STATE OF RHODE ISLAND

2008 303(d) LIST

LIST OF IMPAIRED WATERS

DRAFT

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				Reservoir - pa

NOTES:

NEW indicates a new waterbody impairment listing from the 2006 303(d) list

Parameters: Cu = copper; Cd = Cadmium; DO = dissolved oxygen; Fe = Iron; Hg = mercury; Pb = lead; TSS = Total Suspended Solids; Cl = Chlorides; BI= Biodiversity Impairment (includes Benthic Macroinv Ambient Bioassays – Chronic Aquatic Toxicity, Sediment Bioassays for Estuarine and Marine Waters);

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 laid out in the CWA, which requires all states to do the following:

1. Establish water quality standards (WQS) (including Water Use Classifications and class-specific water quality criteria) for the state's surface waters;
2. Monitor water quality conditions of the state's waters (i.e. lakes, ponds, rivers, streams, estuaries and other marine 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)) 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. 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), February 2007: http://www.dem.ri.gov/programs/benviron/water/quality/surfwq/pdfs/calm.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 not 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.

New integrated 305(b)/303(d) Report

Prior to 2008, DEM submitted the 305(b) State of the State's Waters Report and 303(d) List of Impaired Waters as separate documents. In 2001, the USEPA issued guidance (*2002 Integrated Water Quality Monitoring and Assessment Report Guidance, EPA, November 19, 2001)* for states to develop and submit an Integrated Water Quality Monitoring and Assessment Report (Integrated Report). This guidance recommends for the first time that states integrate their Section 305(b) water quality assessment report and their Section 303(d) Impaired Waters List into a single document. The Integrated Report is intended to provide a streamlined approach to assessing and reporting on water quality.

The new federal guidance results in a fundamentally different scope, organization, and options for communicating about water quality than previous guidance for these individual reports. Five new categories of assessment determination replace the old 305(b) assessment terminology (fully supporting, threatened, partially supporting, not supporting) and the 303(d) List Group format previously utilized by DEM. The new format provides five lists/categories of water quality assessment information, with Category 5 being the 303(d) list of impaired waters.

Assessments may result in different use support attainment status for the different designated uses for individual waterbodies. 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 Report 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 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 one of the following five assessment categories:

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 all water quality standards for all 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 any use 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.

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.

As described above, the first four 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 the entire list (Category 1-5 lists) is made available for public information and education purposes, RIDEM is seeking comments only on the Category 5 list (303(d) List of Impaired Waters).

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 listing. The primary source of data generated for assessments is developed from programs consistent with the RI Water Monitoring Strategy (http://www.ci.uri.edu/Projects/RI-Monitoring/Docs/DEM_WQ_Oct_14_05.pdf). There is a variety of data generated by programs outside of the Water Monitoring Strategy framework. The Department actively solicited submittal of such data and information for consideration in developing the 2008 305(b) water quality assessments and 303(d) Impaired Waters List. With release of the draft 2008 Integrated Lists for public review, the Department considers the 2008 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 2010 assessment cycle and development of the 2010 Integrated Report.

2008 303(d) List Overview

The 2008 303(d) List identifies waterbodies within the State, which are not currently meeting Rhode Island Water Quality Standards. This list has been compiled by DEM's Office of Water Resources (OWR) and is based upon the most recent comprehensive assessment of water quality conditions, described above.

All waters previously listed in the five Groups of the 2006 303(d) List were re-assessed in accordance with the CALM and Integrated Reporting format. With the new assessment and listing methodology and Integrated Report categories, some of the previous assessments of impairment may be revised and result in the placement of the waterbody in one of the first four categories (i.e., delisted from the 2008 303(d) List). For example, if a waterbody was listed in Group 5 for a cause of impairment which has an approved TMDL, as long as the waterbody does not have any other impairments still requiring a TMDL, that waterbody will now be placed in Category 4A (Impaired but TMDL has been approved). Following federal guidance, for the most part those waterbody impairments placed in Group 5 for a "control action functionally equivalent to a TMDL" now appear in Category 5 – and the schedule for TMDL development reflects the ongoing pollution abatement action and the plan to assess the need for a TMDL, upon its completion. 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 all 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.

The 303(d) list identifies impaired waterbodies and 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 reflects the priority given for TMDL development with consideration to shellfishing waters, drinking water supplies and other areas identified by the public as high priority areas.

TMDL Process Overview

The goal of DEM'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 nonpoint sources, such as septic systems and unchannelized runoff from agricultural and urbanized areas.

- Calculate current point and nonpoint source pollutant loads.
- 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 TMDL water quality target(s).
- Formally solicit and respond to public comments.
- Submit the draft TMDL to EPA for formal approval.

Public Participation in the TMDL Process

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. As such, 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.

DEM seeks input from stakeholders at key points in the TMDL development process. A public meeting is typically held at the beginning of the project to inform local officials, environmental groups, business people, property owners and other interested individuals of DEM's efforts to initiate the TMDL and to solicit their input. At the midpoint of the process, typically after supplemental water quality monitoring has been completed, another meeting may be held 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 public comment 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.

Broad Observations on the 2008 303(d) list

The 303(d) list reflects the dynamic process of water quality monitoring and restoration planning. Deletions from and additions to the list will occur as new monitoring data become available - reflecting whether water quality standards have or have not been met. The following broad observations about the 2008 303(d) list are offered to assist readers in understanding the changes from the 2006 list:

<u>Modifications of Terminology</u>

Moving to EPA's Integrated Format for reporting water quality assessments and impaired waters listings included the use of EPA's new National Assessment Database (ADB). Within this new database, a number of cause/impairment terms used in previous 303(d) listings, have been

changed. A general explanation of how the older 303(d) causes are now represented in the 2008 303(d) list is summarized below:

1. Biodiversity Impacts – More refined cause descriptions of the biological impairment are used in the Integrated Report format. This old term is now better characterized according to the type of biological data and evaluation that led to the listing. The new cause terms used in the 2008 List include: *Aquatic Macroinvertebrate Bioassessment; Benthic Macroinvertebrate Bioassessment; Sediment Toxicity Tests; Whole Effluent Toxicity (WET) Tests.*
2. Nutrients – Instead of this general term, the specific element causing the impairment is now listed. For freshwaters, *Total Phosphorus* is now listed as the cause of the impairment and for saltwaters *Total Nitrogen* is now listed as the cause of the impairment.
3. Pathogens – Instead of this general term, the cause of the impairment is now listed as *Enterococcus, fecal coliform* or *E. coli* to reflect the actual bacteria indicator that led to the listing.
4. Mercury – Listings for mercury impairments have been refined to characterize the media as fish tissue (*mercury in fish tissue*), water column (*mercury in water column*) or sediments (*mercury*).
5. Total Toxics and Unknown Toxicity – These general terms are now better characterized according to the type of biological data and evaluation that led to the listing. See the table below for specific waterbodies and listings.

Waterbody Name	Waterbody ID number	2006 cause	2008 cause
Allen's Harbor	RI0007027E-01A	Total Toxics	Sediment Bioassays for Estuarine and Marine Waters
East Passage	RI0007029E-01C	Unknown Toxicity	Sediment Bioassays for Estuarine and Marine Waters
Pawcatuck River	RI0008039R-18B	Unknown Toxicity	WET tests
Latham Brook	RI0002007R-05	Unknown Toxicity	Ambient Bioassays – Chronic Aquatic Toxicity
Wood River	RI0008040R-16D	Unknown Toxicity	Ambient Bioassays – Chronic Aquatic Toxicity
Newport Harbor/Coddington Cove	RI0007030E-01A	Total Toxics	Sediment Bioassays for Estuarine and Marine Waters
Newport Harbor/Coddington Cove	RI0007030E-01D	Total Toxics	Sediment Bioassays for Estuarine and Marine Waters

Observed Effects

The new Integrated Report format and ADB 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 an impairment. Such Observed Effects can include excess algal growth, chlorophyll a, taste and odor, color, sedimentation/ siltation, and noxious aquatic plants. These terms were used on the 2006 303(d) List as causes of impairment. In general, on the 2008 303(d) List, these terms have been moved from causes of impairment to Observed Effects for a number of waterbodies. (Note: Two deviations to this general rule exist: (1) for waterbodies where the TMDL has been approved by US EPA or has been completed (though not yet approved by US EPA) for this cause, it is maintained as a cause to represent that the TMDL has or will address the effect; (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 has been redefined as an Observed Effect, the nutrient related cause (Total Phosphorus or Total Nitrogen) has been maintained as a cause of impairment for the waterbody. The list below includes the waterbodies where a term previously characterized as a cause of impairment is now tracked as an Observed Effects in the ADB database.

Waterbody Name	Waterbody ID number	Observed Effect
Scott Pond	RI0001003L-01	Excess Algal Growth
Echo Lake (Pascoag Reservoir)	RI0001002L-03	Aquatic Plants - Native
Valley Falls Pond	RI0001003L-02	Excess Algal Growth
Almy Pond	RI0010047L-01	Excess Algal Growth
Sands Pond	RI0010046L-01	Taste and Odor
Saugatucket Pond	RI0010045L-01	Aquatic Plants - Native
Apponaug Cove	RI0007025E-01	Excess Algal Growth
Melville Ponds	RI0007029L-01	Excess Algal Growth
Prince's Pond (Tiffany Pond)	RI0007020L-06	Excess Algal Growth
Providence River	RI0007020E-01A	Excess Algal Growth
Sandy Pond (S. of Airport) (Little Pond)	RI0007024L-01	Excess Algal Growth
Seekonk River	RI0007019E-01	Excess Algal Growth
South Watson Pond	RI0007036L-02	Color
Warwick Pond	RI0007024L-02	Excess Algal Growth
Chapman Pond	RI0008039L-01	Aquatic Plants - Native
Hundred Acre Pond	RI0008039L-13	Aquatic Plants – Native, Excess Algal Growth
Fenner Pond	RI0006017L-08	Excess Algal Growth
Simmons Reservoir	RI0006018L-03	Sedimentation/Siltation, Excess Algal Growth
Slater Park Pond	RI0004009L-02	Excess Algal Growth
Lower Sprague Reservoir	RI0002007L-06	Excess Algal Growth
Woonasquatucket River & Tribs	RI0002007R-10C	Excess Algal Growth

Impairments Not Caused by a Pollutant

In some instances a waterbody may be considered impaired for causes that are not pollutants and therefore do not require a TMDL to address the impairment. Such causes include flow, aquatic plants – native and non-native aquatic plants, non-native fish, shellfish or zooplankton. These impairments have been identified for tracking purposes and will be addressed by other programs. It is noted that the Newport water supply reservoirs included in Group 4 (Assessments made based on insufficient data and/or data that is old) of the 2006 303(d) list which have no other causes of impairment, are now placed in Category 4C (Waters impaired but not by a pollutant) given that the original listing was based upon observed water level fluctuations and not bioassessment data.

Progress in Water Quality Restoration

Several waterbodies and waterbody impairments have been de-listed from the 2008 303(d) List for one of four reasons as outlined in the tables below. The four reasons for de-listing an impairment are:

- 4A – TMDL for the impairment has been completed and approved by EPA
- 4B – Other pollution control requirements are reasonably expected to result in attainment of the water quality standard associated with the impairment
- 4C – The impairment is not caused by a pollutant
- Water quality standard for the impairment is now being met

Causes De-listed Due To EPA Approval Of TMDL (4A)		
Waterbody Name	Waterbody ID number	Cause of Impairment
Sakonnet River	RI0010031E-01A	Fecal Coliform
The Cove, Island Park	RI0010031E-03B	Fecal Coliform
Greenhill Pond	RI0010043E-02	Fecal Coliform
Ninigret Pond	RI0010043E-04B	Fecal Coliform
Factory Pond Stream & Tribs	RI0010043R-02	Fecal Coliform
Teal Pond Stream	RI0010043R-04	Fecal Coliform
Pettaquamscutt River	RI0010044E-01A	Fecal Coliform
Pettaquamscutt River	RI0010044E-01B	Fecal Coliform
Crooked Brook	RI0010044R-03	Fecal Coliform
Mumford Brook	RI0010044R-10	Fecal Coliform
Indian Lake	RI0010045L-04	Mercury in Fish Tissue
Indian Run Brook & Tribs	RI0010045R-02	Fecal Coliform
Mitchell Brook	RI0010045R-03A	Fecal Coliform
Mitchell Brook	RI0010045R-03B	Fecal Coliform
Rocky Brook & Tribs	RI0010045R-04	Fecal Coliform
Saugatucket River & Tribs	RI0010045R-05B	Fecal Coliform
Almy Pond	RI0010047L-01	Total Phosphorus
Brickyard Pond	RI0007020L-02	Dissolved Oxygen, Total Phosphorus
Barrington River	RI0007021E-01A	Fecal Coliform
Runnins River & Tribs	RI0007021R-01	Fecal Coliform
Palmer River	RI0007022E-01A	Fecal Coliform
Warwick Pond	RI0007024L-02	Dissolved Oxygen, Total Phosphorus
Apponaug Cove	RI0007025E-01	Fecal Coliform
Brushneck Cove	RI0007025E-02	Fecal Coliform
Buttonwoods Cove	RI0007025E-03	Fecal Coliform
Greenwich Bay	RI0007025E-04A	Fecal Coliform
Greenwich Bay	RI0007025E-04B	Fecal Coliform
Greenwich Cove	RI0007025E-05A	Fecal Coliform
Warwick Cove	RI0007025E-06A	Fecal Coliform
Warwick Cove	RI0007025E-06B	Fecal Coliform

Causes De-listed Due To EPA Approval Of TMDL (4A) (continued)		
Waterbody Name	Waterbody ID number	Cause of Impairment
Gorton Pond	RI0007025L-01	Dissolved Oxygen, Total Phosphorus, Excess Algal Growth
Hardig Brook & Tribs	RI0007025R-01	Fecal Coliform
Maskerchugg River	RI0007025R-03	Fecal Coliform
Dark Entry Brook	RI0007025R-04	Fecal Coliform
Tuscatucket Brook	RI0007025R-05	Fecal Coliform
Baker Creek	RI0007025R-06	Fecal Coliform
Southern Creek (Carpenter Brook)	RI0007025R-09	Fecal Coliform
Greenwood Creek	RI0007025R-11	Fecal Coliform
Gorton Pond Trib	RI0007025R-13	Fecal Coliform
Mill Brook	RI0007025R-14	Fecal Coliform
Saddle Brook	RI0007025R-16	Fecal Coliform
Fry Brook & Tribs	RI0007028R-02	Fecal Coliform
Hunt River	RI0007028R-03A	Fecal Coliform
Hunt River & Tribs	RI0007028R-03B	Fecal Coliform
Hunt River	RI0007028R-03C	Fecal Coliform
Scrabbletown Brook	RI0007028R-06	Fecal Coliform
Kickemuit Reservoir (Warren Reservoir)	RI0007034L-01	Taste and Odor, Excess Algal Growth, Fecal Coliform, Turbidity, Total Phosphorus
Upper Kickemuit River	RI0007034R-01	Fecal Coliform
North Easton Pond (Green End Pond)	RI0007035L-03	Excess Algal Growth
North Easton Pond (Green End Pond)	RI0007035L-03	Total Phosphorus
Stafford Pond	RI0007037L-01	Excess Algal Growth, Total Phosphorus, Dissolved Oxygen
Watchaug Pond	RI0008039L-02	Mercury in Fish Tissue
Meadowbrook Pond (Sandy Pond)	RI0008039L-05	Mercury in Fish Tissue
Tucker Pond	RI0008039L-08	Mercury in Fish Tissue
Larkin Pond	RI0008039L-11	Mercury in Fish Tissue
Hundred Acre Pond	RI0008039L-13	Mercury in Fish Tissue
Barber Pond	RI0008039L-14	Dissolved Oxygen
Yawgoo Pond	RI0008039L-15	Total Phosphorus, Mercury in Fish Tissue, Dissolved Oxygen, Excess Algal Growth
Chickasheen Brook	RI0008039R-05A	Aquatic Plants – Native, Total Phosphorus
Alton Pond	RI0008040L-01	Mercury in Fish Tissue
Ashville Pond	RI0008040L-04	Mercury in Fish Tissue
Wincheck Pond	RI0008040L-06	Mercury in Fish Tissue
Yawgoog Pond	RI0008040L-07	Mercury in Fish Tissue
Locustville Pond	RI0008040L-10	Mercury in Fish Tissue
Wyoming Pond	RI0008040L-11	Mercury in Fish Tissue
Browning Mill (Arcadia) Pond	RI0008040L-13	Mercury in Fish Tissue
Boone Lake	RI0008040L-14	Mercury in Fish Tissue
Eisenhower Lake	RI0008040L-16	Mercury in Fish Tissue
Quidnick Reservoir	RI0006013L-04	Mercury in Fish Tissue
Tiogue Lake	RI0006014L-02	Mercury in Fish Tissue
Upper Dam Pond	RI0006014L-04	Total Phosphorus
J.L. Curran (Fiskeville) Reservoir	RI0006016L-02	Mercury in Fish Tissue
Roger Williams Park Ponds	RI0006017L-05	Excess Algal Growth, Dissolved Oxygen, Total Phosphorus
Mashapaug Pond	RI0006017L-06	Excess Algal Growth, Total Phosphorus, Dissolved Oxygen
Spectacle Pond	RI0006017L-07	Excess Algal Growth, Total Phosphorus
Sand Pond (N. of Airport)	RI0006017L-09	Dissolved Oxygen, Total Phosphorus

Causes De-listed Due To EPA Approval Of TMDL (4A) (continued)		
Waterbody Name	Waterbody ID number	Cause of Impairment
Assapumpset Brook & Tribs	RI0002007R-01	Fecal Coliform
Woonasquatucket River & Tribs	RI0002007R-10A	Zinc
Woonasquatucket River & Tribs	RI0002007R-10B	Fecal Coliform
Woonasquatucket River & Tribs	RI0002007R-10C	Zinc, Fecal Coliform
Woonasquatucket River	RI0002007R-10D	Lead, Copper, Zinc

Causes De-listed Because Attainment of Water Quality Standards is Expected Due to 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

Causes De-listed Because Impairment Is Due To Non-Pollutant (4C)		
Waterbody Name	Waterbody ID number	Cause of Impairment
Gardiner Pond	RI0007035L-01	Other flow regime alterations
Nelson Paradise Pond	RI0007035L-02	Other flow regime alterations
North Easton Pond (Green End Pond)	RI0007035L-03	Other flow regime alterations
Saint Mary's Pond	RI0007035L-05	Other flow regime alterations
Lawton Valley Reservoir	RI0007035L-06	Other flow regime alterations
Sisson Pond	RI0007035L-10	Other flow regime alterations
Bowdish Reservoir	RI0005047L-03	Non-Native Aquatic Plants (Exotic Species)

Causes De-listed Because Water Quality Standard Is Now Being Met		
Waterbody Name	Waterbody ID number	Cause of Impairment
Robin Hollow Pond	RI0001006L-04	Total Coliform
Gilbert Stuart Stream	RI0010044R-01	Fecal Coliform
Great Salt Pond	RI0010046E-01D	Fecal Coliform
Pawtuxet River Main Stem	RI0006017R-03	Dissolved Oxygen
Blackstone River	RI0001003R-01A	Lead, Ammonia (Unionized)
Blackstone River	RI0001003R-01B	Lead, Ammonia (Unionized)

New Impairments

New data indicate a number of new impairments - both for waterbodies not previously identified as impaired and for those previously listed for another parameter.

New Impairments included on the 2008 303(d) List		
Waterbody Name	Waterbody ID number	Cause of Impairment
Bailey's Brook & Tribs	RI0007035R-01	Enterococcus
Blackamore Pond	RI0006018L-06	Total Phosphorus
Canob Brook	RI0008040R-23	Iron
Chickasheen Brook	RI0008039R-05A	Enterococcus

New Impairments included on the 2008 303(d) List (continued)		
Waterbody Name	Waterbody ID number	Cause of Impairment
East Passage	RI0007029E-01O	Dissolved Oxygen
Lake Washington	RI0005047L-04	Total Phosphorus
Melville Ponds	RI0007029L-01	Total Phosphorus
Mud Brook	RI0008039R-39	Enterococcus
Parsonage (Knowles) Brook	RI0007024R-02	Fecal Coliform, Enterococcus
Pawcatuck River & Tribs	RI0008039R-18D	Enterococcus
Pawcatuck River & Tribs	RI0008039R-18C	Enterococcus
Unnamed Tribs to Slack Reservoir	RI0002007R-15	Enterococcus
West Passage	RI0007027E-03J	Dissolved Oxygen
White Brook Pond	RI0008039L-26	Total Phosphorus

Lower Sprague Reservoir

RI0002007L-06 Waterbody Classification: B

Lower Sprague Reservoir. Smithfield

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				

Latham Brook & Tribs

RI0002007R-05 Waterbody Classification: B

Latham Brook and tributaries Smithfield

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Ambient Bioassays – Chronic Aquatic Toxicity	2012		Record of Decision in place for Davis Industrial landfill.
		Benthic-Macroinvertebrate Bioassessments	2012		Record of Decision in place for Davis Industrial landfill.
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Assessed				
Secondary Contact Recreation	Not Assessed				

Woonasquatucket River & Tribs

RI0002007R-10B Waterbody Classification: B

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

Use Description	Use Attainment Status	Cause/Impairment	TMDL Schedule	TMDL Approval Date	Comment
Fish and Wildlife habitat	Not Supporting	Mercury in Water Column	2016		
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	

Woonasquatucket River & Tribs

RI0002007R-10C

Waterbody Classification: B1

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	Dioxin (including 2,3,7,8-TCDD)	2016		
		Mercury	2016		
		Oxygen, Dissolved	2016		
		Polychlorinated biphenyls	2016		
		Zinc		7/3/2007	
Fish Consumption	Not Supporting	Dioxin (including 2,3,7,8-TCDD)	2016		
		Mercury in Fish Tissue	2016		
		PCB in Fish Tissue	2016		
Primary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	
Secondary Contact Recreation	Not Supporting	Fecal Coliform		7/3/2007	

Woonasquatucket River

RI0002007R-10D

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	2016		
		Copper		7/3/2007	
		Dioxin (including 2,3,7,8-TCDD)	2016		
		Lead		7/3/2007	
		Mercury	2016		
		Oxygen, Dissolved	2016		
		Polychlorinated biphenyls	2016		
		Zinc		7/3/2007	
Fish Consumption	Not Supporting	Dioxin (including 2,3,7,8-TCDD)	2016		
		Mercury in Fish Tissue	2016		
		PCB in Fish Tissue	2016		
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.

Nine Foot Brook & Tribs

RI0002007R-11 Waterbody Classification: B

Nine Foot Brook and tributaries Smithfield, Glocester

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

Unnamed Tribs to Slack Reservoir

RI0002007R-15 Waterbody Classification: B

Unnamed Tributaries to Slack Reservoir. Johnston, Smithfield

Use Description	*Use Attainment Status*	*Cause/Impairment*	*TMDL Schedule*	*TMDL Approval Date*	*Comment*
Fish and Wildlife habitat	Fully Supporting				
Fish Consumption	Not Assessed				
Primary Contact Recreation	Not Supporting	Enterococcus	2016		
Secondary Contact Recreation	Not Supporting	Enterococcus	2016		