



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION I**  
**5 POST OFFICE SQUARE, SUITE 100**  
**BOSTON, MASSACHUSETTS 02109-3912**

September 19, 2011

Betsey Wingfield, Chief  
Bureau of Water Protection and Land Reuse  
Connecticut Department of Environmental Protection  
79 Elm Street  
Hartford, CT 06106

Dear Ms. Wingfield:

Thank you for your submittal of the 2010 Clean Water Act Section 303(d) list, Connecticut's 2010 List of Water Bodies Not Meeting Water Quality Standards. In accordance with ' 303(d) of the Clean Water Act and 40 CFR ' 130.7, the U.S. Environmental Protection Agency (EPA) conducted a complete review of Connecticut's 2010 ' 303(d) list and supporting documentation. Based on this review, EPA has determined that Connecticut's list of water quality limited segments still requiring total maximum daily loads meets the requirements of ' 303(d) of the Clean Water Act (ACWA@ or Athe Act@) and EPA's implementing regulations. Therefore, by this letter, EPA hereby approves Connecticut's 2010 ' 303(d) list.

The ' 303(d) list was submitted as Table 3-2 of the Connecticut's 2010 Integrated Water Quality Report. Chapter 3 of the report 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 State's Water Quality Standards. The submittal presents Connecticut's total maximum daily load strategy which describes the priority setting approach and identifies those waters for which total maximum daily loads will be completed and submitted during the next two years and beyond. The statutory and regulatory requirements, and EPA New England's review of Connecticut's compliance with each requirement, are described in detail in the enclosed approval document.

The Connecticut Department of Environmental Protection has also successfully completed a public participation process during which the public was given the opportunity to review and comment on the ' 303(d) list. As a result of this effort, Connecticut has considered public comments in the development of the final list. A summary of the public comments and DEP's response to comments was included in the final submittal.

We are pleased with the quality of your submittal and appreciate the level of effort that CT DEP has devoted to preparing the 2010 ' 303(d) list. Your staff have prepared a comprehensive and informative list, and provided EPA with supporting documentation and assistance. My staff and I look forward to continued cooperation with DEP in implementing the requirements under ' 303(d) of the CWA.

Please feel free to contact Steve Silva at 617-918-1561 or Mary Garren at 617-918-1322 if you have any questions or comments on our review.

Sincerely,

/s/

Stephen S. Perkins

Enclosure

cc: Traci Iott, CT DEP  
Rob Hust, CT DEP  
Stephen Silva, EPA  
Ann Williams, EPA  
Gregory Dain, EPA  
Mary Garren, EPA

# **EPA NEW ENGLAND'S REVIEW OF CONNECTICUT'S 2010 CWA SECTION 303(d) LIST**

## **I. INTRODUCTION**

EPA has conducted a complete review of Connecticut's (CT) 2010 Section 303(d) list and supporting documentation and information and, based on this review, EPA has determined that Connecticut'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 Connecticut's 2010 final Section 303(d) list, included as part of the *2010 State of Connecticut Integrated Water Quality Report pursuant to Sections 305(b) and 303(d) of the Federal Clean Water Act* dated May 31, 2011. The final Integrated Water Quality Report, with minor revisions was submitted to EPA on July 18, 2011. The minor revisions were detailed in the cover letter submitted by CT DEP to EPA. The statutory and regulatory requirements, and EPA's review of Connecticut's compliance with each requirement, are described in detail below.

## **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 §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 describes categories of water quality related data and information that may be existing and readily available. See EPA's May 5, 2009 memorandum on *Information Concerning 2010 Clean Water Act Sections 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions*, which recommended that the 2010 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 the October 12, 2006 memo and attachments and the May 5, 2009 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 upon 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), EPA's 2006 Integrated Report Guidance, and the 2006 and 2009 memoranda and attachments.

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

The Connecticut's Department of Environmental Protection (CT DEP) submitted a final 2010 Section 303(d) list to EPA, along with responses to comments, dated May 31, 2011. The Section 303(d) list under review here was included as Chapter 3 of Connecticut's 2010 Integrated Report. The 2010 Section 303(d) list includes all waters that have been assigned to EPA Category 5. The Section 303(d) list contains decision ranking criteria for prioritizing EPA Category 5 waterbodies for TMDL development.

1.) The final 2010 State of Connecticut Integrated Water Quality Report to Congress includes extensive information, including the following specific sections directly related to the Section 303(d) list:

Chapter 3: 2010 List of Connecticut Waterbodies Not Meeting Water Quality Standards

Table 3.1: US EPA Categories for Waterbodies Not Meeting State WQS

Table 3.2: Connecticut Impaired Waters List

Table 3.3: Waterbodies with Adopted TMDLs (Category 4-A)

Table 3.4: Pollution Control Measures for Category 4-B Waterbody Segments

Table 3.5: Nonpollutant Impairments (Category 4-C)

Table 3.6: Reconciliation List

Table 3.7: Waterbodies Removed from Connecticut's Impaired Waters List

Table 3.8: Priority List for TMDL Development of Impaired Waterbodies

Connecticut has included all waters known or suspected not to be meeting water quality standards on the Section 303(d) list. Under its current listing approach, Connecticut keeps a waterbody 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 is confirmed as having been 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 4-A lists waters for which a TMDL has already been approved. Category 4-B includes waters for which a functionally equivalent control action has been developed. An impairment caused by a pollutant is being addressed through other pollution control requirements. Waters in Category 4-C 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 contains waters where available data and/or information indicates that the water is impaired or threatened by pollutants for one or more designated uses and a TMDL is required. Federal Regulations in 40 CFR Section 130.7 require EPA to review and approve or disapprove the Category 5 list of impaired waters.

2.) Response to public comments

CT DEP published a draft *2010 Integrated Water Quality Report* on April 11, 2011. The State's *List of Connecticut Waterbodies Not Meeting Water Quality Standards* was included as Chapter 3 of the draft report. Stakeholders were notified by mail and by public notice in local newspapers. A public informational meeting was held on May 5, 2011. Comments were accepted from the public until May 11, 2011. Four parties submitted comments. The State published a detailed Responsiveness Summary along the final impaired waters list on May 31, 2011. CT DEP provided EPA with a copy of each comment letter attached to the Responsiveness Summary. The text of the Responsiveness Summary grouped the public comments and provided the State's responses to each question or issue raised. EPA has reviewed each of the original comment letters and CT DEP's responses, and concludes that Connecticut adequately responded to the public comments.

CT DEP received a comment from the Connecticut River Watershed Council regarding waterbody segment CT4000-00\_02 of the Connecticut River in northern Connecticut. CT DEP explains in their Response to Comments that their listings of potential sources are merely sources that may be explored. They are not confirmed sources. The watershed council asked for evidence as to why sources outside "state jurisdiction or borders" are potential sources. EPA requested additional information from CT DEP about this waterbody segment and CT DEP's basis for considering sources outside the state boundary. The Commonwealth of Massachusetts identifies multiple communities on the Connecticut River at the state boundary (e.g. Agawam, Springfield, and West Springfield) that are permitted for Combined Sewer Overflow (CSO) discharges. <http://www.mass.gov/dep/water/wastewater/csofaqs.htm#> CSOs are being phased out in communities, but still remain in some older cities and towns. Bacteria are common in CSO discharges during wet weather and the reason for the ongoing elimination of CSOs. CT has identified out-of-state sources as a potential source of bacteria in segment CT4000-00\_02. CT DEP's consideration of the identified CSO discharges as "potential" sources is reasonable and does not imply that they will be confirmed as actual sources.

EPA has reviewed CT DEP's responses and concludes that Connecticut has adequately responded to the public 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 State of Connecticut uses sources of data and information consistent with EPA regulations and guidance (U.S. EPA, 2005) when conducting the State's water quality assessments. These data include:

- Results from recent ambient monitoring;
- Recent Sections 305(b) reports, 303(d) lists, and 319(a) nonpoint assessments;
- Reports of water quality problems provided by local, state, territorial or federal agencies, volunteer monitoring networks, members of the public or academic institutions;
- Fish and shellfish advisories, restrictions on water sports or recreational contact;
- Reports of fish kills or abnormalities (deformities, lesions, tumors);
- Safe Drinking Water Act source water assessments;
- Superfund and Resource Conservation and Recovery Act reports; and
- Results from predictive modeling, dilution calculations or landscape analysis.

The primary sources of assessment information for rivers are ambient monitoring data collected by CT DEP monitoring staff, and physical, chemical and bacteria data collected at fixed sites by the United States Geological Survey (USGS). Lake assessments and trophic status are generally determined from studies conducted by CT DEP, the Connecticut Agricultural Experiment Station, USGS and Connecticut College since 1979 (Frink and Norvell 1984, Canavan and Siver 1995, Healy and Kulp 1995, CT DEP 1998) as well as recent studies by professional contractors. For estuaries, use assessments are based primarily on physical, chemical and biological monitoring by the CT DEP for the Long Island Sound Study and National Coastal Assessment (Strobel 2000), bacterial monitoring for shellfish sanitation by the CT Department of Agriculture, Bureau of Aquaculture (CT DA-BA), and beach monitoring by state and local authorities. Reasonable efforts are also made to incorporate data from other state and federal agencies, municipalities, utilities, consultants, academia, and volunteer monitoring groups. (Page 6 of the Integrated Report)

Connecticut relies upon data from many sources to assess whether a waterbody is meeting water quality standards and maintaining the water's designated uses. These sources are outlined above. The types of data used to assess the status of a waterbody may include: ambient physical and chemical, benthic invertebrate and fish community, indicator bacteria, aquatic toxicity, tissue contaminant, sediment chemistry/toxicity and effluent analysis. The data must meet the threshold of being "sufficient and credible," meaning that the data are scientifically defensible by an experienced professional. Data that meet that requirement are then used to assess the status of the waterbody.

CT DEP addresses mercury impairment of surface waters. Waters that are specifically listed in Category 5 as impaired for mercury have specific fish consumption advisories that are the result of local pollution sources. Additionally, "All freshwaters of the State are considered impaired for fish consumption and addressed by statewide limited consumption advisory for all freshwater fish, except trout, due to atmospheric deposition of mercury." (Table 2-1, footnote b) A statewide fish consumption advisory was issued for all species except trout < 15 inches in length in the mid-1990s due to mercury contamination. This advisory was based on statewide surveys of mercury contamination in fish from lakes (Neumann, 1996) and rivers (CT DEP, unpublished). A follow up study was completed in 2008 (Vokoun and Perkins, 2008) and the statewide fish consumption advisory was continued. The Northeast Regional Mercury TMDL approved by

EPA on December 20, 2007 addresses atmospheric mercury deposition in all the New England states, including Connecticut. CT DEP places all freshwater in the State in Category 4-A for failure of the waterbody segments to meet standards for fish consumption due to atmospheric mercury deposition.

In order to prepare the 2010 Section 303(d) list, the State established a date by which data would be considered for this listing cycle. Data available to CT DEP as of October 1, 2010 are relied upon for these assessments. Connecticut permits data from catastrophic events, such as fish kills and chemical spills, to be used in the assessment even if collected after October 1, 2010. Assessment data are maintained by the State in the EPA Section 305(b) Assessment Database (ADB) version 2.2.0, as well as a number of databases designed for CT DEP use.

EPA has reviewed Connecticut’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 Connecticut 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).

The State provided its rationale for not relying on particular existing and readily available water quality-related data and information as a basis for listing waters. Details as to why certain waters were not listed are provided in CT DEP’s Response to Comments. Waters included in Category 5 of the 2010 Section 303(d) list were assessed as impaired based upon failure of the water to attain its designated uses and attain water quality standards. Table 2-1 of the 2010 Integrated Report summarizes the status of Connecticut’s rivers, lakes, and estuarine segments/miles.

**Waters not listed on Connecticut’s 2008 §303(d) list, but which are being newly listed or with an additional impairment added on Connecticut’s 2010 §303(d) list.**

The State added 11 new freshwater segments to Category 5, the impaired waters list, in 2010. Each newly listed segment in the following table is impaired for recreation and/or habitat for fish, other aquatic life and wildlife.

**Table 1:** New Waterbody Segments added to Connecticut’s 2010 Section 303(d) list (Category 5 of the Integrated Report)

<b>Segment ID#</b>	<b>Waterbody Name</b>	<b>Impaired Use</b>
CT2203-00_01	Oil Mill Brook (East Lyme/Waterford)-01	Recreation
CT2204-03_01	Stony Brook (Waterford)-01	Recreation
CT3106-06-1-L2_01	Crandall Pond (Cider Mill Pond) (Tolland)	Recreation
CT4300-32_01	Minister Brook (Simsbury)-01	Recreation

CT4300-33_01	Russell Brook (Simsbury)-01	Recreation
CT4300-39_01	Owens Brook (Simsbury)-01	Recreation
CT4304-00_01a	Sandy Brook (Barkhamsted/Colebrook)-01a	Recreation
CT4607-08_01	Lyman Meadow Brook (Middlefield)-01	Recreation
CT4607-13_01	Laurel Brook (Middletown)-01	Recreation
CT7102-00_02	Bruce Brook (Bridgeport/Stratford)-02	Recreation
CT7102-00_02	Bruce Brook (Bridgeport/Stratford)-02	Habitat for Fish, Other Aquatic Life and Wildlife

Thirty-eight freshwater segments identified in the table below remain on the list from 2008 and have had a new impairment added in 2010.

**Table 2:** Waterbodies in Category 5 on the 2008 Section 303(d) list with a new impairment added in 2010

<b>Segment ID#</b>	<b>Waterbody Name</b>	<b>Impaired Use Added</b>
CT1004-00_01	Shunock River-01	Recreation
CT2202-00_01	Latimer Brook-01	Recreation
CT3300-00_01	French River-01	Recreation
CT3700-00_05	Quinebaug River-05	Habitat for Fish, Other Aquatic Life and Wildlife
CT3800-00_05	Shetucket River-05	Habitat for Fish, Other Aquatic Life and Wildlife
CT3800-00_05	Shetucket River-05	Recreation
CT4000-00_01	Connecticut River-01	Recreation
CT4013-00_02	Sumner Brook (Middletown)-02	Habitat for Fish, Other Aquatic Life and Wildlife
CT4100-00_01	Stony Brook (Suffield)-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT4300-00_02	Farmington River-02	Recreation
CT4302-00_03	Mad River (Winchester)-03	Recreation
CT4309-00_01	Cherry Brook (Canton)-01	Recreation
CT4312-00_01	Roaring Brook (Farmington)-01	Recreation
CT4315-00_05	Pequabuck River-05	Habitat for Fish, Other Aquatic Life and Wildlife
CT4315-00_06	Pequabuck River-06	Habitat for Fish, Other Aquatic Life and Wildlife

CT4316-00_01	Thompson Brook (Avon)-01	Recreation
CT4317-00_01	Nod Brook-01	Recreation
CT4318-00_01	Hop Brook (Simsbury)-01	Recreation
CT4319-00_01b	Salmon Brook, West Branch (Granby)-01b	Recreation
CT4321-00_01	Mill Brook (Windsor)-01	Recreation
CT4500-00_03	Hockanum River-03	Recreation
CT4500-00_04-B	Hockanum river-04-B	Recreation
CT4500-04_01	Ogden Brook (Vernon)-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT4500-12_02	Lydall Brook (Manchester)-02	Habitat for Fish, Other Aquatic Life and Wildlife
CT4504-00_01	South Fork Hockanum River (Manchester)-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT4603-00_01	Webster Brook-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT5105-00_01	Chatfield Hollw Brook (Killingworth)-01	Recreation
CT5200-02_01	Patton Brook-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT5200-10_01	Meetinghouse Brook (Wallingford)-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT5207-00_02	Wharton Brook-02	Habitat for Fish, Other Aquatic Life and Wildlife
CT5302-00_03	Mill River (Cheshire)-03	Habitat for Fish, Other Aquatic Life and Wildlife
CT6000-77_01	Twomile Brook (Derby/Orange)-01	Habitat for Fish, Other Aquatic Life and Wildlife
CT6302-00_02	Mill Brook (Sharon)-02	Recreation
CT6700-00_01	Shepaug River-01	Recreation
CT7105-00_05	Pequonnock River-05	Recreation
CT7405-00_02	Rippowam River-02	Habitat for Fish, Other Aquatic Life and Wildlife
CT7409-00_01	Horseneck Brook-01	Habitat for Fish, Other Aquatic Life and Wildlife

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

**Waters not listed on Connecticut's 2010 §303(d) list, but which were listed on Connecticut's 2008 §303(d) list.**

EPA requested that Connecticut provide a rationale for its decision not to include previously listed waters. As discussed below, the State has demonstrated, to EPA's satisfaction, good cause for not listing those waters, as provided in 40 C.F.R. §130.7(b)(6)(iv).

Category 5 in 2008 to Category 2 in 2010

For the 2010 Section 303(d) list cycle, the State has delisted some or all of the impairments in thirteen water body segments included on the 2008 Section 303(d) list because monitoring data show they are now meeting some or all of the water quality standards. These segments were listed in Category 5 in 2008 and are being completely or partially moved off the Section 303(d) list in this assessment cycle. CT DEP supplied up-to-date information on all the State's waters as part of this assessment cycle. Information supporting full and partial delistings is available for review in the EPA ADB.

Eight of thirteen waterbody segments are being fully delisted from Category 5. The remaining five of the thirteen segments are being delisted to Category 2 for a particular impairment, but these five segments remain other categories of the Integrated Report. Connecticut waters may be listed in multiple categories to reflect the attainment or non-attainment of a particular designated use. As with all of the State's waters, if any designated use is determined to be impaired in the next listing cycle it will be fully or partially returned to Category 5. Table 3-7 of the Integrated Report (as resubmitted of EPA on July 18, 2011) summarized all the waters removed from the Impaired Waters List in this listing cycle.

Table 3: Waterbodies in Category 5 on the 2008 Section 303(d) list being fully or partially delisted to Category 2 in 2010

<b>Segment ID#</b>	<b>Waterbody Name</b>
CT3401-00_02	Rocky Brook
CT3700-00_02	Quinebaug River-02
CT3800-00_03	Shetucket River-03
CT4601-02_01	Hatchery Brook-01
CT-C1_008	LIS CB Inner – Joshua Cove, Beattie Pond, Guilford
CT-C1_020-SB	LIS CB Inner – Housatonic River (lower), Milford
CT-C1_021-SB	LIS CB Inner – Housatonic River (upper), Orange
CT-E1_028-SB	LIS EB Inner – Lieutenant River, Old Lyme
CT-E1_029-SB	LIS EB Inner – Connecticut River (lower), Essex
CT-W1_011	LIS WB Inner – Saugatuck River, Westport
CT-W1_018-SB	LIS WB Inner – Stamford Harbor (inner), Stamford
CT-W1_019	LIS WB Inner – Cos Cob Harbor (upper), Greenwich
CT-W1_020	LIS WB Inner – Indian Harbor (upper), Greenwich

Three waterbody segments are being delisted data from this reporting cycle demonstrates that the waterbodies are fully supporting their recreational uses based upon data provided by CT DEP that demonstrates that the water quality criteria for bacteria (single sample maximum and geometric mean) are being attained. Bacteria were the pollutant originally responsible for the listing of each of these waterbody segments. These waters are: Rocky Brook-02 (CT3401-00\_02), Quinebaug River-02 (CT3700-00\_02), and Shetucket River-03 (CT3800-00\_03). EPA has reviewed the data for these waterbody segments and agrees with CT DEP that these waters are appropriate for delisting.

Hatchery Brook-01(CT4601-02\_01) was listed because the water was not attaining its designated use for habitat for fish, other aquatic life and wildlife. Hatchery Brook-01 listed as impaired due to a fish kill that occurred when a local club drained their chlorinated pool. CT DEP staff followed up and the club’s response was to remove the pool entirely. CT DEP fisheries staff has completed a fish survey indicating that the fish community in this segment of the river has been restored. EPA agrees with CT DEP that Hatchery Brook-01 is appropriate for delisting due to restoration of the fish communities.

Nine segments of coastal Long Island Sound are being delisted from the 2010 impaired waters list. CT DEP is moving these nine waterbody segments from Category 5 to Category 2. They were listed as impaired for habitat for fish, other aquatic life and wildlife. The CT Bureau of Aquaculture is the governing agency for shellfishing in CT. Administrative actions previously taken by that agency had determined these areas to be classed as “inadequate use of Shellfish Harvest”. While CT Bureau of Aquaculture categories and CT DEP Water Quality classifications are not directly comparable, CT DEP used the Bureau of Aquaculture’s administrative closures of the shellfish beds as reason to list the waterbody segments as impaired on the 303(d) list. Original listings by CT DEP for these nine coastal segments were not based on available

monitoring data. The assessment status of the waterbody segment was changed to “not assessed”. This list is a subset of the waters listed above in Table 3.

<b>Segment ID#</b>	<b>Waterbody Name</b>
CT-C1_008	LIS CB Inner – Joshua Cove, Beattie Pond, Guilford
CT-C1_020-SB	LIS CB Inner – Housatonic River (lower), Milford
CT-C1_021-SB	LIS CB Inner – Housatonic River (upper), Orange
CT-E1_028-SB	LIS EB Inner – Lieutenant River, Old Lyme
CT-E1_029-SB	LIS EB Inner – Connecticut River (lower), Essex
CT-W1_011	LIS WB Inner – Saugatuck River, Westport
CT-W1_018-SB	LIS WB Inner – Stamford Harbor (inner), Stamford
CT-W1_019	LIS WB Inner – Cos Cob Harbor (upper), Greenwich
CT-W1_020	LIS WB Inner – Indian Harbor (upper), Greenwich

Two waterbody segments were originally proposed for delisting in this cycle, but will remain in Category 5 of the Impaired Waters List. CT DEP has agreed with EPA that the recreational uses of the Housatonic River -04 (CT6000-00\_04) and Sasco Brook-01 (CT7109-00\_01) are not fully restored. The data does not show full attainment of Water Quality Standards. Those two segments have been withdrawn as candidates for delisting by CT DEP. They will remain in Category 5 as impaired for their recreational uses. The appropriate changes were made to the Integrated Report. The revised report was submitted to EPA on July 18, 2011.

Table 3-6 of the 2010 Integrated Report provides a full detailed reconciliation of all the changes made between the 2008 and 2010 Section 303(d) lists. The reconciliation, as taken from the revised Integrated Report, is included here as Appendix A of this approval template.

Table 3-7 of the 2010 Integrated Report details all the waterbodies delisted in this listing cycle.

For each of the full and partial delistings described above, EPA agrees that the State has reasonably concluded that the identified impairments no longer need to be on the Section 303(d) list because the segments are now meeting WQS for the identified impairments, the reason for the original listing has been addressed, or the waterbody did not originally require listing.

#### **Category 4**

As discussed above, Category 4 contains segments that remain impaired for one or more designated use, but do not need a TMDL for one of three reasons specified. Waterbody segments in Category 4-A have a State developed TMDL which has been approved by EPA. Segments listed in Category 4-A in prior listing cycles remain in that category unless TMDL implementation has resulted in attainment of the appropriate WQS. Segments listed in Category 4-B 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 4-C contains waterbody 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.

The 2010 Integrated Report does not include any waterbody segments that are being delisted from Category 5 to Categories 4-B or 4-C. Thirty-three segments/impairments are being removed from the impaired waters list for bacterial impairment and placed in Category 4-A due to EPA's approval of TMDLs for bacteria during the 2010 listing cycle. Implementation of the TMDLs is expected to result in full attainment of the water quality standards. Standards attainment will be verified through follow-up monitoring.

**Table 4:** Waters in Category 4-A with a TMDL approved during this listing cycle

<b>Segment ID#</b>	<b>Waterbody Name</b>	<b>Impaired Use addressed by TMDL</b>
CT4313-00_02	Poland River	Recreation
CT4314-00_01	Coppermine Brook	Recreation
CT4315-00_01	Pequabuck River	Recreation
CT4315-00_02	Pequabuck River	Recreation
CT4315-00_03	Pequabuck River	Recreation
CT4315-00_04	Pequabuck River	Recreation
CT4315-00_05	Pequabuck River	Recreation
CT4315-00_06	Pequabuck River	Recreation
CT5200-00_1	Quinnipiac River	Recreation
CT5200-00_2	Quinnipiac River	Recreation
CT5200-00_3	Quinnipiac River	Recreation
CT5200-00_4	Quinnipiac River	Recreation
CT5200-00_5	Quinnipiac River	Recreation
CT5200-00_6	Quinnipiac River	Recreation
CT5200-00_7	Quinnipiac River	Recreation
CT5203-00_01	Misery Brook	Recreation
CT5205-00_01	Sodom Brook	Recreation
CT5206-00_01	Harbor Brook	Recreation
CT5206-00_02	Harbor Brook	Recreation
CT6900-00_01	Naugatuck River	Recreation
CT6900-00_02	Naugatuck River	Recreation
CT6900-00_03	Naugatuck River	Recreation
CT6900-00_04	Naugatuck River	Recreation
CT6900-00_05	Naugatuck River	Recreation
CT6900-00_06	Naugatuck River	Recreation
CT6900-22_01	Great Brook	Recreation
CT6912-00_01	Steele Brook	Recreation
CT6912-00_02	Steele Brook	Recreation
CT6914-00_01	Mad River	Recreation
CT6914-00_02	Mad River	Recreation
CT6914-00_03a	Mad River	Recreation
CT6916-00_01	Hop Brook	Recreation
CT6917-00_01	Long Meadow Pond Brook	Recreation

In summary, EPA recognizes that Connecticut’s delisting in 2010 of these previously Section 303(d)-listed waterbodies has been done in accordance with 40 CFR Section 130.7(b) and EPA’s guidance referenced above.

Table 5 presents the list of all waters that are placed in Category 4-B of the 2010 Integrated Report. All of these waters were found in Category 4-B in the 2008 listing cycle as well.

**Table 5:** Waters listed in Category 4-B in 2008 and remaining in Category 4-B in 2010

<b>Segment ID#</b>	<b>Waterbody Name</b>
CT3104-00-2-L8_outlet_01	Ruby Lake outlet stream-01
CT4300-48_01	Perkins Brook-01
CT5000-55_02	Unnamed trib to Oyster River (Milford)-02
CT5201-00_01	Eightmile River (Southington)-01
CT6000-00_03	Housatonic River-03
CT6000-00_04	Housatonic River-04
CT6000-00_05	Housatonic River-05
CT6000-00_06	Housatonic River-06
CT6000-00_07	Housatonic River-07
CT6000-00-5+L1_01	Lillinonah, Lake (Newtown/Southbury/Bridgewater/Brookfield)
CT6000-00-5+L2_01	Zoar, Lake (Monroe/Newton/Oxford/Southbury)
CT6000-00-5+L2_02	Zoar, Lake (Newtown/Southbury)
CT6000-00-5+L4_01	Housatonic, Lake (Shelton/Derby/Seymour/Oxford/Monroe)
CTW1_006	LIS WB Inner – Mill River, Fairfield

**Waters showing water quality improvement**

Although not subject to formal §303(d) review and approval, EPA notes that two previously impaired water were addressed by other pollution control measures and have been moved from Category 4-B in the 2008 Integrated Report to Category 2 in Connecticut’s 2010 IR.

**Table 6:** Waters listed in Category 4-B in 2008 and placed in Category 2 in 2010

<b>Segment ID#</b>	<b>Waterbody Name</b>
CT5302-00_01	Mill River-01
CT7108-00_02b	Mill River

Mill River-01 (CT5302-00\_01) was listed as impaired for its recreational use and its use for habitat for fish, other aquatic life and wildlife. This administrative listing was due to an incident originally attributed to a combined sewer overflow and no water quality data was taken to support the listing. The actual source was found to be a municipal sewer system malfunction. CT DEP’s Municipal Wastewater Program ensured that the necessary repairs were completed in the 2007. This was confirmed in 2010. The DEP fisheries staff has documented that the

diadromous clupeids (herring family) have been restored in the waterbody segment. For these reasons, EPA agrees with CT DEP that the recreational and habitat uses of Mill River-01 have been restored.

Mill River (CT7108-00\_02b) was originally listed due to a spill from a truck delivering chlorine to a drinking water treatment facility. A fish kill resulted in this segment. CT DEP issued a Notice of Violation in 2003. The department oversaw response actions and initiation of future preventative measures. After years during which the fish population had not rebounded, CT DEP fisheries staff has completed a fish survey showing that the population has now rebounded.

The waterbody segment is now supporting a healthy population of wild brook trout. The segment has been listed in Category 4-B as being addressed by pollution control measures and not slated for TMDL development. These other measures have restored the habitat and the waterbody segment is being moved from Category 4-B to Category 2. EPA agrees with CT DEP that Mill River-02b is appropriate for delisting due to restoration of the fish communities.

### **Priority Ranking**

EPA also reviewed the State's priority ranking of listed waters for TMDL development, and concludes that the State properly took into account the severity of pollution and the uses to be made of such waters, as well as other relevant factors such as the complexity of the impairment and availability of quality information on it, and the likelihood that a remedy might be implemented before a TMDL could be developed. 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.

Connecticut generally bases the development of its priority ranking on the severity of the pollution and the uses to be made of such waters, and the factors listed in EPA guidance (U.S. EPA, 2005), especially waters ranked as high priority ("H", see below).

Connecticut includes other factors such as the availability and quality of data identifying the causes for non-attainment of WQS, and the extent of the water quality problems. Connecticut also bases its ranking in part on the likelihood that a water body's impairment may be resolved before a TMDL is developed.

There are 425 waterbody segments in Category 5 on the 2010 303(d) list impaired for one or more designated uses. The State assigns a priority for TMDL development to each (waterbody segment × impaired designated use) combination. Connecticut has prioritized those waters still requiring the development of TMDLs as high (H), medium (M), or low (L).

#### High Priority Waters

Waters assigned an "H" are high priority waters for a particular impaired use. Assessment information for "H" waters suggests that a TMDL may be needed to restore uses and solve the impairment. Waters and impairments designated as "H" are targeted for TMDL development within 3 years.

40 C.F.R. §130.7(b)(4) requires that “the priority ranking shall specifically include the identification of waters targeted for TMDL development in the next two years.” While the CT DEP identifies their priority waters for the next three years, CT DEP makes a yearly commitment to EPA, as part of their Performance Partnership Agreement, as to the number of TMDLs the State will submit during the coming year. CT DEP shares with EPA the specific TMDLs that they are and will be working on in a tracking report submitted during the year. Their agreement to commit to a 3-year priority ranking system in the next listing cycle and their yearly specific commitments provide the basis for EPA’s acceptance of their priority ranking system this year. Table 3-8 of the 2010 Integrated Report outlines the priority list for TMDL development.

#### Medium Priority Waters

Waters assigned an “M” are of medium priority. There may be insufficient information to assess whether a pollutant is causing the impairment to these water bodies, and other programs may remedy the water quality impairment. Waters and impairments designated as “M” are targeted for TMDL development within 3-7 years.

#### Low Priority Waters

Waters and impairments assigned an “L” are low priorities for TMDL development because other programs are likely to remedy the water quality impairment. Waters/impairments designated as “L” are targeted for TMDL development within 7-11 years.

Connecticut employs a five year rotating basin monitoring cycle. As additional data are compiled, Connecticut is committed to re-prioritizing waters based on factors such as, but not limited to, the nature/severity of the impact, importance of unsupported use, the availability of data or models required for TMDL development, etc. Overall, Connecticut is committed to completing TMDL development for all listed waters by the year 2017.

EPA concludes that Connecticut’s waterbody prioritization and identification of waters targeted for TMDL study and/or development during the next 3 years is reasonable and sufficient for the purposes of Section 303(d). CT DEP 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. EPA has determined that CT DEP properly ranked those waters listed for TMDL development within the next 3 years by considering the complexity of each TMDL. Further, EPA has determined that CT DEP 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 CT DEP 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 Connecticut'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. There are two Federally-recognized Indian Tribes in Connecticut. They are the Mashantucket Pequot Tribal Nation and the Mohegan Tribe.

### **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 the 2010 Section 303(d) list. Connecticut properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) regulations and EPA guidance.

EPA concludes that CT DEP 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 2008 Section 303(d) list.

## APPENDIX A

Reconciliation of the 2008 and 2010 Section 303(d) Impaired Waters List  
prepared by CT DEP as Table 3-6 of the 2010 Integrated Report