



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 1**  
**5 Post Office Square, Suite 100**  
**Boston, MA 02109-3912**

May 2, 2013

Kenneth L. Kimmell, Commissioner  
Massachusetts Department of Environmental Protection  
1 Winter Street  
Boston, MA 02108

Dear Mr. Kimmell:

Thank you for your submittal of the 2012 Clean Water Act (“CWA”) Section 303(d) list, *2012 State of Massachusetts Integrated List of Waters Final Listing of the Condition of Massachusetts’ Waters Pursuant to Sections 305(b) and 303(d) of the Federal Clean Water Act (IL)*. In accordance with Section 303(d) of the CWA and 40 CFR §130.7, the U.S. Environmental Protection Agency, Region 1 (EPA) conducted a complete review of Massachusetts’ 2012 Section 303(d) list and supporting documentation. Based on this review, EPA has determined that Massachusetts’ list of water quality limited segments still requiring Total Maximum Daily Loads (TMDLs) meets the requirements of Section 303(d) of the CWA and EPA’s implementing regulations. Therefore, by this letter, EPA hereby approves Massachusetts’ 2012 Section 303(d) list.

The submittal includes a list of those waters for which technology based and other required controls for point and nonpoint sources are not stringent enough to attain or maintain compliance with the Commonwealth’s Water Quality Standards. The submittal also presents Massachusetts’ TMDL strategy which describes the priority setting approach and identifies those waters for which TMDLs will be completed and submitted during the next two years and beyond. The statutory and regulatory requirements, and EPA’s review of Massachusetts’ compliance with each requirement, are described in detail in the enclosed approval document.

The Massachusetts Department of Environmental Protection (MassDEP) has also successfully completed a public participation process during which the public was given the opportunity to review and comment on the 2012 Section 303(d) list. As a result of this effort, Massachusetts has considered public comments in the development of the final list. The public comments and MassDEP’s responses to those comments were included in the State’s final submittal.

We appreciate the level of effort that MassDEP has devoted to preparing the 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 to aid us in our review and approval. My staff and I look forward to continued cooperation with MassDEP in implementing the requirements under Section 303(d) of the CWA.

Please feel free to contact Andrea Traviglia at 617-918-1993 if you have any questions about or comments on our review.

Sincerely,

/s/

Kenneth Moraff, Acting Director  
Office of Ecosystem Protection

Enclosure

cc: Rick Dunn, MassDEP  
Art Johnson, MassDEP  
Andrea Traviglia, EPA Region 1  
Greg Dain, EPA Region 1  
Ralph Abele, Acting Chief, Water Quality Branch, EPA Region 1

# **EPA NEW ENGLAND'S REVIEW OF MASSACHUSETTS' 2012 CWA SECTION 303(d) LIST**

## **I. INTRODUCTION**

EPA has conducted a complete review of Massachusetts' (MA) 2012 Section 303(d) list and supporting documentation and information and, based on this review, EPA has determined that Massachusetts' 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 Massachusetts' 2012 final Section 303(d) list, included as part of the *2012 State of Massachusetts Integrated List of Waters Final Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b) and 303(d) of the Federal Clean Water Act (IL)* dated March 27, 2013. The Final IL was received by on EPA on April 2, 2013. The statutory and regulatory requirements, and EPA's review of Massachusetts' compliance with each requirement, are described in detail below.

## **II. STATUTORY AND REGULATORY BACKGROUND**

### **Identification of WQLSs for Inclusion on 303(d) List**

Section 303(d)(1) of the Act directs States to identify those waters within its 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, 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 nonattainment 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 §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's 2006 Integrated Report Guidance, referenced below, 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/](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.

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 §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 §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's 2006 Integrated Report Guidance and the 2006, 2009, and 2011 memoranda and attachments.

### **III. REVIEW OF MASSACHUSETTS' SECTION 303(d) SUBMISSION**

The Massachusetts Department of Environmental Protection (MassDEP) issued a draft 2012 Section 303(d) list of impaired waters for public review on March 12, 2012. MassDEP then revised the list based on comments received during the public comment period, including EPA comments sent by email on April 30, 2012. On April 2, 2013, EPA received from MassDEP the Commonwealth's final 2012 Section 303(d) list, which is included in Massachusetts' 2012 IL. EPA also received all relevant appendices to the Commonwealth's 2012 Section 303(d) list, a

provided by the commenters and consider addition of certain waterbody segments to the Commonwealth's final 2012 Section 303(d) list (see page 7 below, "Waters Nominated by the Public"). The Commonwealth also revised or added certain language in its 2012 IL in response to certain public comments received. For example, in response to multiple comments received, MassDEP added a section to the 2012 IL to describe the Massachusetts Sustainable Water Management Initiative (SWMI) and how MassDEP would utilize information from that effort to inform future watershed assessments. Finally, Massachusetts provided answers to the questions, concerns, and issues raised by the public that EPA believes were appropriate, adequately responsive, and clarified why the Commonwealth made decisions regarding listing or delisting of certain waterbody segment impairments.

In summary, EPA has reviewed Massachusetts' responses to the public comments received related to the Commonwealth's 2012 Section 303(d) list decisions, and concludes that Massachusetts has appropriately and adequately responded to the comments.

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

EPA has reviewed Massachusetts' submission, and has concluded that Massachusetts developed its 2012 Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR Section 130.7. EPA's review and analysis considers whether the Commonwealth reasonably considered existing and readily available water quality related data and information and reasonably identified waters required to be listed.

Massachusetts developed its 2012 Section 303(d) list (Category 5) by updating its 2010 Section 303(d) list using all Section 305(b) water quality assessments that have been completed since the 2010 Section 303(d) list was published. Previously unlisted waterbodies that were determined to be impaired for one or more uses were added to the Commonwealth's 2012 Section 303(d) list unless data showed that the impairment was not caused by or associated with a pollutant. Determinations of impairments were based on valid monitoring data and/or evaluative information that were collected and determined to be sufficient to make Section 303(d) listing judgments.

The Commonwealth's 2012 Section 303(d) list was updated to reflect new data and/or other relevant information; in addition, corrections were made in 2012 to address any identified listing errors made during previous listing cycles. The MassDEP watershed assessments are continuously performed according to a rotating watershed schedule and existing and readily available data and information pertaining to each watershed are solicited from all potential sources at the outset of this process. Since the time the Commonwealth's 2010 IL was prepared, new assessments have been completed for the Blackstone, Boston Harbor (including Mystic, Neponset and Weymouth/Weir), Merrimack and Parker watersheds and the Cape Cod coastal drainage area, and these assessments furnished the majority of new information in support of the 2012 listing decisions. Changes to waters in watersheds other than these are few in number in 2012 and are documented in the IL. A complete list of the MassDEP watershed assessments embodied in the 2012 categorization of waters can be found in the Bibliography (pages 25-34) of the 2012 IL.

In preparing its 2012 Section 303(d) list, Massachusetts used all existing and readily available water quality-related data and information including those sources identified in 40 CFR §130.7(b)(5): (i) most recent §305(b) report; (ii) dilution calculations and predictive models; (iii) water quality problems reported by local, state, or federal agencies; members of the public; or academic institutions; and (iv) §319 non-point source assessments. Massachusetts relied on these and additional sources of information (identified in the section of the IL entitled, “General Approach to Assessing Massachusetts’ Waters”, pages 12-15) to prepare the individual watershed assessment reports which together with the 2010 Section 303(d) list provide the basis for compiling the 2012 Section 303(d) list.

Massachusetts actively solicits external sources of information and water quality data to perform assessments. Sources of information used in developing the 2012 Section 303(d) list include federal agencies, state agencies, local governments, academic institutions, and watershed associations. Water quality information obtained from these and other agencies or groups was considered in development of the 2012 Section 303(d) list. Typically the sources of data used for assessments are cited in the individual watershed assessment reports. However, MassDEP also relied on water quality-related data and information that was submitted during the public comment period for the 2012 Section 303(d) list. In those cases where valid water quality-related data and/or other information was provided during the public comment period and used as the basis for listing a waterbody segment impairment on the final 2012 Section 303(d) list, the source of this data and/or other information is identified in Appendix 5 of the final 2012 IL, the Commonwealth’s written Responses to Public Comments.

EPA has reviewed Massachusetts’ description of the data and/or other information it considered, its methodology for identifying waters, and relevant individual watershed assessment reports. EPA concludes that the Commonwealth properly assembled and evaluated all existing and readily available water quality-related data and information, including data and information relating to the categories of waters specified in 40 CFR Section 130.7(b)(5).

Among the information EPA reviewed were MassDEP’s watershed reports that contained information to support the delisting of waterbody segment impairments based upon new assessments. Those watershed reports addressed the Blackstone River, Cape Cod, Charles River, SuAsCo (Concord River), Merrimack River, Neponset River, Parker River, and Taunton River Watersheds. In some cases, Massachusetts does consider including waters on the Section 303(d) list based on data older than 5 years of age (i.e., “evaluated” waters under EPA’s Section 305(b) guidance) where such data show excursions above one or more criteria of Massachusetts’ surface water quality standards. Although data older than 5 years is considered “evaluative” information under EPA’s Section 305(b) guidance, Massachusetts chose to use such data in specific cases as a basis for listing or delisting a waterbody segment impairment. In those instances, the Commonwealth concluded that the use of such data is reasonable because, without specific information to the contrary, there is no reason to believe that data older than 5 years are no longer representative of the water quality of the waterbody in question. EPA believes this conclusion is reasonable, and it is consistent with EPA regulations for states to decide to list waters based on data older than 5 years. The regulations require states to consider all available data and to use it unless the state provides a reasonable rationale for not doing so.

Bartlett Pond (MA81008). MassDEP also added one new impairment to a waterbody segment previously listed in Category 5 (for other impairments) at the request of CRWA: Charles River (MA72-38) for e.coli.

Massachusetts also decided not to list a number of waterbodies and impairments that were nominated for listing by members of the public. The MassDEP's rationales for not listing specific waterbodies and impairments are provided in Appendix 5, Responses to Public Comments. EPA has reviewed MassDEP's responses to all public comment received and has concluded that Massachusetts' decision not to include on the Commonwealth's 2012 Section 303(d) list certain proposed waterbody impairments identified by the public is reasonable for the reasons discussed below. Massachusetts' two primary reasons for not listing waters based on the information received are that (1) the segments and impairments in question were already listed in the 2012 IL cycle in Category 5 or 4a for impairments directly related to those being newly proposed by the public and/or (2) insufficient data and/or other information was provided by the public to confirm that an impairment exists and to support a Section 303(d) listing decision.

During the public comment period on the Commonwealth's proposed 2012 Section 303(d) list, the Buzzards Bay Coalition requested the addition of seven waterbody segment impairments to Massachusetts' list of impaired waters. MassDEP subsequently worked with Buzzards Bay Coalition to evaluate the data presented and ultimately agreed to add six of the seven segment impairments to the Commonwealth's final list of impaired waters, as previously detailed above. However, MassDEP did not agree to the Coalition's request for the seventh segment (MA95-17) to be added to the Section 303(d) list for a nutrient impairment as this segment is already listed in Category 5 for a directly related impairment (Estuarine Bioassessments).

Similarly, MassDEP did not agree to list two segments in the Charles River Watershed, Charles River (MA72-36) and Charles River (MA72-38), for *Enterococcus* that were nominated by CRWA. The rationale for MA72-36 is the same as for MA95-17, i.e., that the Charles River (MA72-36) is also already on the 2012 303(d) list for a related bacteria impairment (e.coli) for which an EPA approved bacteria TMDL already exists. MassDEP and EPA have concluded that the existing bacteria TMDL will address any impairment that would arise from and be demonstrated by *Enterococcus* data. Charles River (MA72-38) was identified above as an addition by MassDEP to the Section 2012 303(d) list based on comments from CRWA for a directly related bacteria impairment (e.coli). As both segments are now listed for bacteria impairments on the 2012 Section 303(d) list, EPA agrees with MassDEP's decision not to list the waterbody segments separately for *Enterococcus*.

EPA also agrees with MassDEP's assessment methodology related to utilizing data within a single year to calculate a geomean rather than combining multiple years of data, noted as a part of the MassDEP's response to certain aspects of the Charles River Watershed's comments.

### **Delistings**

**Water Body Segment Impairments not listed on Massachusetts' 2012 Section 303(d) list, but which were listed on Massachusetts' 2010 Section 303(d) list.**



Commonwealth's list with respect to waters within Indian Country. 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 Commonwealth 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. Natri, 291 F.3d 1123 (9th Cir. 2002). See also EPA guidance (U.S. EPA, 2005). Waters identified by the Commonwealth as impaired or threatened by nonpoint sources of pollution (NPS) were appropriately considered for inclusion on Massachusetts' 2012 Section 303(d) list. Massachusetts properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) regulations and EPA guidance.

EPA concludes that MassDEP properly considered waters identified by the Commonwealth as impaired or threatened in nonpoint assessments under Section 319 of the CWA in the development of the 2012 Section 303(d) list.