Recent staff surveys of the impoundment show it to have an average depth of approximately 3 feet. Water residence times of 2.7 days and 0.3 days, respectively were calculated under the 7Q10 and mean annual flows of 12 cfs and 107 cfs.

Based on water residence time, Slater Park Pond does not meet the definition of a "lake" as defined in EPA's April 2000 Nutrient Criteria Technical Guidance Manual for Lakes and Reservoirs ("natural and artificial impoundments with a surface area greater than 10 acres and a mean water residence time of 14 or more days."). Based on EPA guidance and recent staff field verification, RIDEM is correcting the identification of the run-of-the river area known as Slater Park Pond, from a lake to a river waterbody type. This run-of-the river area is now incorporated into the Upper Ten Mile River WBID# RI0004009R-01A.

The area of the river known as Slater Park Pond is currently on the 2010 303(d) List for: Total Aluminum, Total Iron, Dissolved Cadmium, Dissolved Lead, Total Phosphorus, and fecal coliform. The corrective action of incorporating the run-of-the river area known as Slater Park Pond into the Upper Ten Mile River segment results in:

- 1) Removal of waterbody ID# (RI0004009L-02) from the existing database and removal of all 303(d) pollutants associated with this waterbody segment,
- 2) The inclusion of the run-of-the river area known as Slater Park Pond into the Upper Ten Mile River segment (RI0004009R-01A) results in an increase of the linear extension of this waterbody ID# by the appropriate length of Slater Park Pond area (from 3.0934 miles to 3.6034 miles), and all data previously used to assess Slater Park Pond would be transferred to the Upper Ten Mile River segment,
- 3) The inclusion of data from Slater Park Pond into the Upper Ten Mile River segment (RI0004009R-01A) will result in the addition of the following impairments:
 - a. The addition of fecal coliform impairment to Upper Ten Mile,
 - b. The addition of total phosphorus as an impairment to the Upper Ten Mile River. It has been determined that portions of the Upper Ten Mile River, namely the run-of-the river area historically referred to as Slater Park Pond, contain undesirable and/or nuisance aquatic algal growth. Some species of algae found are associated with cultural eutrophication. This information has been determined to exceed the state's narrative nutrient criteria for freshwater rivers.

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Response to Comments Received on the Draft 2012 303(d) List

(Note that in the interest of document brevity, comments may have been paraphrased and/or excerpted from original comments.)

1. The Center for Biological Diversity (CBD) requests that Rhode Island identify its coastal waters as threatened or impaired under section 303(d) of the Clean Water Act. Rhode Island should list its ocean water segments as impaired water bodies as required by section 303(d) of the Clean Water Act because existing pollution controls are insufficient for ocean waters to meet Rhode Island's water quality standards. 33 U.S.C. § 1313(d).

DEM Response

RIDEM acknowledges ocean acidification (OA) as an important issue and while the literature cited by CBD clearly define the concerns and science available on the topic of OA, they do not provide sufficient information demonstrating that Rhode Island's marine waters are failing to attain (or will not be in attainment by the next listing cycle) Rhode Island's water quality standards, including those for protection of pH, marine or aquatic life use, and antidegradation. CBD did not submit any data that showed any exceedances of water quality standards, nor information showing that the state's aquatic and marine life uses nor any other designated uses were not being met. Furthermore, the CBD comments are not clear which waters are the focus of the antidegradation concerns nor indicated which components of the antidegradation policy are not in compliance with Rhode Island's water quality standards. Nevertheless, available water quality data (discussed below) do not suggest that existing uses in Rhode Island's marine waters are not being met.

At this time, Rhode Island does not have data available to characterize short-term marine pH diurnal and seasonal variability or to quantify a normally occurring pH "baseline" necessary to identify variation from natural and any long term trends for the state's ocean waters. However, Rhode Island does have data available for Narragansett Bay. Review of Narragansett Bay data indicated that while there is inter-annual variability and seasonal fluxes in pH, there is no trend of increasing nor decreasing pH levels. Furthermore, the primary driving forces behind the Narragansett Bay inter-annual and seasonal fluxes in pH are from phytoplankton blooms and salinity changes due to freshwater loadings. Details are provided below.

A network of fixed site monitoring stations is maintained throughout Narragansett Bay that provide high resolution temporal data. The stations are located strategically to transect the length of Narragansett Bay and serve as sentinels of changing conditions. These stations measure near surface and near bottom pH, temperature, dissolved oxygen, chlorophyll, and salinity at 15 minute intervals where applicable. Buoy stations are deployed from May-October, concentrating on monitoring the summer months (June-September). The land-based stations operate year-round. For pH assessments, all 12 bay

stations were analyzed on a summer seasonal basis and three land-based, year round stations were also examined for changes in pH levels.

For the seasonal analysis, since stations were added to the network over the course of several years (2001-2008), each location was examined individually. Seasonal means, maximum, and minimum levels were calculated from June 1- September 30 for each year between 2001 and 2011, where data are available. The results show that the means at each station fall within Rhode Island's saltwater pH criteria (6.5-8.5), and with the exception of one station in the Seekonk River affected by freshwater inflows during the springtime flood of 2010, all individual data points are in fact above a pH of 6.5. pH varies inter-annually and by station location. As suggested in the literature, several factors, such as chlorophyll blooms and salinity levels appear to be affecting pH levels such that pH is increased during a phytoplankton bloom and decreased when freshwater is introduced because freshwater is more acidic than seawater (Oczkowski, et.al, 2010). The headwaters of the bay have an influx of freshwater delivering nutrients to the bay. As a result, phytoplankton biomass levels tend to have a north to south gradient of high to low bloom concentrations. Conversely, there is a north to south gradient of low to high salinity in Narragansett Bay (Oviatt, 2002). pH ranges follow these observed gradients with the uppermost station (Phillipsdale located in the Seekonk River) showing the largest flux in pH with an average standard deviation of 0.45 and the station closest to the mouth of the Bay with Rhode Island Sound (located at GSO dock) having the lowest variability with a 0.10 standard deviation. Furthermore, high seasonal pH maximums tracked with high chlorophyll maximums, and years with the lowest salinities tracked the years with the lowest pH minimums indicating that the inter-annual variability of pH levels in Narragansett Bay are predominately driven by salinity and phytoplankton changes. In addition, a general increasing pH trend was not observed during analysis of summer seasonal data from any of the stations in the mesohaline region of Narragansett Bay (Phillipsdale in the Seekonk River and Bullock Reach in the Providence River) as have been observed in Chesapeake Bay (Waldbusser et al. 2010).

Three stations were available for long-term continuous analysis of pH. These are landbased stations located at the western edge of Greenwich Bay (GB), South of Prudence Island on the East Passage (TW), and on the western side of the West Passage near the mouth of the Bay at the GSO dock (GD). These stations were added at different times over the course of the history of the continuous monitoring network. The GSO dock station has the longest record dating back to 1996. Evaluation of all the daily pH values over the course of this time period shows the seasonal trends in pH. Peak pH occurs during the winter/spring of each year at the GSO dock. This area is also subject to winter/spring blooms depending upon environmental factors, such as temperature <3.5°C (Oviatt, 2002). Chlorophyll levels and increased pH values are correlated. The GSO dock station generally has the least season variability when comparing all 3 stations. One exception occurred during a major flood event in October 2005. There was a large inflow of freshwater during this month that may have attributed to the low pH readings. Overall, at this time based on the available data, there is no evidence of a decline in pH in any area of Narragansett Bay, nor do the data demonstrate non-attainment of Rhode Island marine quality standards.

Data used in the analyses discussed above are available on the RIDEM website at <u>http://www.dem.ri.gov/bart/stations.htm</u>. Daily averages of the data can be found at <u>http://www.narrbay.org/chemical_data.htm</u>.

The Department is addressing nutrient loadings to Narragansett Bay with more stringent nitrogen limits established by RIPDES (Rhode Island Pollutant Discharge Elimination System) permits for major POTWs discharging to the Bay watershed. These permit limits are expected to reduce chlorophyll levels and also reduce pH maximums. The fixed network stations will remain in place for the near future allowing for the continued monitoring of chlorophyll and pH levels.

The articles by CBD also did not provide sufficient information to determine whether the marine pH criteria or aquatic life designated use are not being met. The majority of the articles that CBD cited were of a global nature which is at a geographic scale that cannot be used to determine the local condition of RI's waters. Those studies conducted along the United State's eastern coast are geographically dissimilar from Rhode Island and included no data applicable to Rhode Island's waters. Other cited biological studies were laboratory experiments which do not necessarily represent local populations or conditions in Rhode Island.

However, RIDEM/OWR will work with our marine fisheries colleagues to track research results monitoring changes in calcification rates and shellfish larvae survival rates within Narragansett Bay. As more knowledge on the issue of ocean acidification in coastal estuarine waters becomes available, along with studies conducted within and around Narragansett Bay, water quality assessments relating to pH and the aquatic life designated use will be further examined.

2. The marine pH water quality standard requires that the pH of all seawaters must be between "6.5 – 8.5 but not more than 0.2 units outside of the normally occurring range" (RI Water Quality Regulations Rule 8.D.(3)). This standard, however, may be insufficient to protect designated uses. Zeebe et al. (2008) highlighted the importance of addressing ocean acidification before seawater pH change exceeds the 0.2 unit water quality criterion recommended by the EPA (Zeebe et al. 2008). In light of this insufficiency and EPA's current review and possible revision of its marine pH criterion, Rhode Island should gauge the need to list waters due to ocean acidification on the 303(d) list by the impacts on water quality and marine life.

DEM Response

As noted in CBD's December 22, 2011 letter to RIDEM, EPA's November 15, 2012 memorandum to the states on Integrated Reporting and Listing Decisions Related to Ocean Acidification provides recommendations on state assessments, monitoring, and sources for more information on ocean acidification and assessment. The memorandum also reported on EPA's decision against revising the national marine pH criteria for aquatic life due to insufficient data based upon a review of a wide range of information received in response to a Notice of Data Availability on OA and marine pH water quality criteria.

EPA concluded that states need to continue to use their current marine pH criteria as a basis for 303(d) listing until additional OA criteria are adopted. RIDEM will continue to utilize the state adopted and EPA approved marine pH criteria for the 2012 assessments and 303(d) Listing.

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