September 27, 2012

Alicia Good, Assistant Director
Rhode Island Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, RI 02908

Dear Ms. Good:

Thank you for your submission of the State of Rhode Island's 2012 Clean Water Act (CWA) Section 303(d) list of impaired waters. In accordance with Section 303(d) and 40 CFR §130.7, the U.S. Environmental Protection Agency, Region 1 (EPA) conducted a complete review of Rhode Island's 2012 Section 303(d) list and supporting documentation. Based on this review, EPA has determined that Rhode Island's 2012 Section 303(d) list meets the requirements of Section 303(d) of the CWA and EPA's implementing regulations. Therefore, by this letter, EPA hereby approves the State's Section 303(d) list, submitted to EPA on September 10, 2012.

Rhode Island's submission includes a list of water bodies for which technology-based and other required controls for point and nonpoint sources are not stringent enough to attain or maintain compliance with the State's Water Quality Standards. As required, this list includes a priority ranking for each listed water body and specifically identifies waters targeted for total maximum daily load (TMDL) development in the next two years. A long-term schedule for developing TMDLs for all waters on the State's list was also provided. The statutory and regulatory requirements, and EPA's review of the State's compliance with these requirements, are described in detail in the enclosed approval document.

Assessments of state waters conducted under Sections 305(b) and 303(d) of the CWA should be prepared in a manner to support their submission to EPA by April 1 of even numbered years in accordance with those sections of the CWA and 40 CFR §130.7. In addition, waters should be assessed using Water Quality Standards that are approved and in effect at the time of the assessment.

The Rhode Island Department of Environmental Management (RI DEM) has successfully completed a public participation process that provided the public an opportunity to review and comment on the State's 2012 Section 303(d) list. Through this effort, Rhode Island was able to consider and address public comments in the development of the final list. A summary of the public comments and Rhode Island's responses to public comments was included in the State's September 10, 2012 submittal.

We are pleased with the quality of your submission and appreciate the level of effort that the RI DEM devoted to preparing its 2012 Section 303(d) list. Your staff has done an excellent job of preparing a comprehensive and informative list, and providing EPA with supporting documentation and assistance.

My staff and I look forward to continued cooperation with RI DEM in implementing the requirements of Section 303(d) of the CWA. If you have any questions regarding EPA's review or this approval, please contact Steve Silva at (617) 918-1561 or have your staff contact Steven Winnett at (617) 918-1687.

Sincerely,

/s/

Stephen S. Perkins, Director
Office of Ecosystem Protection

Enclosure

cc: Angelo Liberti, RI DEM
Elizabeth Scott, RI DEM
Connie Carey, RI DEM
Stephen Silva, EPA
Lynne Hamjian, EPA
Greg Dain, EPA
Steven Winnett, EPA

EPA NEW ENGLAND'S REVIEW OF
RHODE ISLAND'S 2012 CWA SECTION 303(d) LIST

I. INTRODUCTION

EPA has conducted a complete review of Rhode Island's (RI) 2012 Section 303(d) list and supporting documentation and information. Based on this review, EPA has determined that Rhode Island's list of water quality limited segments (WQLSs) still requiring total maximum daily loads (TMDLs) meets the requirements of Section 303(d) of the Clean Water Act ("CWA" or "the Act") and EPA implementing regulations. Therefore, by this order, EPA hereby approves Rhode Island's 2012 final Section 303(d) list, submitted on September 10, 2012. The Section 303(d) list will be a component of the State's *2012 Integrated Water Quality Report to Congress submitted pursuant to the Federal Clean Water Act Sections 305(b) and 303(d)*(the "IR"), which will be submitted later this calendar year. The statutory and regulatory requirements, and EPA's review of Rhode Island's compliance with each requirement, are described in detail below.

The purpose of this review document is to describe the rationale for EPA's approval of Rhode Island's 2012 Section 303(d) list. The following sections identify key elements to be included in the Section 303(d) list submittal based on the Clean Water Act and EPA regulations. See 40 CFR Section 130.7. The content of this review is based upon EPA's 2006 Integrated Report Guidance, which describes categories of water quality-related data and information that may be existing and readily available. See EPA's March 21st, 2011 memorandum on *Information Concerning 2012 Clean Water Act Sections 303(d), 305 (b), and 314 Integrated Reporting and Listing Decisions*, which recommended that the 2012 integrated water quality reports follow the Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act (2006 Integrated Report Guidance (IRG) issued July 29, 2005 (available at http://www.epa.gov/owow/tmdl/2006 IRG/) as supplemented by an October 12, 2006 memo and attachments, a May 5, 2009 memo and attachments, and the March 21, 2011 memo and attachments. All guidance, memoranda and attachments may be found at: http://www.epa.gov/owow/tmdl/guidance.html. While States are required to evaluate all existing and readily available water quality-related data and information, States may decide to rely or not rely on particular data or information in determining whether to list particular waters.

EPA reviewed Rhode Island's 2010 *Consolidated Assessment & Listing Methodology for 305(b) and 303(d) Integrated Water Quality Monitoring and Assessment Reporting* (RI CALM) used to develop the Section 303(d) list and the State's description of the data and information it considered during preparation of the list. EPA's review of Rhode Island's Section 303(d) list is based on an analysis of whether the State reasonably considered all existing and readily available water quality-related data and information, and reasonably identified waters required to be listed. EPA also closely examined all the requests made by the State to remove water bodies from the 2012 Section 303(d) list that had appeared on the previous list in 2010 to ensure that only those which had the proper justification were allowed to be removed. The paragraphs below are arranged to reflect the organization of guidance from EPA,

titled, *Recommended Framework for EPA Approval Decisions on 2002 State Section 303(d) List Submissions*, transmitted in a memorandum from EPA Headquarters dated May 20, 2002.

II. STATUTORY AND REGULATORY BACKGROUND

Identification of WQLSs for Inclusion on Section 303(d) List

Section 303(d)(1) of the Act directs states to identify those waters within their jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard (WQS) and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by state or local authority, and (3) other pollution control requirements required by state, local, or federal authority. See 40 CFR Section 130.7(b)(1).

Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the State's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate non-attainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See 40 CFR Section 130.7(b)(5). In addition to these minimum categories, states are required to consider any other data and information that is existing and readily available. EPA guidance (U.S. EPA, 2005) describes categories of water quality-related data and information that may be existing and readily available. While states are required to evaluate all existing and readily available water quality-related data and information, states may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring states to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR Section 130.7(b)(6) require states to include as part of their submissions to EPA documentation to support decisions to rely or not rely on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.

Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that states establish a priority ranking for listed waters. The regulations at 40 CFR Section 130.7(b)(4) require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that states establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992), and EPA guidance (U.S. EPA, 2005).

III. REVIEW OF RHODE ISLAND'S SECTION 303(d) SUBMISSION

Rhode Island's Department of Environmental Management (DEM) submitted a final 2012 Section 303(d) list to EPA, along with responses to comments it received, on September 10, 2012. The 2012 Section 303(d) list includes all waters that have been assigned to EPA Category 5 in accordance with the RI CALM.[1] The Section 303(d) list contains a schedule prioritizing EPA Category 5 water bodies for TMDL development by 2012 through 2022.

On May 15, 2012, the State submitted to EPA a pre-public release draft version of its Section 303(d) list, along with supporting documentation. On May 15, 2012, EPA provided comments to the State on that draft. DEM subsequently released its draft 303(d) list documents to the public and began its public notice period on May 29, 2012, with notice posted on DEM's website, press releases, and mailings and emails to many stakeholders. DEM held a public informational meeting on June 13, 2012; approximately 35 people attended. The public comment period ended on June 26, 2012. Comments were received from one organization, the Center for Biological Diversity (CBD), and no individuals.

Rhode Island has included all waters known or suspected not to be meeting water quality standards on the Section 303(d) list, or in EPA Category 4, as discussed below. Under its current listing approach, Rhode Island keeps a water body on its impaired waters list until it is shown that water quality standards are being attained, criteria are met for its placement in EPA Category 4, or the initial listing was incorrect. TMDLs for listed waters will be completed in accordance with the schedule established for its specific group, which reflect priority rankings and other relevant factors.

EPA Category 4 includes waters that are currently not meeting water quality standards but do not need a TMDL completed due to one of three reasons. Category 4A contains waters for which a TMDL has already been approved. Category 4B includes waters for which a "functionally equivalent" control action has been developed. An impairment caused by a pollutant is being addressed through other

[1] The EPA categories 1-5 discussed herein refer to the listing categories described in EPA's listing guidance referenced in Section I above.

pollution control requirements. Waters in Category 4C are not attaining water quality standards but the cause is not associated with a pollutant. EPA reviews the Category 4 list to insure that the waters are categorized appropriately and do not belong in Category 5.

EPA Category 5, which corresponds to the Section 303(d) list, contains waters where available data and/or information indicate that the water is impaired or threatened by pollutants for one or more designated uses and a TMDL is required. The CWA and 40 CFR Section 130.7 require EPA to review and approve or disapprove the Section 303(d) list of impaired waters.

Response to public comments

DEM received one comment letter, dated December 22, 2011, from the Center for Biological Diversity (CBD). CBD asserted that Rhode Island should list all ocean assessment units (AUs) within the State's coastal waters as impaired or threatened for ocean acidification because (1) designated uses for fish and wildlife habitat are not attained; 2) general criteria protecting fish and wildlife are not attained; 3) acidification is causing measurable degradation in violation of the antidegradation policy; and 4) ocean waters are at risk of violating the marine pH criterion.

DEM received CBD's comments during the State's data solicitation period, in advance of the public comment period provided for the State's draft Section 303(d) list. DEM published notice of the comment period on May 29, 2012 and also held a public meeting on June 13, 2012. DEM received no comments on its draft 303(d) list during the public comment period itself, which ended on June 26, 2012.

The State's September 10, 2012 303(d) list submittal to EPA included a detailed written response to CBD's comments. EPA has reviewed DEM's response to CBD's comments and has concluded that the State adequately and appropriately responded to those comments. DEM explained that CBD did not submit or reference any data or other information demonstrating that Rhode Island's coastal waters are not meeting the applicable designated uses, narrative criteria, marine pH criteria and antidegradation requirements. DEM also explained that, apart from CBD's submission, DEM is unaware of other existing and readily available water-quality related data or information that show that the State's coastal waters are not meeting the applicable water quality standards.

In particular, DEM explained that it is not aware of any modeling results or data indicating that Rhode Island's ocean waters do not currently attain, or by the next listing cycle will fall out of attainment with, the State's marine pH criterion. As DEM explained in detail in its response to CBD's comments, DEM possesses some data and information relevant to pH values for Narragansett Bay, and further explained that the data and other information demonstrate that the water segments in question are attaining the State's marine pH criterion. DEM also stated that CBD did not submit to the State any data demonstrating that the State's marine pH criterion is not being attained in Narragansett Bay or in any of the State's other coastal waters. As indicated earlier, EPA believes that DEM adequately responded to CBD's comments and that DEM's responses are appropriate. In the absence of specific data or other information demonstrating excursions of the State's pH criterion or any other water quality criteria, due

to ocean acidification, EPA finds that DEM's decision not to list the State's ocean waters as threatened or impaired due to ocean acidification is appropriate.

As discussed in EPA's November 15, 2010 guidance entitled "Integrated Reporting and Listing Decisions Related to Ocean Acidification" (at http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/oa_memo_nov2010.cfm), EPA recommends that for future lists, States (such as Rhode Island) with marine waters include, as part of their routine IR data solicitation process, a request for existing and readily available water quality-related data and information, including modeling and other non-site-specific data, relevant to marine pH (including natural background conditions). As also stated in the guidance, EPA believes that not enough information is available currently to develop ocean acidification-related carbon dioxide TMDLs, and is deferring development of TMDL guidance related to ocean acidification listings until more information becomes available in the future. EPA encourages CBD to submit data and other information that is relevant to Rhode Island's marine waters during DEM's data solicitations for future CWA Section 303(d) lists.

In its comment letter, CBD also asserted that Rhode Island should revise its pH criterion in light of the most recent information on ocean acidification. Currently, Rhode Island's pH criterion is approved by EPA. As indicated in EPA's November 15, 2010 guidance, EPA decided against revising the national marine pH criterion for aquatic life due to insufficient data, after EPA reviewed a wide range of information received in response to a Notice of Data Availability (NODA) on Ocean Acidification and Marine pH Water Quality Criteria. EPA also stated in that guidance that States will need to continue to use their current marine pH criteria as a basis for 303(d) listing until additional ocean acidification related criteria are adopted. Therefore, EPA also supports DEM's decision to use the state-adopted and EPA approved marine pH criterion for assessments and 303(d) list decisions in 2012. EPA also notes that the 303(d) listing process is not the appropriate context for submitting proposals to revise the States' water quality criteria, and suggests that such proposals be submitted during States' triennial reviews of their water quality standards.

As noted above, EPA has reviewed DEM's responses to the public comments received and concludes that Rhode Island adequately responded to those comments.

IV. IDENTIFICATION OF WATERS AND CONSIDERATION OF EXISTING AND READILY AVAILABLE WATER QUALITY-RELATED DATA AND INFORMATION

EPA has reviewed the State's submission, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR Section 130.7. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed. The assessment methodology used by Rhode Island is described in the RI CALM.

For the 2012 assessment cycle, the Rhode Island Department of Environmental Management (DEM)

used the US EPA's Assessment Database (ADB) to house the water quality assessment information and generate the Integrated Lists. DEM used the Single Category Reporting format which assigns an individual assessment unit to one IR Category.

As noted in the CALM, DEM strives to consider all readily available water quality data and related information in developing the Integrated Lists. In determining if data are appropriate, DEM considers quality assurance/quality control, data quality objectives, monitoring design, age of data, accuracy of sampling location information, data documentation and data format (hard copy versus electronic).

The primary source of data generated for assessments is developed from programs consistent with the Water Monitoring Strategy, and as described in Chapter III.D of the 2008 305(b) Report (http://www.dem.ri.gov/programs/benviron/water/quality/pdf/iwqmon08.pdf). There are a variety of data generated by programs outside of the Water Monitoring Strategy framework. This includes data generated by special projects, research, volunteer efforts, and the federal government. DEM reports that it is interested in and considers all such data, but the applicability to the assessment process may be limited by the sampling design and data quality objectives of those projects. Because such data generally have not been collected for assessment purposes, they may be of limited utility for application in assessments due to the frequency of sampling, indicators used, number of samples, etc. The data quality objectives outlined in the CALM are used to allow DEM to determine, in a consistent manner, whether these data can be used to make determinations about the water quality attainment status.

DEM actively solicited submittal of such data and information for consideration in developing the 2012 Integrated Report. In addition to data from the monitoring programs described within the 2010 305(b) Report (which includes the URI Watershed Watch program, the Wood-Pawcatuck Watershed Association, USGS, and DEM's ambient river rotation basin program), DEM received and reviewed 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 in the development of the 2012 water quality assessments. The data used to generate the information for this report are generally from 2009 through 2011.

DEM also uses predictive models and dilution calculations in concert with ambient and discharge data to identify water quality limited segments. Examples of such listed waters include the Blackstone River, the Providence-Seekonk River, the Pawtuxet River, and the Barrington-Palmer-Runnins Rivers.

In order to prepare the 2012 Section 303(d) list, the State established a date by which data would be considered for this listing cycle. Data collected from the public (the solicitation for which was published on November 17, 2011) between 2009 and 2011 are relied upon for these assessments. Assessment data are maintained by the State in the EPA Section 305(b) Assessment Database (ADB).

EPA has reviewed Rhode Island's description of the data and information considered in development of the Section 303(d) list, including but not limited to the State's methodology for identifying waters, data in ADB, and the Rhode Island water quality standards. EPA concludes that the State properly

assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR Section 130.7(b)(5).

Waters included in Category 5 of the 2012 Section 303(d) list were assessed using the RI CALM. Based upon that assessment, a total of 120 water body segments have been assigned to Category 5 of the impaired waters list, with a total of 253 water body segment – pollutant combinations.

NEW IMPAIRMENTS

Two (2) water body segments identified in Table 1 remain on the list from 2010 and have had one or more new impairments added in 2012.

Table 1 - Waters listed as impaired on the 2010 List with a new impairment added in 2012

Water Body Name	Water Segment ID #	Cause of Impairment Added
Blackstone River, segment B	RI0001003R-01B	lead
Ten Mile River & Tribs, segment A	RI0004009R-01A	total phosphorus, fecal coliform bacteria

In addition, the State added an impairment for one water body (Table 2, below) whose other, previously listed impairment had been moved to Category 4A (impaired but has an approved TMDL already).

Table 2 - Waters with existing listing(s) in Category 4A, with a new impairment added in 2012

Water Body Name	Water Segment ID #	Cause of Impairment Added
Clear River & Tribs	RI0001002R-05C	lead

Clear River & Tribs segment C has an approved TMDL for enterococcus bacteria (Category 4A).

Finally, for reasons detailed in the State's 303(d) list documents, DEM has removed a run of river impoundment, Slater Park Pond (RI0004009L-02), as a separate assessment unit and has incorporated it into the Upper Ten Mile River segment, RI0004009R-01A. The impairments for which the pond had, in previous 303(d) list cycles, been listed, will now be associated with the river segment. Accordingly, fecal coliform and phosphorus impairments previously associated with the pond are now associated with the Upper Ten Mile River, which is already listed for aluminum, cadmium, iron, lead, and enterococcus bacteria impairments.

While EPA is not acting to approve or disapprove Rhode Island's listing methodology, we have reviewed the material and we conclude that the methodology DEM used to develop the impaired waters list is reasonable and consistent with Rhode Island's water quality standards, and with the Clean Water Act Section 303(d) regulations and EPA guidelines.

DELISTINGS

WATER BODIES/IMPAIRMENTS MOVED TO CATEGORY 1

Water Body Segments Delisted For All Impairments

For the 2012 Section 303(d) list, two (2) water body segments that appeared on Rhode Island's 2010 303(d) list as impaired for bacteria have been delisted in 2012 for all impairments because the water bodies meet all designated uses and water quality criteria (Category 1).

Sandy Brook and Unnamed Tribs to Slack Reservoir have been delisted and placed into Category 1 because data show they are now meeting water quality standards for their only listed impairment (Table 3).

EPA has examined in detail the supporting information provided by RI DEM and agrees that the State has reasonably concluded that these waters no longer need to be on the 303(d) list for the reasons provided. EPA approves their delistings.

Table 3 - Waters fully delisted – moved to Category 1

Water Body Name	Water Segment ID #	Reason for Full Delisting
Sandy Pond (S. of Airport) (Little Pond)	RI0007024L-01	meets WQS for fecal coliform bacteria
Unnamed Tribs to Slack Reservoir	RI0002007R-15	meets WQS for enterococcus bacteria

CATEGORY 4

The following tables show a summary of previously Section 303(d)-listed water bodies that have been moved to Category 4 in this listing cycle. These segments are impaired for one or more designated uses, but do not need a TMDL for one of three reasons specified. Water body segments in Category 4A (Table 4, below) already have a State developed TMDL which has been approved by EPA during the 2012 listing cycle. Segments listed in Category 4B (Table 5, below) have other required control measures which are expected to result in attainment of an applicable water quality standard in a reasonable period of time. Category 4C contains water body segments for which the State has demonstrated that the failure to meet water quality standards is not caused by a pollutant, but rather by other types of pollution. No water body segments have been newly placed in Category 4C in the 2012 listing cycle, so no data are presented here for the category.

Category 4A

For the water bodies/impairments moved to Category 4A for this listing cycle, TMDLs for the pollutant of concern have been completed, and are approved by EPA. In all, 57 water body-pollutant combinations were placed in Category 4A during the 2012 listing cycle. Those 57 approved TMDLs, covering the same number of water bodies, are identified in Table 4. EPA approves the State's Section

303(d) list without these waterbody-pollutant combinations because the removal of these listings is consistent with EPA's regulations and EPA's Guidance for Assessment, Listing and Reporting Requirements.

Table 4 - Waters fully or partially moved to Category 4A – TMDL completed

Water Body Name	Water Body Segment ID	Water Body Towns	EPA Approved	TMDL Parameter(s)
Ashaway River & Tribs	RI0008039R-02A	Hopkinton	9/22/2011	Enterococcus bacteria
Bailey's Brook & Tribs	RI0007035R-01	Middletown	9/22/2011	Enterococcus bacteria
Belleville Upper Pond Inlet	RI0007027R-02	North Kingston	9/22/2011	Enterococcus bacteria
Boyd Brook	RI0006013R-01	Scituate, Coventry	9/22/2011	Enterococcus bacteria
Branch River & Tribs	RI0001002R-01A	Burrillville	9/22/2011	Enterococcus bacteria
Branch River & Tribs	RI0001002R-01B	North Smithfield	9/22/2011	Enterococcus bacteria
Breakheart Brook & Tribs	RI0008040R-02	West Greenwich, Exeter	9/22/2011	Enterococcus bacteria
Brushy Brook & Tribs	RI0008040R-03B	Hopkinton	9/22/2011	Fecal Coliform bacteria
Burnt Swamp Brook & Tribs	RI0001006R-06	Cumberland	9/22/2011	Enterococcus bacteria
Canonchet Brook & Tribs	RI0008040R-04B	Hopkinton	9/22/2011	Enterococcus bacteria
Chepachet River & Tribs	RI0001002R-03	Burrillville, Glocester	9/22/2011	Enterococcus bacteria
Chickasheen Brook	RI0008039R-05A	Exeter	9/22/2011	Enterococcus bacteria
Clear River	RI0001002R-05D	Burrillville	9/22/2011	Enterococcus bacteria
Clear River & Tribs	RI0001002R-05C	Burrillville	9/22/2011	Enterococcus bacteria
Crookfall Brook & Tribs	RI0001004R-01	Lincoln, North Smithfield, Smithfield	9/22/2011	Enterococcus bacteria
Cutler Brook & Tribs	RI0002007R-02	Glocester	9/22/2011	Enterococcus bacteria
Dry Brook & Tribs	RI0006018R-02A	Johnston	9/22/2011	Enterococcus bacteria

Dutemple Brook	RI0008039R-30	Exeter	9/22/2011	Enterococcus bacteria
East Sneech Brook	RI0001006R-03	Cumberland	9/22/2011	Enterococcus bacteria
Frenchtown Brook & Tribs	RI0007028R-01	East Greenwich, West Greenwich	9/22/2011	Enterococcus bacteria
Fresh Meadow Brook & Tribs	RI0010045R-01	North Kingston, South Kingston	9/22/2011	Enterococcus bacteria
Hunt River	RI0007028R-03D	N. Kingstown, Warwick	9/22/2011	Enterococcus bacteria
Huntinghouse Brook	RI0006015R-11	Glocester, Scituate	9/22/2011	Enterococcus bacteria
Jamestown Brook	RI0007036R-01	Jamestown	9/22/2011	Fecal Coliform bacteria
Latham Brook & Tribs	RI0002007R-05	Smithfield	9/22/2011	Enterococcus bacteria
Long Brook & Tribs	RI0001006R-02	Cumberland	9/22/2011	Enterococcus bacteria
Maidford River	RI0007035R-02A	Middletown	9/22/2011	Fecal Coliform bacteria
Maidford River	RI0007035R-02B	Middletown	9/22/2011	Fecal Coliform bacteria
Mashapaug Pond	RI0006017L-06	Providence	9/22/2011	Fecal Coliform bacteria
Meadow Brook & Tribs	RI0008039R-13	Richmond	9/22/2011	Enterococcus bacteria
Meshanticut Brook & Tribs	RI0006017R-02	Cranston, West Warwick, Warwick	9/22/2011	Enterococcus bacteria
Mile Brook	RI0008039R-14	Hopkinton	9/22/2011	Enterococcus bacteria
Moosup River & Tribs	RI0005011R-03	Foster, Coventry	9/22/2011	Enterococcus bacteria
Moshassuck River & Tribs	RI0003008R-01A	Lincoln	9/22/2011	Enterococcus bacteria
Moshassuck River & Tribs	RI0003008R-01B	Lincoln, Pawtucket, Central Falls	9/22/2011	Enterococcus bacteria
Moswansicut Stream	RI0006015R-16	Scituate	9/22/2011	Escherichia coli bacteria
Nooseneck River & Tribs	RI0006012R-05	Coventry, West Greenwich	9/22/2011	Enterococcus bacteria

Paradise Brook	RI0007035R-03	Middletown	9/22/2011	Fecal Coliform bacteria
Parmenter Brook & Tribs	RI0008039R-37	Hopkinton	9/22/2011	Enterococcus bacteria
Pascoag River	RI0001002R-09	Burrillville	9/22/2011	Enterococcus bacteria
Pawcatuck River & Tribs	RI0008039R-18B	Charlestown, Richmond	9/22/2011	Enterococcus bacteria
Pawcatuck River & Tribs	RI0008039R-18C	Charlestown, Richmond, Hopkinton, Westerly	9/22/2011	Enterococcus bacteria
Pawtuxet River South Branch	RI0006014R-04B	Coventry, West Warwick	9/22/2011	Enterococcus bacteria
Phillips Brook & Tribs	RI0008040R-14	West Greenwich	9/22/2011	Enterococcus bacteria
Roger Williams Park Ponds	RI0006017L-05	Providence	9/22/2011	Fecal Coliform bacteria
Sandhill Brook & Tribs	RI0007028R-05	N. Kingstown	9/22/2011	Fecal Coliform bacteria
Simmons Brook & Tribs	RI0006018R-04	Johnston, Cranston	9/22/2011	Enterococcus bacteria
Stillwater River & Tribs	RI0002007R-09	Smithfield	9/22/2011	Enterococcus bacteria
Sucker Brook	RI0007037R-01	Tiverton	9/22/2011	Enterococcus bacteria
Taney Brook	RI0008039R-23	Richmond	9/22/2011	Enterococcus bacteria
Tarkiln Brook & Tribs	RI0001002R-13B	Burrillville, North Smithfield	9/22/2011	Enterococcus bacteria
Tomaquag Brook & Tribs	RI0008039R-24	Hopkinton	9/22/2011	Enterococcus bacteria
Tribs to Tiogue Lake	RI0006014R-05	Coventry	9/22/2011	Enterococcus bacteria
West River & Tribs	RI0003008R-03B	Lincoln, N. Providence, Providence, Smithfield	9/22/2011	Enterococcus bacteria
White Horn Brook & Tribs	RI0008039R-27B	South Kingstown	9/22/2011	Enterococcus bacteria
Windsor Brook & Tribs	RI0006015R-30	Foster	9/22/2011	Enterococcus bacteria
Wood River & Tribs	RI0008040R-16A	Exeter, Richmond, Hopkinton	9/22/2011	Enterococcus bacteria

Category 4B

Rhode Island is not proposing to add new waters into Category 4B in this listing cycle, but EPA is re-evaluating the continued listing of the impairments for four waters that were previously placed into the Category. The State's decision to include waters in Category 4B rather than on its 2012 Section 303(d) list is consistent with EPA regulations at 40 CFR Section 130.7(b)(1). These waters were previously identified on the State's Section 303(d) list. Under 40 CFR Section 130.7(b)(1), states are not required to list impaired waters where effluent limitations required by the CWA, more stringent effluent limitations required by state or local authority, or other pollution control requirements required by state, local, or federal authority, are stringent enough to implement applicable water quality standards. The regulation does not specify the time frame in which these various requirements must implement applicable water quality standards to support a state's decision not to list particular waters. EPA guidance states that water quality standards must be attained within the near future (U.S. EPA, 2005).

Monitoring should be scheduled for these waters to verify that the water quality standard is attained as expected in a reasonable time frame. Where standards will not be attained through implementation of the requirements listed in 40 CFR Section 130.7(b)(1) in a reasonable time, it is appropriate for the water to be placed on the Section 303(d) list to ensure that implementation of the required controls and progress towards compliance with applicable standards is tracked. If it is determined that the water is meeting applicable standards when the next Section 303(d) list is developed, it would be appropriate for the State to remove the water from the list at that time.

In this case, the State placed 4 segments into Category 4B in the 2008 listing cycle pursuant to 40 CFR Section 130.7(b)(1)(ii). To support this decision, the state must demonstrate, consistent with the regulation and EPA guidance (U.S. EPA, 2005), that there are "more stringent effluent limitations (including prohibitions) required by either State or local authority preserved by section 510 of the [Clean Water] Act, or Federal authority (law, regulation, or treaty)" sufficient to achieve applicable water quality standards for the pollutants of concern within a reasonable period of time. DEM and EPA will evaluate waters listed in Category 4B during subsequent listing cycles to ensure that they continue to meet the criteria and do not warrant placement in Category 5.

The four water body segments were moved to Category 4B in the 2008 listing cycle (see Table 5 below). The estuarine segments of Mt. Hope Bay (RI0007032E-01A, 01B, 01C, 01D) have been impaired by thermal modifications and biodiversity impacts by the cooling water discharges from the Brayton Point Power Station in Somerset, MA. The plant had been withdrawing nearly one billion gallons of water per day for cooling water, then discharging it back to the Bay, raising bay temperatures approximately 1.5 degrees F. The elevated temperatures have degraded normal aquatic habitats, disrupted fish migration, and made the bay inhospitable to native species. The withdrawal itself is responsible for killing aquatic organisms directly in the plant. The elevated temperatures also violate water quality standards for temperatures.

EPA renewed the Brayton Point NPDES permit (No. MA0003654) on October 6, 2003, with strict limits to reduce total heat discharge and reduce water withdrawals. The limits were established to ensure that water quality standards would be met. The permit was appealed, and subsequently resolved, with the permit limits effective December 18, 2007. As part of its December 17, 2007 agreement to end all

permit litigation, the owner of the power station, Dominion Energy, planned to install natural draft cooling towers as part of its compliance with the permit. EPA issued an administrative order which contained a schedule for compliance with the permit limits within 36 months of obtaining all construction and operating permits. Once compliance is achieved, habitat quality will improve and annual fishery losses are expected to be reduced by 94%.

As of May 2012, the Brayton Point Power Station had implemented operational measures designed to result in compliance with the permit requirements; the Station has reduced its withdrawals and effluent through the use of the new cooling towers. EPA acknowledges that it is too early to expect measureable water quality improvements but anticipates such improvements in future listing cycles.

Based on the information DEM provided in its 2012 303(d) list submission, EPA has determined that the four Mt. Hope Bay water body segments are appropriate for continued listing in Category 4B for the impairments to water temperature and fish biodiversity. The State will continue to assess the bay segments in subsequent listing cycles to determine whether they should: 1) remain in Category 4B; 2) be placed into Category 5 again; or 3) placed into Category 1 or 2 because the segments are no longer impaired. The State will report back to EPA on the water bodies in the next listing cycle.

Table 5 - Waters listed in Category 4B from previous listing cycles– other pollution control in place

Water Body Name	Water Segment ID #	Other requirements in place
Mt Hope Bay, segment A	RI0007032E-01A	Brayton Point NPDES discharge permit
Mt Hope Bay, segment B	RI0007032E-01B	Brayton Point NPDES discharge permit
Mt Hope Bay, segment C	RI0007032E-01C	Brayton Point NPDES discharge permit
Mt Hope Bay, segment D	RI0007032E-01D	Brayton Point NPDES discharge permit

Priority Ranking

EPA also reviewed the State's priority ranking of listed waters for TMDL development. DEM has prioritized its list through its establishment of a schedule from 2012 to 2022 for completing TMDLs for waters on the list. According to the State's 2010 CALM, this schedule reflects the high consideration the State has given to "shellfishing waters, drinking water supplies and other areas identified by the public as high priority areas." In addition, EPA reviewed the State's identification of WQLSs targeted for TMDL development in the next two years, and concludes that the targeted waters are appropriate for TMDL development in this time frame.

Combinations of water body segments and impairment are given a priority for TMDL development based on their place in DEM's schedule. There are 120 water body segments in Category 5 with 254 (water body segment × impairment cause) combinations. DEM's TMDL development schedule is as follows, with the number of combinations due for development by the date shown:

2012: 36
2013: 4
2014: 5
2016: 56
2018: 107
2020: 13
2022: 33

DEM recognizes that changes in priorities may take place as new waters are added to the list and as other information becomes available. Overall, Rhode Island is committed to completing TMDL development for all currently listed waters by the year 2022.

EPA concludes that Rhode Island's water body prioritization and identification of waters targeted for TMDL study and/or development is reasonable and sufficient for the purposes of Section 303(d). DEM properly examined and considered the severity of pollution and uses of the listed waters, as well as other relevant factors identified in EPA's regulations. Further, EPA has determined that DEM priority ranking ensures reasonable progress in addressing high priority waters with challenging water quality problems (Memo from Geoffrey H. Grubbs, Supplemental Guidance on Section 303(d) Implementation, August 13, 1992). EPA and DEM assess yearly the pace of TMDL development versus the universe of impaired waters in the State.

Water bodies on tribal lands

EPA's approval of Rhode Island's Section 303(d) list extends to all water bodies on the list with the exception of those waters, if any, that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove the State's list with respect to waters within Indian country at this time. EPA, or any eligible Indian Tribe, as appropriate, will retain responsibilities under Section 303(d) for those waters.

Waters impaired by nonpoint sources of pollution

The State properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In 'Pronsolino v. Marcus,' the District Court for Northern District of California held that Section 303(d) of the Clean Water Act authorizes EPA to identify and establish total maximum daily loads for waters impaired by nonpoint sources. Pronsolino v. Marcus, 91 F. Supp. 2d 1337, 1347 (N.D.CA. 2000). This decision was affirmed by the 9th Circuit court of appeals in Pronsolino v. Nastri, 291 F.3d 1123 (9th Cir. 2002). See also EPA guidance (U.S. EPA, 2005). Waters identified by the State as impaired or threatened by nonpoint sources of pollution (NPS) were appropriately considered for inclusion on Rhode Island's 2012 Section 303(d) list. Rhode Island properly listed waters with

nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) regulations and EPA guidance.

EPA concludes that DEM properly considered waters identified by the State as impaired or threatened in nonpoint assessments under Section 319 of the CWA in the development of the 2010 Section 303(d) list.