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DEPARTMENT OF
ENVIRONMENTAL PROTECTION
Bureau of Water Management
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Arthur J. Rocque, Jr., Commissioner

2004 WATER QUALITY REPORT TO CONGRESS

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Table of Contents

Chapter	Page
Table of Contents	iii
List of Tables and Figures	iv
Chapter 1. Executive Summary	1-1
Chapter 2. Connecticut Surface Water Resources and Management	2-1
Chapter 3. Economic and Community Costs and Benefits of Clean Water	3-1
Chapter 4. Assessment Methodology of Surface Waters	4-1
Chapter 5. Water Quality (Use Support) Summaries	5-1
Chapter 6. Wetlands Assessments	6-1
Chapter 7. Ground Water Protection	7-1
Chapter 8. Public Health and Aquatic Life Concerns	8-1
Chapter 9. References	9-1
Appendix A. Waterbody Segment Locations	A-1
Appendix B. Use Support in Rivers and Causes/Sources of Impairment	B-1
Appendix C. Use Support in Lakes and Causes/Sources of Impairment	C-1
Appendix D. Use Support in Estuaries and Causes/Sources of Impairment	D-1
Appendix E. Codes for Terms Used in Use Support Tables	E-1
Appendix F. Connecticut Reservoir and Trophic Status	F-1
Appendix G. Applicable Water Quality Standards and Criteria for Assessed Waters	G-1
Appendix H: Biological Sampling Stations and Provisional Results: Fall 1996-Fall 2000	H-1

Tables and Figures

Tables

Table of Acronyms used in the 2004 Water Quality Report to Congress	v
Table 2-1. Connecticut Water Resources Atlas	2-1
Table 4-1. Designated uses for surface waters as described in Connecticut Water Quality Standards and 305(b)/303(d) Reports.	4-2
Table 4-2. Aquatic life use support categories and contributing decision criteria for wadeable streams.	4-9
Table 4-3. Aquatic life use support in estuaries as determined by dissolved oxygen levels.	4-10
Table 4-4. Fish consumption use support and criteria.	4-11
Table 4-5. Shellfishing use support as determined by shellfish bed classifications.	4-11
Table 4-6. Decision criteria for various categories of primary contact use support.	4-13
Table 4-7. Overall use support categories.	4-14
Table 5-1. Summary of Evaluated and Monitored Waterbody Segments.	5-1
Table 5-2. Use support summaries for Connecticut waters, 2004.	5-9
Table 5-3. Summary of Potential Causes Impairing Rivers.	5-10
Table 5-4. Summary of Potential Causes Impairing Freshwater Lakes.	5-11
Table 5-5. Summary of Potential Causes Impairing Estuaries.	5-12
Table 5-6. Summary of Potential Sources Impairing Rivers.	5-13
Table 5-7. Summary of Potential Sources Impairing Freshwater Lakes.	5-14
Table 5-8. Summary of Potential Sources Impairing Estuaries.	5-15
Table 5-9. Summary of trophic status of “significant” and all assessed lakes.	5-15
Table 5-10. Special Monitoring Projects 2002-2003.	5-16
Table 6-1. Present and historical wetland and watercourse acreage in Connecticut.	6-1
Table 6-2. Tidal wetlands and submerged aquatic vegetation.	6-3
Table 8-1. Fish Consumption Advisories for Connecticut Waters, 2002.	8-3
Table 8-2. Fish kills reported in Connecticut during 2002 and 2003.	8-4
Table 8-3. Bathing beach closures reported in Connecticut for 2002 and 2003.	8-7

Figures

Figure 2-1. Perennial streams and lakes in Connecticut.	2-2
Figure 4-1. Rotating basin schedule of stream monitoring and reporting.	4-5
Figure 5-1. A comparison of stream miles assessed in Connecticut in 2002 and 2004.	5-2
Figure 5-2. Primary contact use support in assessed rivers.	5-4
Figure 5-3. Aquatic life use support in assessed rivers.	5-4
Figure 7-1. Major aquifers in Connecticut (from USGS, Melvin et al. 1986).	7-1
Figure 8-1: Connecticut public drinking water supply watersheds.	8-2

Acronyms Used in the 2004 Water Quality Report to Congress

303(d)	Section 303(d) of the Federal Clean Water Act requiring a list of waters not meeting water quality standards every two years
305(b)	Section 305(b) of the Federal Clean Water Act requiring a water quality report every two years
319	Section 319 of the Federal Clean Water Act addressing nonpoint source pollution
ADB	Assessment Database - tracks 305(b) water quality assessments
ALUS	Aquatic Life Use Support
APA	Aquifer Protection Area
BMP	Best Management Plan
CALM	Consolidated Assessment and Listing Methodology (for 305(b) and 303(d) reporting)
CFU	Colony Forming Units
CMA	(Connecticut) Coastal Management Act
CSO	Combined Sewage Overflow
CT DEP or DEP	Connecticut Department of Environmental Protection
CT DPH or DPH	Connecticut Department of Public Health
CWA	(Federal) Clean Water Act
CWF	Clean Water Fund
DA-BA	(Connecticut) Department of Agriculture - Bureau of Aquaculture
DECDD	(Connecticut) Department of Economic and Community Development
DWSRF	Drinking Water Supply Revolving Fund
GIS	Geographic Information System
IPM	Integrated Pest Management
IWL	Impaired Waters List
LISS	Long Island Sound Study
MCL	Maximum Contaminant Level
MTBE	Methyl Tertiary-Butyl Ether
NEMO	Nonpoint Education for Municipal Officials
NHD	National Hydrography Dataset (for stream mapping nationwide)
NPS	Nonpoint Source (pollution)
NRCS	Natural Resource Conservation Service
OLISP	Office of Long Island Sound Program (at CT DEP)
PWS	Public Water Supply
QRWA	Quinnipiac River Watershed Association
QSHC	Quinebaug-Shetucket Heritage Corridor
QWP	Quinnipiac Watershed Partnership
RBP	Rapid Bioassessment Protocols
SDWA	(Federal) Safe Drinking Water Act
SECCOG	Southeast Connecticut Council of Governments
SET	Sediment Erosion Table
STORET	(US EPA's) data STORage and RETrieval system
TMDL	Total Maximum Daily Load
TWA	(Connecticut) Tidal Wetlands Act
US EPA or EPA	United States Environmental Protection Agency
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tank
WPC	Water Planning Council
WQS	Water Quality Standards

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Chapter 1 . Executive Summary

Section 305(b) of the Federal Clean Water Act (CWA) requires each State to monitor, assess and report on the quality of its waters relative to designated uses established by the State's Water Quality Standards (CT WQS 2002b). This process is the principal means by which States report on water quality and the extent of water quality impairments to the United States Environmental Protection Agency (US EPA), the United States Congress, and the general public. States submit 305(b) reports biennially to US EPA, where the information is compiled into a national summary, the *National Water Quality Inventory* (US EPA 2002). An electronic report of Connecticut's assessment database was provided to US EPA separately. This written report fulfills the Federal requirement for a narrative report.

Section 303(d) of the CWA requires States to list all waters not meeting water quality standards and to prioritize those waters for management. Prior to 2002, the Connecticut 305(b) and 303(d) reports were separate documents, as was the case for most States. Following guidance issued by US EPA in 2001, CT DEP developed a *Consolidated Assessment and Listing Methodology* (CT CALM, CT DEP 2002e and 2004b), which effectively unified and documented protocols for the assessment of waters for both sections of the CWA. Impaired waters listed under Section 303(d) are now generated as a subset of all waters assessed under Section 305(b), using the CT CALM. The 2004 303(d) List or *2004 List of Connecticut Waterbodies Not Meeting Water Quality Standards* (CT DEP 2004a) is printed as a separate document. The CT CALM (2004b) comprises Chapter 4 of this report.

Geographic Coverage

In 2001, the CT DEP completed a five-year rotating basin strategy for statewide monitoring in wadeable streams and rivers (CT DEP 1999). One or more major basins were targeted for monitoring each year during the five-year cycle. This allowed CT DEP to increase the miles of assessed perennial streams from 15% to more than 25%. Assessment information obtained during the full basin rotation was reported in the 2002 305(b) Report. Despite gains in monitored miles, this type of focused monitoring cannot be extrapolated to achieve the CWA goal to provide a "description of the quality of all navigable waters of the State".

To work toward the comprehensive assessment goal, CT DEP, with funding and cooperation from US EPA Region I, conducted a pilot statewide probabilistic monitoring effort in wadeable streams during 2002 and 2003. Through this approach, a statistically valid sample of streams was monitored to represent conditions of all wadeable streams in the State. During this two-year period, the rotating basin approach was suspended, although some focused monitoring was still conducted at reference sites, in rivers with known problems, and as intensive monitoring prior to and following Total Maximum Daily Load (TMDL) implementation.

Because laboratory and data analyses have not been completed for all probabilistic sites, a full statistical analysis and extrapolation to all wadeable streams will not be done until the 2006 305(b) Report. For this report, data from probabilistic sites and any targeted monitoring conducted during 2002 and 2003 were incorporated into stream assessments on a segment-by-segment basis. Where no new information was available, river assessments remain the same as

for the 2002 305(b) Report. There was new information for 759 miles of river in 173 river segments; 94 miles in 44 segments were assessed for the first time. All estuary segments were re-assessed for this report based on the most recent available information. Lake assessments were updated for 77 of 147 assessed lakes, where new information was available.

Depending on the waterbody and data availability, any one or combination of the following information sources were used to make water quality assessments: benthic macroinvertebrate and fish community analysis, ambient physical/chemical data, indicator bacteria monitoring and beach closures, intensive surveys, toxicity tests, sediment and tissue analyses.

Benthic community analysis was the primary method of evaluating aquatic life use support in wadeable streams, supplemented by fish community data where available. Physical and chemical data were screened and evaluated for water quality criteria exceedences. Indicator bacteria and beach closure information were the primary sources of information for recreational support. For lakes, aquatic weed growth was also considered in the assessment of recreational uses. Fish consumption was assessed for all waters based on advisories issued by the Connecticut Department of Public Health (CT DPH). Shellfishing was assessed for all estuarine waters based on monitoring by the Department of Agriculture-Division of Aquiculture (DA-BA). Navigation, industrial supply, and agricultural uses were assumed to be supported in all waters. A more thorough description of assessment methodology is presented Chapter 4.

Water quality in drinking water reservoirs is reported directly to CT DPH, which in turn reports to US EPA, the Connecticut Legislature, and the public. Some of that information is summarized in this report (Chapter 8), as well as information regarding reservoir trophic status and threats to water quality as perceived by utilities. Although Connecticut does not have official ambient monitoring programs for wetlands or groundwater, the programs that address protection, special monitoring and management are described in Chapters 6 and 7, respectively.

Major Findings from Water Quality Assessments

Water quality in Connecticut continues to improve as a result of protective laws, remediation efforts and a substantial investment in improved treatment of wastes at the Federal, State, municipal and private levels. There are still gains to be made in these areas. The CT DEP estimates the projected costs for necessary upgrades and improvements to municipal sewage infrastructure to be \$2.25 billion. Additionally, further improvements are needed with respect to stormwater management and nonpoint source pollution control. Implementation of Phase II stormwater regulations and continued funding of Section 319 nonpoint source management projects will help address these issues. However, improvements in nonpoint pollution control depend in large part on the development and implementation of protective measures at the local level.

Some of the major findings during the five-year rotating basin assessment period include:

Rivers

- ◆ More than 76% (1,187 of 1,556) of assessed river miles were fully supporting for aquatic life use;

- ◆ For biologically impaired river segments, often multiple potential sources exist and determination of the definitive cause(s) and source(s) requires further investigative work;
- ◆ 69% (925 of 1,338) of river miles assessed for contact recreation were supporting;
- ◆ Indicator bacteria is the most common cause for impairment in rivers; of the miles impaired by bacteria, about 35% were associated with a possible source of human sewage;

Lakes

- ◆ Contact recreation was fully supported in 84% (21,840 of 25,997) of assessed lake acres;
- ◆ Contact recreation impairment in lakes was less often associated with indicator bacteria than with extensive aquatic weed or algal growth;
- ◆ The 4% (1,029 of 27,650) of assessed lake acres considered impaired for aquatic life use can be largely attributed to eutrophication processes;
- ◆ Invasive and or/exotic aquatic weed growth has emerged as a significant threat to recreational use support, as well as aesthetic quality in lakes.

Estuaries

- ◆ Hypoxia (low oxygen conditions) is the primary cause of aquatic life use impairment in Long Island Sound, affecting over a third of Connecticut's bottom estuarine waters for some period of time during the summer. This is largely due to nitrogen loading, which fuels growth of algae that eventually die and decompose, consuming oxygen;
- ◆ Implementation of the Long Island Sound TMDL, approved by US EPA in April 2001, is addressing hypoxia by mandating reduced nitrogen inputs from wastewater treatment plants and nonpoint sources to meet oxygen goals by 2014;
- ◆ Through Connecticut's innovative nitrogen credit trading program for municipal treatment plants, nitrogen reduction goals were exceeded for both 2002 and 2003;
- ◆ 187 square miles of estuary did not meet direct shellfish harvest or relay conditions appropriate for their respective water quality classifications (SA or SB). The DA-BA identified the main sources of contamination as stormwater runoff, marinas, waterfowl and in some communities, failed septic systems;
- ◆ Contact recreation is supported in 96% of assessed estuarine waters. Waters not supporting contact recreation are generally those directly adjacent to remaining CSOs in urban areas.

For decades, Connecticut has invested considerable resources in the enormous task of abating pollution associated with municipal and industrial point sources. These efforts have achieved significant improvements in the quality of many rivers, streams, and coastal waters. Further progress is possible with additional point source controls, particularly for Long Island Sound and several rivers. In the future, however, water resource management efforts will need to be focused on control and mitigation of nonpoint pollution sources and coordinated watershed efforts. These initiatives will require input from the numerous public and private interests that oversee land use management and environmental policy, especially at the local level.

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Chapter 2. Connecticut Surface Water Resources & Management

Freshwater resources in Connecticut include approximately 5,830 miles of rivers and streams (Figure 2-1), 2,300 lakes, ponds and reservoirs (US EPA 1993), 435,000 acres of inland wetlands, and 17,500 acres of tidal wetlands (Metzler and Tiner 1992). Almost all of the State's freshwater resources are tributary to the Long Island Sound estuary. A very small portion (less than 100 square miles) is tributary to the Hudson River in New York. Table 2-1 provides a summary of Connecticut's water resources.

Table 2-1. Connecticut Water Resources Atlas

State Population (2000)-----	3,409,549
State Surface Area-----	5009 square miles (3,205,760 acres)
No. of Major Basins according to State Subdivisions -----	7
Total No. of River Miles-----	~ 5,830*
Perennial Stream Miles -----	5,484
Intermittent Stream Miles-----	344
Ditches and Canal Miles -----	2
No. of Border River Miles -----	~ 11 miles
Border Rivers -----	Byram River - NY Pawcatuck River - RI
Major Interstate Rivers -----	French River - MA Quinebaug River - MA Connecticut River - MA, VT, NH Housatonic River- MA Farmington River - MA
No. of Lakes/Ponds/Reservoir -----	2,267
No. of Significant Public Owned Lake-----	116
No. of Drinking Water Reservoirs-----	179
Acres of Lakes/Ponds/Reservoirs -----	~ 64,973
Acres of Significant Publicly Owned Lakes -----	27,107
Acres of Drinking Water Reservoirs-----	18,604
Square miles of Estuaries/Harbors -----	~ 612
Miles of Coastline -----	~380
Acres of Freshwater Wetlands -----	~ 435,000 (Approx. 15% of state area)
Acres of Tidal Wetlands-----	~ 17,500
* This estimate is derived from a US EPA (1993) computer measurement tool working from USGS maps at the 1:100,000 scale. This number can and will vary with map scale, and is expected to increase with the implementation of the National Hydrography Dataset at the 1:24,000 scale for the 2006 report.	

Average annual precipitation in Connecticut is 47 inches. Annual precipitation, which contributes to surface runoff, ranges from an annual average of 22 inches in north-central and southwestern Connecticut to about 29 inches in southeastern Connecticut. Streamflow varies significantly throughout the year in response to the seasonality of precipitation and the growing season. The critical time with regard to decreased flows for most Connecticut streams and rivers is late summer and early fall when drought conditions may occur.

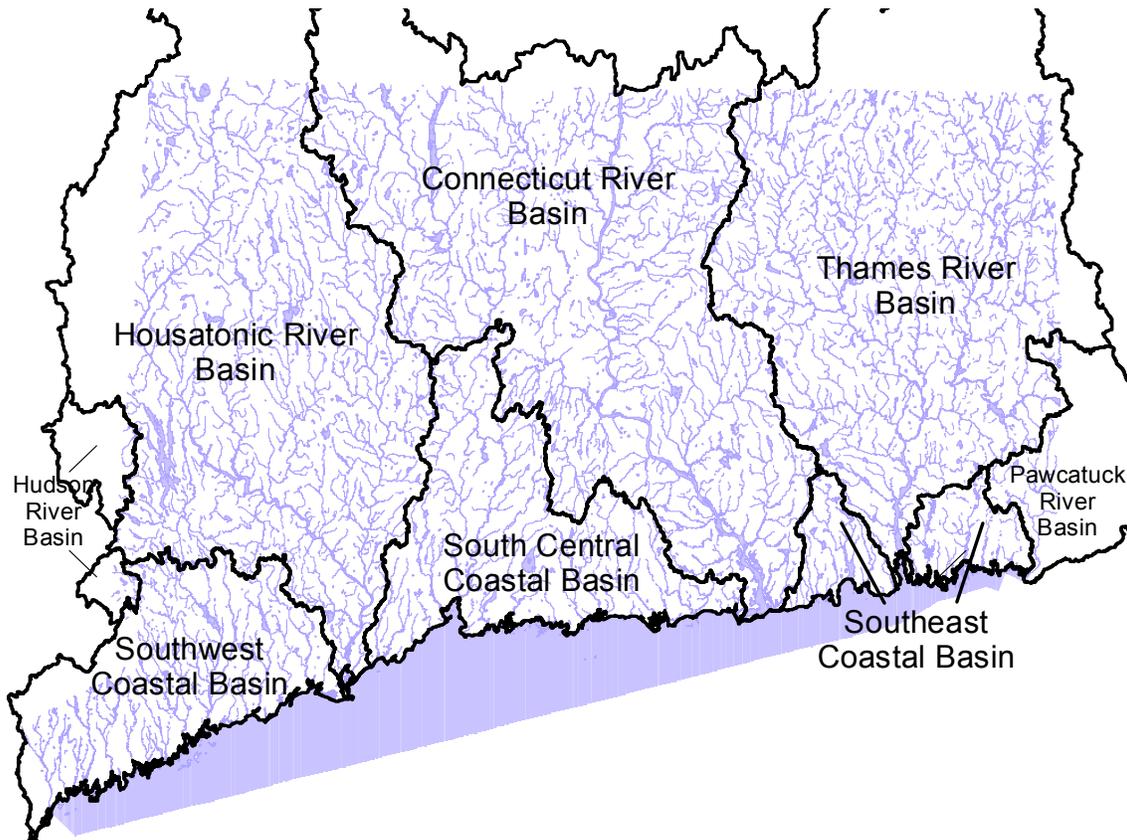


Figure 2-1. Connecticut's perennial streams and major basins.

The largest river basins in the state include portions of the Connecticut (1,450 square miles, 13% of the entire basin), Housatonic (1,248 square miles, 64% of the entire basin), and Thames (1,155 square miles, 78% of the entire basin). Smaller coastal rivers are included in three major coastal basin complexes, the Southwest Coast, South Central Coast and Southeast Coast Major Basins. The South Central Coast complex includes the entire Quinnipiac River basin (166 square miles). Additionally, Connecticut contains a small part of the Hudson River basin along the New York State border, and the Pawcatuck River basin along the Rhode Island border.

Connecticut's 179 public water supply reservoirs provide potable water to roughly two thirds of the State's residents. Recreational uses of these reservoirs is generally prohibited or limited to passive uses such as fishing and hiking. Of more than 2,100 perennial lakes and ponds (US EPA 1993) that are not used for drinking water, DEP classifies 116 as "significant", in that they offer recreational opportunities to the general public and/or have outstanding aquatic habitats or fisheries.

The estuarine waters of Long Island Sound are in the midst of one of the most heavily urbanized and suburbanized regions in the nation. The Sound's 16,000 square mile watershed encompasses virtually all of Connecticut, parts of Massachusetts, New Hampshire and Vermont, a small area in Canada, and portions of New York City and Nassau, Westchester and Suffolk Counties in New York State. The western end is connected to New York Harbor via the East River, a tidal strait. The eastern end is connected to Block Island Sound in Rhode Island and the Atlantic Ocean. Roughly 610 of the 1300 square miles of the Sound's estuarine waters are within Connecticut's boundaries and assessed by the DEP.

Surface water resources are essential for many diverse needs including the growth and development of the State's economy. The high quality of many of these resources contributes to the quality of life for Connecticut residents. The State's dense population and industrial base places major demands on surface waters for potable and industrial supply, waste assimilation, and recreation. These demands must be accommodated while achieving water quality suitable to support healthy aquatic life.

Connecticut Water Quality Standards and Criteria

Connecticut's Water Quality Standards (WQS, CT DEP 2002a) are a critical element in Connecticut's clean water program. They provide the framework and set the overall policy for management of water quality in accordance with Section 22a-426 of the Connecticut General Statutes. Generally, the WQS state that the Department of Environmental Protection shall:

- Protect surface and ground waters from degradation.
- Segregate waters used for drinking from those that play a role in waste assimilation.
- Restore surface waters that have been used for waste assimilation to conditions suitable for fishing and swimming.
- Restore degraded ground water to protect existing and designated uses.
- Provide a framework for establishing priorities for pollution abatement and State funding for clean up.
- Adopt standards that promote the State's economy in harmony with the environment.

There are three elements that make up the WQS. The first of these are the Standards themselves. This is the text of the policy statements, which discuss issues such as classification of different water resources according to the desirable use, anti-degradation, allowable types of discharges, the fundamental principles of waste assimilation, and a variety of other subjects. The second element in this document comprises the Criteria. These are descriptive and numerical standards that describe the allowable parameters and goals for the various water quality classifications. The final element is the Classification Maps that show the Class assigned to each surface and groundwater resource throughout the State. These maps also show the goals for the water resources, and in that manner provide a blueprint and set of priorities for our efforts to restore water quality. The Standards, Criteria and Maps are reviewed and revised roughly every three years. Any change is considered a revision requiring public participation, as described in Section 22a-426 of the Connecticut General Statutes.

Point Source Discharge Regulation

The CT DEP regulates wastewater discharges, including certain stormwater discharges to the State's surface and ground water resources. Such regulation provides for control of discharges from a wide variety of activities such as industrial facilities, municipal sewage treatment plants, power generation facilities, construction sites, agricultural waste management systems, large subsurface sewage disposal systems, landfill leachate, and ground water remediation discharges. Regulation activities include permitting, enforcement and tracking reports of discharge monitoring.

Legislation enacted as part of Connecticut's CWA in 1967 (Section 22a-430, Connecticut General Statutes) established the DEP as the authority for discharge permitting in the state. Establishment of this authority enabled the National Pollutant Discharge Elimination System (NPDES) to be delegated to DEP in 1974. Connecticut's Clean Water Act also requires permits for facilities having discharges to ground water resources. Discharge permit issuance is predicated on protecting water quality consistent with Federal and State water quality goals as described in Connecticut's Water Quality Standards (CT DEP 1997).

The CT DEP relies upon numerous enforcement tools to achieve compliance with State and Federal Clean Water Act laws and regulations. Examples include facility monitoring and inspection, compliance assistance, notices of violation and various types of administrative orders to abate pollution. Effluent quality monitoring is required to ascertain compliance with permit conditions, and all such compliance monitoring data are regularly reported to CT DEP.

Additional information concerning wastewater discharge permitting and enforcement programs can be found in the Connecticut Department of Environmental Protection's website, <http://dep.state.ct.us/>.

Nonpoint Source (NPS) Pollution Control

Unlike point source pollution, Nonpoint Source (NPS) pollution is diffuse in nature, both in terms of its origin and in the manner in which it enters surface and ground waters. NPS pollution results from surface runoff, drainage and seepage, as well as direct precipitation and dry atmospheric deposition. Pollutants usually enter surface waters in surges associated with rainstorms or snowmelt. Hydromodification - physical disturbance caused by filling, draining, ditching, damming, or otherwise altering wetlands and watercourses - is also considered a NPS problem.

Impacts of NPS can be subtle, such as the dilution of brackish water by freshwater surges or the deposition of nutrients and toxic substances from atmospheric sources. Often, traditional land use and development practices are overlooked as sources of pollution until their impacts become obvious. Studies have shown that replacing as little as 10% of natural ground cover with impervious surface can cause measurable degradation to stream water quality (Arnold and Gibbons 1996). More noticeable NPS impairment is seen when inadequate erosion and sediment control results in siltation of waterways, or when leachate from agricultural wastes cause obvious turbidity or algal problems.

Management of nonpoint source pollution requires the integration of State, local and Federal programs. A significant strength of Connecticut's NPS Program is its "networked" approach, involving diverse programs such as stormwater permitting, local land use planning, agricultural waste management, aquifer protection, inland and tidal wetland management, and air pollution control.

Section 319 of the CWA, administered through the DEP, funds a large percentage of the programs and efforts mentioned above. From 1990 – 2002, Section 319 grants totaling just over \$12 million have supported 277 projects. Some success stories highlighted during the last few years include:

- ◆ Significant reduction in the use of pesticides and fertilizers in the Quinnipiac watershed due to implementation of integrated crop and pest management;
- ◆ Restoration of degraded salt marsh and coastal grassland at Hammonasset State Park and at White Sands Beach in Old Lyme;
- ◆ Cooperative restoration project for Lake Waramaug, which included stream bank stabilization, farm waste management and in-lake restoration techniques;
- ◆ Support for volunteer and student monitoring in Connecticut rivers and estuaries.
- ◆ Continued support of the Nonpoint Education for Municipal Officials (NEMO) Program, providing local decision-makers with information and tools to protect water resources;
- ◆ Restoration of a recreational urban pond in Manchester through dredging of accumulated sediments, and construction of a trash-rack and instream sediment trapping forebay;
- ◆ Continued support of a comprehensive monitoring study comparing NPS pollution from a traditional development and one which incorporates a number of Best Management Practices (BMPs); and
- ◆ Extensive fish habitat restoration in Railroad Brook in Bolton.

Watershed Management

Watershed management considers the resources and problems of a contiguous watershed. Priorities and opportunities are identified to abate pollution, restore degraded habitat and protect existing high quality resources. In 1999, the CT DEP established basin coordinators for major drainage basins in the state. Each coordinator serves as the point person for comprehensive watershed management based on sound science, local stewardship and shared management responsibilities with watershed partners. Below are just a few of the many projects and issues that DEP watershed coordinators, their partners and other stakeholders are working on in their respective watersheds.

Southwest Coastal Basin:

- ◆ Harbor Watch / River Watch water quality monitoring, database development, and intensive follow-up work to determine the sources of pollutants;
- ◆ Stream channel and riparian restoration at Merwin Meadows Park and Schenck's Island; design and permitting of a fisheries bypass at Cannondale (NRCS and the Mianus Chapter of Trout Unlimited);
- ◆ Norwalk River Watershed Association study and workshop on municipal septic system ordinances;

- ◆ Permanent exhibit at the Maritime Museum at Norwalk focusing on nonpoint source pollution in the Norwalk River watershed and what residents can do to prevent it;
- ◆ Study of environmental impacts of road sand/salt use in the watershed and exploration of alternatives (Fairfield County Soil and Water Conservation District);
- ◆ Plans for removal of the Strong Pond dam at Merwin's Meadow Park in Wilton (NRCS and Save the Sound), and preliminary design work for removal of the Flock Process Dam in Norwalk;
- ◆ Implementation of Best Management Practices at the Fairfield Hunt Club (Sasco Brook Pollution Abatement Committee - representatives from municipal agencies and CT DEP);
- ◆ Interstate Environmental Commission and intergovernmental initiative to investigate and resolve sources of high fecal indicator bacteria in the Byram River Watershed.

Housatonic River Basin:

- ◆ Remediation and restoration of the Housatonic River impacted by polychlorinated biphenyls (PCBs) originating from the General Electric Company facility in Pittsfield, MA (Parties to the October 1999 Consent Decree; citizen interest and environmental groups);
- ◆ Relicensing of Northeast Generation Services Company hydropower facilities along the Housatonic River (Federal Energy Regulatory Commission, CT DEP, U.S. Fish & Wildlife Service, US EPA and other stakeholders);
- ◆ Naugatuck River restoration efforts including wastewater treatment plant upgrades, dam removals, water quality monitoring, anadromous fish passage, in-stream habitat restoration, greenway planning and recreational access (CT DEP, US EPA, US Army Corps of Engineers, regional planning organizations, conservation districts, municipalities and environmental groups);
- ◆ Water Resources Management Plan for the Pomperaug River Watershed - a pilot project designated by the Connecticut Water planning Council as a potential model for statewide application; other local natural resource issues in the Pomperaug River Watershed (Pomperaug River Watershed Coalition, local municipalities and other stakeholders);
- ◆ Local initiatives in the Still River Basin pertaining to rediscovery of the river as a recreational and natural resource (Still River Alliance and Housatonic Valley River Trail working group).

South Central Coastal Basin:

- ◆ Feasibility study for the restoration of the former Community Lake in Wallingford and for dredging Hanover Pond in Meriden (DEP, municipalities, and consultants);
- ◆ Fish passage at Wallace Dam on the Quinnipiac River in Wallingford (DEP's Dam Safety and Fisheries programs, Quinnipiac River Watershed Association (QRWA), and a private property owner);
- ◆ Public access to the Quinnipiac River (DEP's Office of Long Island Sound Programs, QRWA, Quinnipiac Watershed Partnership (QWP), Town of North Haven, Regional Growth Partnership, and local businesses);
- ◆ Designation of a Quinnipiac River Greenway (QRWA, QWP, and Quinnipiac River Linear Trail Committee, and municipalities);

- ◆ Funding for public education and outreach, streambank stabilization, non-point source pollution control, publication of QWP's Quinnipiac River Watershed Action Plan, in addition to research by the Yale Center for Coastal and Watershed Systems;
- ◆ Publication of the South Central Coast Major Basin Overview that describes existing DEP programs, resource information and data for the basin.

Connecticut River Basin:

- ◆ Wild and Scenic Study designation for the Eightmile River in East Haddam, Salem and Lyme (Eightmile River Wild & Scenic Study Committee);
- ◆ Farmington River Wild & Scenic designation's Upper Farmington River Management Plan for the West Branch Farmington River in Colebrook, Hartland, Barkhamsted, New Hartford, and Canton (Farmington River Coordinating Committee);
- ◆ Farmington River bank stabilization (Farmington River Watershed Association);
- ◆ State of the Watershed report for the Pequabuck River (Pequabuck River Watershed Association and the Central Connecticut Regional Planning Agency);
- ◆ Implementation of a Mattabesset River Watershed Management Plan (Mattabesset Stakeholders Group);
- ◆ Proposed trail along the South Branch Park River (USDA Natural Resources Conservation Service's Resource Conservation & Development Program and the Capitol Region Council of Governments).

Thames River and Southeast Coastal Basins:

- ◆ West Thompson Lake Phosphorus Budget Study and Thames River Basin Work Plan to address prioritized waterbodies in the French, Quinebaug, Shetucket and upper Thames River basins (DEP, US Geological Survey, US EPA);
- ◆ Stormwater Quality Management Project to improve water quality from a commercial center before discharging to the Quinebaug River (DEP, Town of Brooklyn);
- ◆ 2004 Work Plan for the Thames River Basin Partnership - including Thames River Floating Workshop, website startup, and Steering Committee actions (DEP, Project Oceanology, USDA-NRCS, EPA, Eastern CT Conservation District, SECCOG, Pfizer);
- ◆ Willimantic River State Greenway strategic planning and outreach (DEP, Willimantic River Alliance, 9 towns, Green Valley Institute, USDA-NRCS, CT Greenways Council);
- ◆ Quinebaug-Shetucket Heritage Corridor (QSHC) - several projects including a river access and cleanup guide, water resources subcommittee, Quinebaug IPM project, and long-range planning (DEP, QSHC Natural Resources and Agricultural Committee, Green Valley Institute, UConn Cooperative Extension, National Park Service, US Geological Survey, US Army Corps of Engineers, Eastern CT Conservation District, several towns);
- ◆ Jordan Cove National Urban Monitoring Demonstration Project – final project phase of media outreach campaign (DEP, University of Connecticut, US EPA, Town of Waterford, AquaSolutions, Project NEMO, and others).

Special State Concerns

The CT DEP implements numerous water management programs. Priority initiatives, reported in the *Environmental Quality Branch Strategic Plan for CT DEP* (CT DEP 2002c), are summarized below.

Long Island Sound

Low dissolved oxygen (hypoxia) is the priority water quality problem affecting Long Island Sound. Hypoxia results from excess nutrients, primarily nitrogen, fueling overproduction of algae. When the algae die and sink to the bottom, they decompose consuming large amounts of dissolved oxygen. The key management initiative for the Sound is to raise the dissolved oxygen in bottom waters to a minimum of 3.5 mg/l. This will be accomplished by reducing the annual nitrogen load to the Sound by 58.5% by 2014. A 64% reduction goal was set for Connecticut sewage treatment plants (STPs), which are considered a major source of nitrogen.

The CT DEP issued a general permit with a nitrogen reduction schedule through 2014 covering 79 STPs. This, in addition to requirements for reduction of nonpoint source nitrogen loading, is the main component of the Long Island Sound Total Maximum Daily Load (TMDL) plan. To provide an economic incentive for meeting the overall reduction goal, the Connecticut General Assembly authorized a nitrogen credit-trading program. Under this program, an STP that removes nitrogen in excess of its requirements is able to sell earned credits to the credit exchange. This provides financial incentive for superior performance. Treatment plants not meeting their permit requirements must purchase credits. Through this program, the overall nitrogen reduction goal was exceeded in both 2002 and 2003 (CT DEP 2003). Achieving target goals in the future will depend on the continued availability of financing to support municipal nitrogen removal projects.

Stormwater Management

Municipal Stormwater: In recent years, Connecticut has put an increasing emphasis on regulation of stormwater discharges from industrial complexes, municipal facilities and large construction sites. Presently, almost 2000 facilities in Connecticut are registered under one or more general permits authorizing the discharge of stormwater. In January 2004, CT DEP issued a General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). The MS4 permit affects 130 Connecticut towns, and requires them to develop and implement a stormwater management plan by January 2009, addressing six stormwater control measures:

- Public education and outreach
- Public participation
- Detection and elimination of illicit discharges
- Construction stormwater management
- Post-construction stormwater management
- Pollution prevention / Good housekeeping.

Concentrated Animal Feeding Operations (CAFOs): Over 1.1 million tons of manure are produced annually by dairy and poultry farms in Connecticut. Manure contains nutrients and bacteria, which can pollute surface and ground waters if released in excess. Effective April 2003, the US EPA issued new regulations for Concentrated Animal Feeding Operations (CAFOs), defined by the number and type of animals held for controlled production. The CT

DEP has prepared a draft general permit to authorize discharges from CAFOs, requiring affected farmers to develop and implement a nutrient management plans for the collection, storage, treatment and land-application of animal/agricultural waste. The number of farms to be initially covered by CAFO general permit will be no more than ten. A technical report commissioned by the Connecticut CAFO Advisory Committee (Wright-Pierce 2003) estimates that implementation of the permit would cost state farmers more than \$20 million over the next five to ten years. To offset this financial burden, the report recommends increased cost-sharing by state and federal programs, removing tax impacts for using state and federal funds, developing a pilot regional manure management facility to help address nutrient surplus, and educating Connecticut consumers about the importance of farming to the economy and quality of life.

Site Remediation

Over the last decade, significant improvements have been made to Connecticut's site remediation programs, including implementation of the Licensed Environmental Professional program, adoption of the remediation standard regulations, the covenant not to sue program, and significant streamlining changes to the Property Transfer Act. Through the Urban Sites Remedial Action Program, and in concert with the Federal Brownfield's program, the CT DEP has made site remediation in urban areas a high priority. CT DEP will continue to increase efforts to work with the Department of Economic and Community Development, the state's municipalities and other parties to develop additional tools and make improvements to our remediation programs, with a special focus on the urban areas.

State Water Allocation

CT DEP has long recognized the need to develop a comprehensive water allocation system that preserves the integrity of water resources while providing for public drinking water needs. In 2000, pursuant to Public Act 98-224, the CT DEP completed a diversion registration inventory and report on water allocation policies for the Connecticut General Assembly. The report included a critical evaluation of present water management programs and recommendations to address policy shortcomings.

CT DEP currently participates in the Water Planning Council (WPC), established by PA-01-177 in 2001 to study eleven major issues related to water supply and natural resource management. Three committees were assigned to study and report on these issues, and each committee designated two subcommittees, which met during 2002. In its first annual report to the General Assembly, January 2003, the WPC proposed initial action steps and policy changes for state agency implementation or legislative consideration. The proposed changes included a revised water allocation procedure, the securing of adequate, stable resources for water allocation management, and reframing the current management structure governing water policy. A model developed by the Water Allocation Subcommittee and endorsed by the WPC identified the critical planning and management elements for well-balanced decision making in a water allocation policy.

The WPC established an Advisory Group in 2003 comprised of a broad array of stakeholders to assist the Council in accomplishing action items set out in their report. The Water Planning Council accomplished a number of significant action items in 2003 including adoption of a State Drought Management Plan, and proposed legislation to amend the Diversion Act and the Water

Utility Coordinating Committee process. The WPC assigned four workgroups in 2003 to study a water conservation rebate program, stream gage monitoring network, small water systems, and land use inventory of public water supply lands. Workgroup reports were submitted to the WPC in the fall of 2003, and the WPC submitted its second Annual Report and 2004 Work Plan to the General Assembly in January 2004. WPC and workgroup reports can be downloaded from: www.dpuc.state.ct.us/DPUCINFO.nsf/ByWaterPlanning.

Chapter 3. Economic and Community Costs and Benefits of Clean Water

Public funding of for improved sewage system infrastructure in Connecticut is substantial. Since passage of the State Clean Water Act in 1967, more than \$1.35 billion has been distributed to Connecticut municipalities as grants or loans for sewage treatment projects through the State's Clean Water Fund. The investment in remediation of Superfund and Brownfield sites is also impressive. Major gains in water quality have been achieved through these public investments, their analogs in the private sector, and protective legislation. Further improvement of the quality of water resources will require continued public and private financial support.

Unlike the costs of cleanup, the benefits of improved water quality are not easily measured in monetary terms. Maintenance of high quality potable water supplies is critical to the health and economic well being of every resident. Clean water for swimming, fishing, and boating are quality of life issues that also have clear economic benefits associated with recreation, marine industries and resultant tax revenues. Cleaning up abandoned and contaminated urban sites has broad implications for the health of nearby residents, the economic revitalization of Connecticut's cities, and the protection of sensitive wetlands and water resources.

Essentially all aspects of Connecticut's clean water programs create long and short term jobs. Upgrading of sewage treatment facilities, the extension of sewer lines, installation of industrial treatment facilities and ground water remediation all generate jobs in the design, engineering and construction industries. Operations and maintenance of these facilities creates long term employment.

Benefits of Clean Water

Long Island Sound

The University of Connecticut conducted a study in 1992 to quantify the economic value of the State's largest water resource, Long Island Sound (Altobello 1992). Dollar values (in 1990 dollars) were calculated for a variety of individual water quality dependent uses of Long Island Sound. Uses such as transportation, power generation and waste disposal, which are not water quality dependent, were not addressed. Key study findings included:

- ◆ The annual value to the economies of Connecticut and New York for water quality dependent uses of Long Island Sound was conservatively estimated at 5.5 billion dollars in 1990.
- ◆ Approximately 3 billion of those dollars were contributed to Connecticut's economy.
- ◆ Annual commercial finfish and shellfish landings for Connecticut were estimated to be \$35 million. Associated economies directly related to harvesting increase the value to \$98 million. Additional industries related to processing, wholesaling and retailing of fish and shellfish were not considered. Therefore, real economic return to the region would have been considerably higher. (Note: the landings value used by Altobello (1992) is larger than that estimated for 2000 and 2001. See next section).
- ◆ An estimated 7.5 million people visited the Connecticut beaches in 1990. Studies conducted in other states suggest that this correlates to roughly \$159 million for Connecticut's

economy. Related contributions to the state's tourism industry increases this estimate to \$361.4 million.

- ◆ Sport fishing constitutes another important industry in Long Island Sound. Roughly 330,000 people participate in the sport in Connecticut. Direct expenditures associated with sport fishing were estimated at \$258.5 million. Related activities increase this estimate to \$624.6 million contributed to the State's economy.
- ◆ Recreational boating represents a huge industry that benefits from water quality. Direct expenditures for equipment and services in Connecticut were estimated at \$836 million. The addition of related activities increases this value to 1.84 billion.
- ◆ An attempt was made to estimate the value of salt marshes as a resource unto themselves and not as developable land. Many values, such as flood control and erosion buffering were not assigned a dollar value. A conservative estimate of the value of the marshes as spawning grounds and feeding areas for commercial and recreational fishes was calculated. This value was estimated at \$93.75 million, equally divided between Connecticut and New York.

A recent economic valuation of the Sound by the National Ocean Economics Project (Kildow *et al.* 2004) focused on water quality related activities and provided some value estimates that are lower than those in the Altobello (1992) study. The differences are attributed to a decreases in commercial fish harvest, the omission of tourism-related values, and the use of different data sources and valuation techniques for determining "multiplier effects". Still, the latter study concludes maintaining and enhancing water quality in the Sound is economically important.

Connecticut's Long Island Sound Fishery

The CT DEP Marine Fisheries Division estimated the economic value of commercial fisheries landings (which include finfish, lobster, crabs, squid, and shellfish) from Long Island Sound in Connecticut at \$61.5 million in 2000 and \$48.1 million in 2001. The economic value of the recreational fishery in Long Island Sound was estimated at 63.6 million in 2000 and 76.6 million in 2001. "Economic value" of fisheries is the ex-vessel value (dollars received by fishermen for their catch) multiplied by a factor to account for the ripple effects on the economy. These ripple effects may include: expenditures by fisherman for fuel, ice, gear, insurance; wages paid to suppliers of these goods and services; and fishing employee wages spent in the region.

Economic Value of Clean Lakes

Researchers at the University of Connecticut conducted a survey of lakeside property owners, and public beach and boat launch users to assess potential economic impacts of deteriorated water quality (Univ. of CT and CT DEP 1999). Property owners were asked how recreation restrictions would affect property values. Beach and boat launch users were asked how losing recreational activities would affect their willingness to pay lake access fees.

Property owners estimated that property values would drop 35% if swimming were not safe, 19% if fish were not safe to eat, and 43% if both swimming and fish consumption were unsafe. Public users estimated that their willingness to pay would drop 60% if swimming were not safe, 42% if fish were not safe to eat, and 79% if neither were safe. Estimates of tax revenue reductions ranged from approximately 35% if swimming were unsafe, 20% if fish were not safe to eat, and 40% if both were unsafe. Survey results were consistent between lakes and

demonstrate clearly the negative impact of deteriorated water quality on property values, tax revenues and recreation.

Investments in Clean Water

Municipal Sewage Treatment Plant Upgrades

The State Clean Water Fund (CWF), administered jointly by CT DEP and the Office of the Treasurer, is Connecticut's primary funding source for municipal sewage treatment infrastructure improvements and extensions. It was established in 1986 to provide financial assistance to municipalities for planning, design and construction of wastewater collection and treatment projects, and it replaced previous State and Federal grant programs. The CWF provides combinations of grants and low-interest (2%) loans to municipalities, which undertake water pollution control projects under the direction of CT DEP. The grant/loan combination varies depending on the type of project, which range from treatment plant upgrades for nitrogen removal to elimination of CSOs.

Amendments to the Federal Clean Water Act in 1987 required that states establish a revolving loan program by 1989. Connecticut's State Revolving Fund is regulated by US EPA, and receives federal assistance and state bond monies. The CWF was modified in 1996 to include a revolving fund to assist water companies in complying with the Safe Drinking Water Act (see *Drinking Water Fund* below). It was modified again in 1999 to provide grant monies for wastewater projects associated with nitrogen removal, and again in 2002 to provide 100% loans for collection system improvements that do not traditionally receive CWF monies.

Between 1987 and 2003, the Clean Water Fund made commitments to 449 projects in 85 communities, totaling 1.35 billion dollars. During fiscal year 2003, \$17.25 million was obligated to communities including \$1.06 million in planning grants. Projected needs, as reported to US EPA following restrictive documentation guidelines, through 2015 are \$2.25 billion for treatment plant construction, CSO elimination and costs associated with nitrogen removal to meet requirements set in the Long Island Sound TMDL (see Chapter 2 and 5). This figure actually underestimates the true cost, which is estimated in excess of \$3 billion.

Construction of the Waterbury advanced wastewater treatment plant, which was completed in 2001, was the largest project ever undertaken by the CWF, costing \$124 million. Shortly after the plant went on line, water quality improvements in the Naugatuck River were significant. While there are still water quality problems to solve throughout the Naugatuck River, it now supports a Trophy Trout management area between Seymour and Torrington.

Full-scale treatment plant upgrades, including nitrogen removal, were completed in Branford and Fairfield in 2003. A total of 25 nitrogen-removal projects have now been completed with CWF financing. Construction of the Stamford advanced wastewater treatment plant was initiated in 2002. It is the second largest project ever undertaken by the CWF costing \$106 million.

Drinking Water Fund

The 1996 Amendments to the Safe Drinking Water Act authorized US EPA to offer capitalization grants to States for the Drinking Water State Revolving Fund (DWSRF), with a required 20% State match. During 1997, the first year of the program, Connecticut received \$21 million in federal capitalization grants for the DWSRF. The State has received \$7 - \$8 million annually since.

The Connecticut Department of Public Health coordinates the program with the CT DEP, Office of the Treasurer, and the Department of Public Utility Control. The program funds a range of projects, which are ranked based on six criteria: water quality violations, water quantity violations, acquisitions and transfers, proactive infrastructure upgrades, protective measures and affordability. Criteria ranking favors: projects in which water quality, water quantity, or infrastructure problems may result in public health concerns; projects oriented to provide long-term solutions; and projects that serve communities where the median household income is less than 80% of the State average.

Site Remediation

Urban Sites

Connecticut's Urban Sites Remedial Action Program was created to address a key constraint to the conveyance and reuse of contaminated industrial properties - the fear purchasers and investors have of assuming environmental liability for pollution created by others. The landmark legislation that created a pilot program in 1992 and a full program in 1993 provides for expedited remediation of polluted property and enables the private sector to invest in property development without concern for past environmental contamination.

Through December 2003, \$33.3 million in bond funds (out of the \$40.5 million available) were appropriated to hire consultants to undertake site assessments and remedial measures where responsible parties were unable or unwilling to do the necessary work. Eligible sites must be located in either a distressed community as defined in Connecticut General Statutes or a target investment community. The site must also have high economic development potential as determined by the Department of Economic and Community Development (DECD).

The use of Urban Sites Remedial Action Program funds facilitated a variety of activities at a number of types of sites, including assessment, remediation and development of:

- The site of a former Brass factory into a 1.2 million-square-foot commercial mall and museum in Waterbury
- The site of a former brass foundry site into a child day care and adult job training facility in New Haven
- An old landfill into the Connecticut Center for the Performing Arts, Hartford
- An abandoned mill buildings and a former scrap yard into a site for a 750,000 sq. foot research and development facility in New London
- A portion of a former Thread mill complex into upscale office space and a riverside park in downtown Windham.

State Superfund

Connecticut's State Superfund program utilizes bond funds for the investigation and remediation of sites where the Commissioner has determined that contamination poses an unacceptable risk to human health and the environment, and a responsible party cannot be identified, or is unable or unwilling to perform the activities required to address the contamination. In this program, DEP uses bond funds to hire contractors to investigate and remediate sites. Since 1987, over \$33 million in State Superfund bond funds (out of \$46 million available) have been allocated for thirteen sites. Approximately \$6.1 million of the State Superfund bond funds have also been used to provide the State's 10% share of remedial action costs at the Raymark Industries Federal Superfund site in Stratford, where work is funded by the Superfund Trust Fund.

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Chapter 4. Assessment Methodology for Surface Waters.

This chapter presents the Connecticut Consolidated Assessment and Listing Methodology (CT DEP 2004b).

Introduction

This assessment and listing methodology documents the decision-making process for assessing the quality of surface waters for the *Connecticut Water Quality Report to Congress*, or "305(b) Report", and for generating the list of *Connecticut Waterbodies Not Meeting Water Quality Standards* or "303(d) List" (CT DEP 2004a). In accordance with Sections 305(b) and 303(d) of the Federal Clean Water Act (CWA), the State of Connecticut Department of Environmental Protection (CT DEP) submits a 305(b) Report and 303(d) List to the United States Environmental Protection Agency (US EPA) on even numbered years. The 305(b) Report provides information regarding the quality of all assessed waters in the State relative to their designated uses as established in the *Connecticut Water Quality Standards* (CT WQS, CT DEP 2002a). The 303(d) List documents waters impaired for one or more designated uses. For waters impaired by a pollutant or pollutants, Section 303(d) further requires that a total maximum daily load (TMDL) for identified pollutant(s) be established and allocated among dischargers.

As with many states, the Connecticut 305(b) Report and 303(d) List have historically been developed independently of each other, with some but not complete overlap of information. Despite their relationship, the statutory requirements for information gathering and public participation are slightly different for the two Sections of the CWA. Starting in 2002, following a national effort to consolidate the methodologies for both Sections, the Connecticut 303(d) List has been generated as a subset of waters assessed for the 305(b) Report. The *Consolidated Assessment and Listing Methodology* described here is the procedure by which this is done. To understand this process, it is important to put it in the context of the Federal CWA and CT WQS.

The CWA is the primary federal law that protects our nation's surface waters, including lakes, rivers, and coastal areas. In authorizing the Act, the United States Congress declared as a national goal the attainment, wherever possible, of "water quality, which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water". This goal is popularly referred to as the "fishable / swimmable" requirement of the CWA. The State of Connecticut adopted Water Quality Standards as required under Section 22a – 426 of the Connecticut General Statutes and Section 303 of the CWA to accomplish this and other water quality goals.

The CT WQS document contains policy statements concerning the protection of water quality and describes the Classification of State waters. Described for each Class are: 1) allowable discharges; 2) numeric or narrative criteria for various parameters, such as dissolved oxygen and indicator bacteria, to maintain water quality and; 3) designated uses that should be supported (Appendix G). For example, Class A surface waters have the following designated uses: habitat for fish and other aquatic life and wildlife; potential drinking water supplies; recreational use; and water supply for industry and agriculture. The extent to which waterbodies support their designated uses is the key element of 305(b)/303(d) assessments. Designated use support is effectively the measure of water quality used for assessment.

Designated Uses Assessed for 305(b) and 303(d) Reporting

There are slight differences in the wording for designated uses as they are stated in the CT WQS document and as they are described in 305(b)/303(d) assessments. Designated uses are listed in Table 4-1 as they appear in the CT WQS (CT DEP 2002a) and as they are tracked in the US EPA Assessment Database (ADB) for nation-wide 305(b)/303(d) assessments.

Table 4 -1. Designated uses for surface waters as described in Connecticut Water Quality Standards (CT DEP 2002) and 305(b)/303(d) Reports.

305(b) Designated Use	CT WQS Designated Use	Applicable Class of Water	Functional Definition
Primary Contact Recreation	Recreation	AA, A, B, SA, SB	Swimming, water skiing, surfing or other full body contact activities.
Secondary Contact Recreation	Recreation	AA, A, B, SA, SB	Boating, canoeing, kayaking, fishing, aesthetic appreciation or other activities that do not require full body contact.
Aquatic Life Support	Habitat for fish and other aquatic life and wildlife.	AA, A, B, SA, SB	Waters suitable for the protection, maintenance and propagation of a viable community of aquatic life and associated wildlife.
Fish Consumption	Not specified as a use, but implicit in "Habitat for fish and other..." ^a	AA, A, B, SA, SB	Waters supporting fish that do not contain concentrations of contaminants, which would limit consumption to protect human health.
Shellfishing	Shellfish harvesting for direct human consumption.	SA	Waters from which shellfish can be harvested and consumed directly without depuration or relay. Waters may be conditionally approved.
Shellfishing	Commercial shellfish harvesting.	SB	Waters supporting commercial shellfish harvesting for transfer to a depuration plant or relay (transplant) to approved areas for purification prior to human consumption (may be conditionally approved); also support seed oyster harvesting
Public Water Supply	Existing or proposed ^b drinking water supplies.	AA	Waters presently used for public drinking water supply or officially designated as potential public water supply.
Public Water Supply	Potential drinking water supplies.	A	Waters that have not been identified, officially, but may be considered for public drinking water supply in the future.
Navigation	Navigation	A, B, SA, SB	Waters capable of being used for shipping, travel or other transportation by private, military or commercial vessels.
Industrial	Water Supply for Industry	AA, A, B, SA, SB	Waters suitable for industrial supply.
Aesthetics	Not a designated use but included in narrative criteria.	AA, A, B, SA, SB	Appearance, odor or other characteristics of water, which impact human senses are acceptable.
Agricultural	Agriculture	AA, A, B	Waters suitable for general agricultural purposes.
Overall		AA, A, B, SA, SB	Waters supporting all of their designated uses.

^a Also addressed in CT WQS policy statement #14: Surface waters... shall be free of chemical constituents in concentrations or combinations which will... bioconcentrate or bioaccumulate in tissues of fish, shellfish and other

aquatic organisms at levels which will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers...

^b Potential drinking water supplies identified in the Long Range Plan for Management of Water Resources prepared and adopted pursuant to Section 22a-352 Section 25-32d of the Connecticut General Statutes (Water Quality Standards, CT DEP 2002a).

Levels of Use Support

In making water quality assessments, each designated use of a waterbody or waterbody segment is assigned a level of support (*e.g.*, full support, partial support), which characterizes the degree to which the water is suitable for that use. The following use support categories are currently used for 305(b) reporting. These are general definitions. Refer to the section in this chapter entitled *Assessment Methodology* (p.4-8) for specific information regarding the criteria for determining levels of support for each designated use.

Full Support – water quality in the waterbody or waterbody segment is suitable for a designated use and will presumably continue to be suitable for that use in the future.

Threatened - the waterbody currently supports the designated use, but may not in the future due to degrading water quality or the existence of pollution threats that may impair water quality. This category is a subset of Full Support.

Partial Support - the waterbody or waterbody segment does not support the designated use at all times or under certain conditions, or the criteria used to assess support are only partially met.

Not Supporting - the waterbody or waterbody segment does not support the designated use.

Not Attainable * - the waterbody or waterbody segment has been altered to the point where there is no expectation that the use can be met (*e.g.*, a section of river that is piped underground).

* The Not Attainable designation does not imply that there has been a Use Attainability Analysis. This designation has been retained for 305(b) reporting because it provides information regarding river segments that are completely enclosed in conduits (*i.e.*, for all practical purposes are not attainable). For 303(d) listing however, these waters are grouped with Not Supporting so as not to be construed to have undergone a Use Attainability Analysis.

Not Assessed – Insufficient or no information exists to adequately assess use support.

Information Used to Assess Use Support

Depending on the waterbody and data availability, any one or combination of several types of data may be used to assess water quality and use support: ambient physical and chemical parameters, benthic invertebrate and fish community, indicator bacteria, aquatic toxicity, tissue contaminant, sediment chemistry/toxicity and effluent analysis. Following guidance from US EPA (US EPA 2003), the following data and information are considered in conducting water quality assessments:

- ◆ The (most recent) Section 305(b) report, including the Section 314 lakes assessment;
- ◆ The most recent Section 303(d) list;
- ◆ The most recent Section 319(a) nonpoint assessment;

- ◆ Reports of water quality problems provided by local, state, territorial or federal agencies, volunteer monitoring networks, members of the public or academic institutions;
- ◆ Reports of dilution calculations or predictive models;
- ◆ Fish and shellfish advisories, restrictions on water sports or recreational contact;
- ◆ Reports of fish kills or abnormalities (cancers, lesions, tumors);
- ◆ Water quality management plans;
- ◆ Safe Drinking Water Act Section 1453 source water assessments;
- ◆ Superfund and Resource Conservation and Recovery Act reports; and
- ◆ The most recent Toxic Release Inventory.

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) and recent studies by professional contractors. For estuaries, aquatic life use assessments are based primarily on physical and chemical monitoring by the CT DEP for the EPA National Estuary Program Long Island Sound Study. Shellfishing use support is based on bacteria monitoring and sanitary surveys conducted by the CT Department of Agriculture - Bureau of Aquaculture (CT DA-BA) for shellfish bed management.

Reasonable efforts are also made to incorporate data from other state and federal agencies, municipalities, utilities, consultants, academia, and volunteer monitoring groups. Volunteer groups and academics that receive funding through Section 319 of the CWA have data reporting requirements, which encourages the sharing of information for water quality assessments. The CT DEP also directs a monitoring program for volunteers from which usable assessment information is obtained. The details of this program, *A Tiered Approach to Citizen – Based Monitoring of Wadeable Streams and Rivers*, can be obtained from the CT DEP, Bureau of Water Management or online at <http://www.dep.state.ct.us/wtr/volunmon/volopp.htm>.

Other types of information that may be used for assessments include water quality surveys conducted by municipalities and discharge monitoring data from municipal sewage treatment plants, industries and remediation projects. CT DEP staff may conduct effluent or ambient toxicity tests as follow-up to suspected problems.

Knowledge of a condition known to cause water quality impairment is also considered valid information for determining use support. For example, the presence of a combined sewer overflow (CSO) in a stream segment automatically precludes primary contact use support. Use restrictions, such as beach closures, are also taken into consideration.

Data Quality and Degree of Confidence

In tracking water quality assessments, a distinction is made between waters that are considered “monitored” and waters that are considered “evaluated”. A waterbody or waterbody segment is considered monitored if the assessment is based on “sufficient and credible” ambient water quality data that are less than five years old. "Sufficient and credible" means that the quantity and quality of information can support a scientifically defensible assessment by an experienced

professional familiar with waters of similar characteristics. Generally, if the data are more than five years old, not considered high quality, reflect limited sampling events, or if the assessment is made using other types of information, such as knowledge of a pollution source, the waterbody or waterbody segment is considered evaluated.

In most cases a waterbody is considered monitored when ambient data is provided by CT DEP, USGS or CT DA-BA. When volunteer or academic monitors have an EPA-approved Quality Assurance Project Plan (QAPP), their data are usually considered reliable and the waters may be considered monitored.

Where and When Water Quality is Assessed

Waterbodies and Waterbody Segments

A waterbody is a stream/river, lake/pond or estuary/embayment, which may be divided into segments. The basic assessment unit is the segment, and each segment is considered to have homogenous water quality (*i.e.*, use support is uniform throughout the segment). Typically, streams are segmented by features that may cause a change in water quality, such as a confluence with a tributary, a point source discharge, an impoundment or a significant change in land use. For the 2004 reporting cycle, 242 rivers comprising 487 segments were assessed. Almost all 147 assessed lakes were considered to each consist of one segment. (The two exceptions were a large river impoundment partially affected by low oxygen and a pair of connected ponds separated by an earthen berm.) Long Island Sound and associated embayments and estuaries were divided in to 51 waterbodies with 112 segments, largely based on shellfish bed classifications.

Stream & Rivers: Rotating Basin and Probabilistic Approaches

In 2001, the CT DEP completed statewide monitoring in wadeable streams and rivers using a five-year rotating basin strategy, whereby a major hydrological area (basin) was targeted for monitoring each year during the five-year cycle. A more detailed explanation of this approach is found in *Ambient Monitoring Strategy for Rivers and Streams, Rotating Basin Approach* (CT DEP 1999), and assessment information obtained during the full basin rotation was reported in the 2002 305(b) Report.

Even with the resulting increase in assessed miles (approximately 15% to 25%) resulting from the rotating basin approach, the CWA requirement to provide a description of water quality of all navigable waters is not feasible based on this type of focused monitoring. To work toward this comprehensive assessment goal, the CT DEP with funding and cooperation from US EPA Region I conducted a pilot statewide probabilistic monitoring effort in wadeable streams during 2002-2003. Through this approach, a statistically valid sample of streams was monitored to represent conditions of all wadeable streams in the State. During this two-year period, the rotating basin approach was suspended, although some focused monitoring was still conducted at reference sites, in rivers with known problems, as follow-up to effluent treatment upgrades, and as intensive monitoring prior to and following TMDL implementation. Because all laboratory and data analyses have not been completed for probabilistic sites, a full statistical assessment of all wadeable streams will not be done until the 2006 305(b) Report. However, data from probabilistic sites, where analysis was completed, and any targeted monitoring conducted during

the 2002-2003 were incorporated into stream assessments on a segment-by-segment basis for the 2004 report.

For regular ambient monitoring, whether under targeted or probabilistic designs, CT DEP generally samples streams quarterly for physical and chemical parameters, and indicator bacteria. At wadeable sites, benthic macroinvertebrate collections are made during the fall index period. Benthic community structure is used as the primary indicator of biological integrity. Fish community sampling was added at all sites during implementation of the probabilistic approach, and at a subset of sites during the rotating basin schedule. Field surveys and collections of periphyton (benthic algae) were conducted at probabilistic sites during the summers of 2002 and 2003. Analysis of algae data is not complete and will be incorporated into assessments for the 2006 reporting cycle.

In addition to monitoring conducted by CT DEP staff, a cooperative DEP/USGS fixed-network provides physical, chemical and bacteria data from approximately thirty sites located across the State. This long-term program provides data from four to twelve sampling events at each site per year on major rivers and several wadeable streams.

Lakes

Historically, Connecticut has assessed 105 - 115 "significant" lakes statewide for 305(b) reporting. Significance is based on a lake having state or federal public access, or providing unique or otherwise important habitats. In incorporating previously listed 303(d) waters into the 305(b) assessment process in 2002, a number of lakes and ponds which are not considered "significant", but are believed to have impairments, were added to the lake assessment list. Additionally, lakes and ponds with locally monitored bathing beaches have been added.

Due to staff and funding constraints, there has been no statewide ambient lake-monitoring program in Connecticut for more than a decade, and many lake assessments fall into the "evaluated" category because existing information is more than five years old. However, there has been limited targeted monitoring by CT DEP and USGS staff in lakes with known problems. Also, the Lakes Management Grant Program, administered by CT DEP, funds intensive surveys and diagnostic studies in lakes identified as having special problems or special concern to communities. These studies provide valuable information regarding contamination, eutrophication, sedimentation, and extent of aquatic plant growth. Current beach closure data are also taken into consideration for determining primary contact use support.

In 2004, CT DEP will begin a statewide probabilistic lake-monitoring program whereby 20 lakes, chosen by a stratified random design, will be monitored each year for a three-year period. Resulting data will be incorporated into lake assessments for 305(b) reporting as appropriate. Following completion of this project, CT DEP will evaluate the utility of this type of monitoring in providing assessment information and whether it is feasible to continue.

Estuaries

Long Island Sound is monitored year-round on a monthly schedule for dissolved oxygen and nutrients at 17 fixed stations; 25 - 30 stations are added during summer months. Concurrent with this effort, CT DEP collects water quality, sediment, biological community and tissue data at as

many as 40 offshore and harbor sites for a US EPA probabilistic monitoring program, the National Coastal Assessment (Strobel 2000). For the national assessment, representative stations in coastal harbors and offshore waters are chosen randomly to represent conditions of the entire Sound. This information provides the basis for aquatic life use assessments. Annual shellfish bed monitoring and sanitary surveys conducted by CT DA-BA provide assessment information for shellfish use support. Beach closure information as well as known sources of pollution, such as CSOs, is used to determine primary contact use support. All estuarine waters were re-assessed using the most current information for the 2004 reporting cycle.

Reservoirs, Beaches, Fish Kills

Beach closure, drinking water reservoir trophic status and closure, and fish kill information are solicited and reported for the entire State in separate tables in the 305(b) Report. This information is incorporated into individual waterbody assessments where appropriate.

Management of Assessment information

Assessment data (*e.g.*, segment descriptions, assessment methods, use-support, causes and sources of impairment) are stored electronically by waterbody segment in an Assessment Database (ADB) provided by the US EPA. These data are submitted annually in electronic format to EPA in addition to the written biennial 305(b) Report.

Efforts are ongoing to link assessment information stored in the ADB directly to a Geographic Information System (GIS). Connecticut is part of a national initiative to index assessed surface waters to the National Hydrography Dataset (NHD). Problems related to incompatibility of map scales at the state and national levels have delayed utilization of the NHD in Connecticut. The CT DEP expects to fully integrate the NHD into 305(b) reporting for the 2006 cycle. For the 2004 reporting cycle, assessment information and waterbody segmentation are represented by simple graphics using GIS.

Raw monitoring data are managed by means of a Microsoft Access database developed by the Water Monitoring and Assessment Section of the CT DEP. This database contains sampling results and meta-data collected by the Monitoring and Assessment Section since 1997, and has greatly facilitated the assessment process. While CT DEP uses this in-house Microsoft Access database for normal monitoring and assessment purposes, EPA's STORET national water quality database is the ultimate repository for all monitoring results. Migration of CT DEP monitoring data to STORET began in 2003, with all beach data. All monitoring station information will be added in early 2004, followed by chemical, physical, and bacterial data and finally biological community information.

CT DEP TMDL staff maintains a Microsoft Access database to document progress of TMDL development and implementation. The database stores pertinent information regarding participants, waterbodies, ambient and facility monitoring data, and the status of Best Management Practices (BMPs) in achieving TMDL goals. It allows tracking participants from many programs within DEP, other government agencies and interest groups.

Assessment Methodology

Assessment procedures generally follow guidance provided by US EPA (1997) using a variety of information and data types. The CT DEP applies a "weight of evidence" approach when using multiple types of data. A waterbody is generally considered impaired when one or more sources of data or information indicate a water quality standard is not attained, providing that information is considered sufficient and fully credible (see Data Quality section, p. 4-4). For example, if available indicator bacteria data do not exceed criteria, but a CSO is present, the waterbody segment is considered impaired. If the benthic invertebrate community is just meeting standards, and the fish community shows impairment, the waterbody is considered impaired. In resolving discrepancies in conflicting information, consideration is given to data quality, age, frequency and site-specific environmental factors. If reconciliation of conflicting data is not possible, the waterbody segment is designated as "not assessed" for the relevant use and flagged for further monitoring.

Aquatic Life Use Support

River and Streams

Because the biological community of a stream integrates the effects of pollutants and other conditions over time, biological community assessment is the best and most direct measure of aquatic life use support (ALUS). CT DEP has used benthic macroinvertebrate community structure as the primary indicator of biological integrity since the mid-1970s. These data provide a relatively direct characterization of impairment and use support through comparison of sample communities to reference communities (Table 4-2). Occasionally, where habitat conditions are not optimal, a non-quantitative assessment may be used to infer aquatic life use support. Such assessments fall into the "evaluated" category. It is important to note that while CT DEP employs the methods described in US EPA's Rapid Bioassessment Protocols (RBP, Plafkin *et al.* 1989), the actual criteria for benthic invertebrates in the CT WQS (CT DEP 2002a) are narrative community descriptions, rather than numeric values.

Beginning in 1999, fish community sampling has been conducted at wadeable sites by means of a cooperative project with the DEP Fisheries Division. CT DEP intends to develop a numerical index for assessing fish community data in the future, but currently relies on the best professional judgment of fisheries and water quality monitoring staff biologists to evaluate community structure. In general, fish populations from sampled streams are compared to what would be expected in an unimpaired or minimally impaired stream of similar size. Fisheries assessments are used to support benthic information and in some cases provide the primary method to assess ALUS. Methods for both benthic invertebrate and fish monitoring are described in CT DEP (1996, 2001), Plafkin *et al.* (1989) and Barbour *et al.* (1999).

Indirect measurements of ALUS such as ambient physical/chemical data, discharge monitoring reports, aquatic toxicity monitoring reports, and sediment data are also evaluated against water quality criteria established in CT WQS (CT DEP 2002a). Decision criteria used in making ALUS assessments are provided in Table 4-2.

Table 4-2. Aquatic life use support categories and contributing decision criteria for wadeable streams.

Aquatic Life Use	Criteria / Indicators
Fully Supporting	<ul style="list-style-type: none"> • Benthic community: bioassessment indicates community is non-impaired or slightly impaired ^a, and meets narrative criteria in CT WQS; RBP III Community Score (Plafkin <i>et al.</i> 1989) > 54 % of Reference Condition. • Fish community: species composition, trophic structure, and age class distribution as expected for a non-impacted stream of similar size. • Conventional physical/chemical criteria not exceeded. • Measured toxicants do not exceed chronic toxicity criteria. • No record of catastrophic events (<i>e.g.</i>, chemical spills, fish kills) • No evidence of flow diversion
Threatened	<ul style="list-style-type: none"> • Benthic community: non-impaired or lightly impaired, but still meets narrative criteria in CT WQS; RBP III Community Score (Plafkin <i>et al.</i> 1989) > 54 % of Reference Condition, and conditions exist that may impact the community in the future. • Fish community as above, but documented trend is downward or conditions exist that may impact the community in the future. • Slight exceedences of either conventional or toxicant criteria in < 10% of samples; exceedences difficult to discern from expected analytical variability or error. • Discharge effluent constitutes >20% of stream flow. • Land use conditions exist that may cause impairment. • Flow reductions due to diversions have been observed.
Partially Supporting	<ul style="list-style-type: none"> • Benthic community: bioassessment indicates community is moderately impaired; RBP III Community Score (Plafkin <i>et al.</i> 1989) 21- 50% of Reference Condition ^b. • Fish community: species composition, trophic structure and age class distribution significantly less than expected for a non-impacted stream of similar size; diversity and abundance of intolerant species reduced; top carnivores rare; trophic structure skewed toward omnivory. • Either fish or benthic communities meet above conditions, and the other community is fully supporting. • Conventional physical/chemical criteria exceeded in > 10% but < 25% of samples. • Measured toxicants exceed chronic criteria < 10% of samples. • Flow is reduced significantly during drought conditions.
Not Supporting	<ul style="list-style-type: none"> • Benthic community: bioassessment indicates community is severely impaired; RBP III Community Score (Plafkin <i>et al.</i> 1989) < 17% of Reference Condition. • Fish community: species composition, age class distribution and trophic structure greatly impaired in comparison to a non or minimally impacted stream of similar size; community dominated by highly tolerant species, omnivores and habitat generalists; in extreme cases, few species present and/or diseased fish common. • Conventional physical/chemical criteria exceeded in > 25% of samples • Measured toxicants exceed chronic criteria >10% of samples • Stream known to dry completely for significant periods. • Documented catastrophic event (<i>e.g.</i>, chemical spill, fish kill)
Not Attainable	<p>Stream completely enclosed in conduit or cleared concrete trough.</p> <p>Stream is dewatered most of the time due to and upstream impoundment or diversion.</p>

a. “ Slightly impaired” refers to a bioassessment category (Plafkin *et al.*1989) represented by a benthic macroinvertebrate community that may show some loss of pollution-intolerant forms. In Connecticut, a slightly impaired assessment may still meet water quality standards given habitat restrictions.

b. When a bioassessment falls on the border between two use support categories, use support is determined by staff biologists with consideration site conditions and other available data.

Lakes

Levels of support for aquatic life use are based almost exclusively on the best professional judgment of CT DEP lake management staff based on the most recent available information from government agencies and/or reliable contractors and lake associations. Other factors taken into

consideration are known problems, such as chronic algal blooms, extensive establishment of exotic invasive plants, severe sedimentation, and surveys of fisheries biologists.

Trophic Assessments in Lakes

Lake trophic classifications, as listed in the CT WQS (CT DEP 2002a, Appendix G) are based on ambient measurements of four parameters: total phosphorus, total nitrogen, chlorophyll a, and secchi disc transparency in specified seasons. Lakes are classified as either oligotrophic, mesotrophic, eutrophic, or highly eutrophic based on the range of values for these four parameters. Macrophyte coverage and density is used to adjust the trophic classification based on water column data described above. While trophic status is not a direct measure of aquatic community health, highly eutrophic conditions, beyond what is naturally expected (given the relative size of the lake/pond and watershed, the origin of the lake/pond, and other physiographic parameters), or a documented trend toward increased eutrophy may indicate an impairment or a threat to aquatic life. A naturally eutrophic lake, having nutrient concentrations that support high levels of biological activity without any significant anthropogenic source, would not be considered impaired.

Estuaries

Aquatic life use assessments for estuaries are based primarily on oxygen and nutrient data collected by CT DEP’s Long Island Sound monitoring staff. In cases where State water quality criteria are violated for a specific parameter as defined in the CT WQS (CT DEP 2002a), the waterbody is identified as impaired. Low dissolved oxygen, or hypoxia, in offshore waters and some embayments is the most frequently cited impairment of aquatic life. CT DEP revised its dissolved oxygen criteria in 2001 (Appendix G) for offshore bottom waters, based on risk assessment criteria published by EPA (U.S. EPA 2000). Because hypoxia is a seasonal phenomenon, affected waters are considered partially supporting rather than not supporting. Other information sources include tissue analyses, sediment analyses, irregular sampling (*e.g.*, for spills, site assessments or research projects), and professional judgment evaluations of pollutant sources and water quality conditions.

Table 4-3. Aquatic life use support in estuaries as determined by dissolved oxygen levels.

Aquatic Life Use Assessment	Dissolved Oxygen Criteria
Fully Supporting	Waters not affected by hypoxic events.
Partially Supporting	Waters affected by hypoxia for some period during the year.

Fish Consumption

Fish consumption use support is determined by consumption advisories issued by the Connecticut Department of Public Health (CT DPH). Consumption advisories are in turn based on risk assessments conducted by CT DPH using fish tissue contaminant data. A statewide fish consumption advisory was issued in the mid-1990s for all species, except trout less than 15 inches in length, 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). Therefore, in addition to fish consumption use support as determined by the criteria below (Table 4-4), all freshwaters of the State are considered to be partially supporting for fish consumption due to mercury contamination. Likewise, all estuarine waters are partially supporting for fish

consumption due to PCB contamination in migratory striped bass and bluefish, as well as lobster tomalley.

Table 4-4. Fish consumption use support and criteria.

Fish Consumption Assessment	Criteria
Fully Supporting	No consumption advisory for any fish species or any consumer group, other than the statewide advisory for Mercury in freshwater fish or PCBs in migratory saltwater fish.
Threatened	No consumption advisory for any fish species or any consumer group, other than the statewide advisory for Mercury in freshwater fish or PCBs in migratory saltwater fish, but sediments contain detectable levels of contaminants known to bioaccumulate in fish.
Partially Supporting	A consumption advisory exists for some fish species or for certain risk consumer groups, in addition to the statewide advisory for Mercury in freshwater fish or PCBs in migratory saltwater fish.
Not Supporting	A fish consumption advisory exists for all fish species for all consumer groups.

Shellfishing (in Estuaries)

The responsibility for regulating shellfish harvest is assigned to the Department of Agriculture. The Department of Agriculture-Bureau of Aquaculture (CT DA-BA) collects fecal coliform data to assess nearshore waters to determine openings and closures of shellfish grounds (Appendix G). Shellfish beds are classified with respect to the restrictions on harvest. There are four general classifications: 1) Approved for direct human consumption; 2) Conditionally approved for human consumption based upon rainfall, sewage treatment plant operations, season or other conditions, 3) Restricted-relay or restricted-relay/depuration operations (may also be conditional), and 4) Prohibited (may be used for oyster seed harvest). Shellfish growing water classifications are based on seawater sampling and analyses, shoreline surveys and pollution source evaluations conducted by CT DA-BA, in conformance with the Interstate Shellfish Sanitation Conference Model Ordinance. CT DEP applies these classifications to SA and SB waters to assess shellfishing use support (Table 4-5).

Table 4-5. Shellfishing use support as determined by shellfish bed classifications.

Shellfishing	<i>Criteria</i>
Fully Supporting	SA waters approved for direct harvest. SB waters approved for direct harvest, conditional harvest, or restricted to relay or depuration operations.
Partially Supporting	SA waters conditionally approved for direct harvest.
Not Supporting	SA waters prohibited to shellfishing, seed oyster harvesting or certain aquaculture operations; or approved only for relay operations. SB waters prohibited to shellfishing, seed oyster harvesting or certain aquaculture operations.

In a number of towns, the CT DA-BA has placed restrictions on direct harvest of shellfish from the shoreline out to the mid-Sound state boundary. However, beyond a depth of 50 feet, there is essentially no shellfishing conducted at this time, and these waters are not regularly monitored. Therefore, for 305(b)/303(d) purposes, shellfishing is not evaluated as a use in waters between the 50-foot depth contour and the state line. The lack of monitoring should not be construed to mean these deeper offshore waters do not achieve applicable water quality criteria for indicator bacteria.

Primary Contact Recreation

Assessment of the designated use for primary contact recreation is based, for the most part, on indicator bacteria data provided by CT DEP quarterly sampling, USGS monitoring, volunteer monitoring, and municipal monitoring (Table 4-6). Following the adoption of revised CT WQS in 2002, enterococci group bacteria are now used as the primary indicator organism in salt (estuarine) water, and *Escherichia coli* in fresh water. For salt water, 104 Colony Forming Units or CFU/100 ml of enterococci is the single sample criteria for designated bathing areas, 500 CFU/100 ml for other recreational uses, and 35 CFU/100 ml is the geometric mean criteria for any primary contact use. In fresh water, 235 Colony Forming Units or CFU/100 ml of *Escherichia coli* is the single sample criteria for designated bathing areas, 410 CFU/100 ml for non-designated swimming areas, 576 CFU/100 ml for other recreational uses, and 126 CFU/100 ml is the geometric mean criteria for any primary contact use. Fecal coliform data, where it exists, may be used to confirm use support determinations.

For waterbodies or waterbody segments with designated bathing areas, beach closure information rather than actual indicator bacteria data is generally used to determine use support. Public bathing areas are sampled for indicator bacteria on a weekly basis during the swimming season, which serves as the basis for determining closures (CT DPH and CT DEP 2003). Some local health departments have implemented administrative beach closures, which take effect after rainfall events of some pre-determined magnitude. In these cases, precipitation during the swimming season is also considered in evaluating beach closure information.

Additionally, beach personnel routinely conduct physical inspections of shoreline bathing areas (minimally once per day) for evidence of contamination. State and local officials also utilize sanitary surveys of shorelines and watersheds as a primary tool to determine sanitary quality. Discovery of waste materials indicative of untreated sewage or human fecal contamination (*e.g.*, medical waste, disposed condoms, tampon applicators, or diapers, sewage discharged from a boat holding tank or sewage grease balls) can be sufficient justification to support a beach closure decision by local or state authorities.

There is a distinction between occasional, small quantities of temporary and/or transient sources of human fecal contamination transported to a site (*e.g.*, diapers, tampons), and “significant” sources of contamination that originate from a fixed location within the water body (*e.g.*, a CSO or a community with failing septic systems). Any contamination determined to be of human origin would likely result in a beach closure, whereas the presence of a “significant” source would result in a water body segment being assessed as impaired.

All types of closures, whether based on bacterial exceedences or the presence of a contamination source, are included in the annual closure statistics used to assess primary contact use support. A complete discussion of Connecticut's practices related to beach closure may be found in "Guidelines for Monitoring Bathing Waters and Closure Protocol" developed jointly by the Connecticut Department of Health, the DEP, the Connecticut Environmental Health Association, the Connecticut Association of Directors of Health (CT DPH and CT DEP 2003).

In some lakes, primary contact use may also be impaired by excessive growth of aquatic invasive plants or algae. Lakes for which no bacteria data exist may be considered fully supporting of

primary contact if the lake is situated completely within an undeveloped area or if there have been no complaints of illness or excessive aquatic plant growth.

Table 4-6. Decision criteria for various categories of primary contact use support.

Primary Contact Recreation Assessment	Criteria / Indicators for designated public bathing areas
Fully Supporting	<ul style="list-style-type: none"> • Designated bathing area closed 5% of swimming season or less; and • Sanitary survey indicates no significant source* of human fecal contamination.
Threatened	<ul style="list-style-type: none"> • Designated bathing area closed between 6% and 10% of swimming season; and • Sanitary survey indicates no significant source of human fecal contamination. • Land use or environmental conditions exist that may cause impairment. This may include excessive growth of aquatic weeds that threaten swimming use.
Partially Supporting	<ul style="list-style-type: none"> • Designated bathing area closed between 10% and 25% of swimming season; or • Sanitary survey indicates minor potential for significant source of human fecal contamination.
Not Supporting	<ul style="list-style-type: none"> • Designated bathing area closed more than 25% of swimming season; or • Sanitary survey indicates potential for significant source of human fecal contamination.
	Criteria / Indicators for areas not designated as public bathing areas
Fully Supporting	<ul style="list-style-type: none"> • Sanitary survey indicates no significant source of human fecal contamination; and • CT DEP and /or USGS ambient monitoring data show no exceedences of indicator bacteria.
Threatened	<ul style="list-style-type: none"> • Sanitary survey indicates no significant source of human fecal contamination; and • CT DEP quarterly monitoring data show a single sample exceedence of indicator bacteria; or • Limited data from another source show exceedences; or • Land use or environmental conditions exist that may cause impairment. (This may include excessive growth of aquatic weeds that threaten swimming use.); or • Stream flow comprises >20% treated sewage effluent.
Partially Supporting	<ul style="list-style-type: none"> • Sanitary survey indicates minor potential for significant source of human fecal contamination; or • Monthly or frequent ambient monitoring data from USGS or another reliable source show a single sample exceedence or an exceedence of the geometric mean for indicator bacteria; or • CT DEP quarterly ambient monitoring data show two extremely high or three moderate single sample exceedences of indicator bacteria. • Land use or environmental conditions exist that may cause impairment. This may include excessive growth of aquatic weeds that preclude swimming.
Not Supporting	<ul style="list-style-type: none"> • Sanitary survey indicates potential for significant source of human fecal contamination; or • Ambient monitoring data from USGS or another reliable source show one or more single sample exceedences and an exceedence of the geometric mean for indicator bacteria; or • Land use conditions exist known to cause impairment.
Not Attainable	<ul style="list-style-type: none"> • Full body contact not possible; river enclosed in conduit.

- a significant source of human fecal contamination is one that originates from a fixed location and is transported to or within the water body (e.g., a CSO or a community with failing septic systems).

Secondary Contact Recreation

Secondary contact recreation (boating, fishing, etc.) is assessed for all lakes. Excessive growth of invasive aquatic plants may threaten or impair secondary contact uses, such as fishing or boating. The degree of impairment is based upon the best professional judgment of CT DEP

lakes management staff. Also, in some rivers, where water diversions prevent normal use by canoeists and kayakers, secondary contact has been determined to be impaired. This use is assumed to be supported in all other Connecticut waters.

Drinking Water Supply

The CT DPH, in cooperation with the CT DEP, implements the federal Safe Drinking Water Act (SDWA) in Connecticut. The DPH tracks and reports on the water quality of public drinking water supplies within the context of the SDWA. CT DEP does not track reservoirs as waterbodies in the ADB for 305(b) assessments. However, CT DEP periodically surveys water utilities for information concerning closures, trophic status, and potential causes and sources of pollution. Trophic status is reported in a separate table in the 305(b) Report.

A number of Class AA and A tributaries to drinking water reservoirs are tracked and assessed in the ADB for 305(b) reporting. Assessment of these streams is based on standard measures of water quality (physical/chemical parameters, macroinvertebrate community, fish community, *etc.* where available), plus consideration of the potential causes and sources of pollution noted on water utility surveys.

Aesthetics

“Aesthetics” is not a designated use of waters in Connecticut WQS, rather a narrative criteria (Appendix G). Due to the ambiguous nature of measuring aesthetic use support, it is not routinely assessed for 305(b) / 303(d) reporting. For lakes, however, aesthetics is evaluated by lake managers based on best professional judgment and complaints received from the public. Complaints are usually due to excessive growth of aquatic plants or chronic algal blooms.

Navigation

Navigation is assumed to be fully supported for all A, B, SA and SB waters.

Agriculture, Industry

Agricultural and industrial supply uses are assumed to be fully supported for all AA, A, and B waters.

Overall Use Support

Overall use support (Table 4-7) is an integrated assessment that considers all designated uses in aggregate: aquatic life, primary contact, fish consumption and shellfishing (estuaries only). Secondary contact and aesthetics are taken into consideration for this integrated use, especially in lakes with algal or aquatic weed problems.

Table 4-7. Overall use support categories.

Overall Use	Criteria
Fully Supporting	All designated uses fully supported.
Threatened	All designated uses met, but data may show a decline in integrity. One or more uses threatened.
Partially Supporting	One or more designated uses partially supported (Rivers and Lakes); one designated use partially supported or not supported (Estuaries).
Not Supporting	One or more designated uses not supported (Rivers and Lakes); more than one use not supported (Estuaries).
Not Attainable*	Streams that are completely dewatered due to a diversion, enclosed in a conduit or regularly cleared concrete trough.
Not Assessed	Some or none of the designated uses were assessed.

*The Not Attainable designation does not imply that there has been a Use Attainability Analysis. This designation has been retained for 305(b) reporting because it provides information regarding river segments that are completely enclosed in conduits. For 303(d) listing however, these waters are grouped with Not Supporting so as not to be construed to have a Use Attainability Analysis.

Listing of Unimpaired and Impaired Waters

Based on the above assessment methodology, all waters of the State may be placed in one of five categories described in the US EPA guidance (US EPA 2003). For 2002 and 2004 reporting, only impaired waters have been categorized pursuant to this guidance (see categories 4 and 5) for submission with the 303(d) List. All assessed waters, impaired and unimpaired waters are reported in the 305(b) report in a traditional listing by drainage basin. The five EPA categories and the subsequent monitoring recommended to support water quality management are described below:

1. Fully supporting of all uses (may be threatened for some uses ^a). Reliable data and information support a determination that the water quality standards are attained for the Class designation. These waters will be monitored in the future, in accordance with the ambient monitoring strategy adopted by the CT DEP. Waters with threatened uses may be prioritized to determine trends in water quality.
2. Fully supporting of some designated uses (may be threatened for some uses ^a); and insufficient or no data and information available to assess remaining uses. Reliable data and information exist to support a determination that some uses are attained. These waters will be monitored in the future, in accordance with the ambient monitoring strategy adopted by the CT DEP. Waters with threatened uses may be prioritized to determine trends in water quality, or better define attainment status.
3. Not assessed, insufficient or no information exists to determine if any designated use is attained. These waters may be prioritized for monitoring as considered appropriate by CT DEP staff, or may be monitored in accordance with the ambient monitoring strategy adopted by the CT DEP. Following a probabilistic approach, these waters may be assessed through statistical representation.
4. Impaired for one or more designated uses, TMDL development not required for one of the following reasons:

- a. (CT DEP Tier 1) ^b TMDL has been completed. Waters for which TMDL(s) have been developed CT DEP and approved by US EPA that, when implemented, are expected to result in full attainment of the standard. Where more than one pollutant is associated with the impairment of the waterbody or waterbody segment, it will remain in Category 5 until TMDLs for all pollutants have been completed and approved by EPA. Follow-up monitoring will be scheduled as specified in the TMDL implementation and monitoring plan, to verify that the water quality standard is met after implementation.
 - b. (CT DEP Tier 4) ^b Other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future. These are waters where other pollution controls required by local, state, or federal authority are stringent enough to attain any water quality standard applicable to such waters. The pollution controls required are specifically applicable to the particular water quality problem. Monitoring will be scheduled for these waters to verify that the water quality standard is attained as expected.
 - c. (CT DEP Tier 5) ^b Impairment is not caused by a pollutant, but by a stressor not directly related to water quality (*e.g.*, habitat modification, hydraulic modification). These waters will be monitored in the future, in accordance with the ambient monitoring strategy adopted by the CT DEP.
5. Impaired for one or more designated uses, TMDL development required. The water quality standard is not attained. This category constitutes the subset of impaired waters for which one or more TMDLs are needed (*i.e.*, the 303(d) List). Waters in this category will be prioritized for TMDL development based on threats to human health, the potential for a TMDL analysis to result in improved water quality and the comments received during the public review of the proposed 303(d) list. A schedule will be developed for the establishment of TMDLs, describing when data and information will be collected to support TMDL establishment and to determine if standards are attained. This schedule will reflect the priority ranking of the listed waters. Waters in this category are further divided into the two following subcategories:
 - a. (CT DEP Tier 2) ^b It has been determined through methodology described below, that the impairment is caused by a pollutant stressor (*e.g.*, chemical, clean sediment, temperature), a surrogate indicator (*e.g.*, indicator bacteria), or can be attributed to a source that contributes multiple pollutants to a waterbody such that implementing a TMDL for one or more pollutants can reasonably be expected to result in attainment of uses. Where more than one pollutant is associated with the impairment, the waterbody or waterbody segment will remain in this category until TMDLs for all pollutants have been completed and approved by EPA. Further investigative monitoring, if necessary, will be scheduled to confirm causes. Follow-up monitoring will be scheduled to determine if standards are attained following TMDL implementation.

- b. (CT DEP Tier 3) ^b The waterbody or waterbody segment does not support a use based on biological or other information, and the cause is unknown. It is uncertain whether the impairment is caused by a pollutant. Additional monitoring will be scheduled to identify the cause of impairment. If the additional monitoring determines the cause of the impairment to be a pollutant(s), and other pollution control requirements can not reasonably be expected to result in attainment of standards in the near future, the State will complete a TMDL(s) for the pollutant(s). If the additional monitoring determines the impairment is not caused by a pollutant, the waterbody or waterbody segment will be moved Category 4c.

^a The US EPA ranking system does not consider threatened waters in category 1 or 2, but places these waters in category 4 or 5. CT DEP considers waters threatened for some uses as meeting water quality standards and does not place them in the impaired waters categories.

^b US EPA categories 4 and 5 constitute the "Impaired Waters List" (IWL) for the State of Connecticut, documented in the *2002 List of Connecticut Waterbodies Not Meeting Water Quality Standards* (CT DEP 2002). The "Tier" designation refers to the categories used in the Connecticut IWL.

Determining Causes and Sources of Impairment

A primary focus of CT DEP monitoring and assessment staff is the evaluation of existing data and information to make use support assessments. In some cases, ambient biological community data indicate impairment, but the cause(s) and source(s) are unknown or, more often, multiple potential causes/sources exist but a direct link to impairment is lacking. Therefore, for many impaired waters listed in the 305(b)/303(d) Report, the causes and sources indicated are the best estimations of DEP monitoring staff based on a weight of evidence approach. Once a waterbody or segment is designated for TMDL development, a more thorough investigative study is conducted to identify causes and sources of impairment. These investigations may include more intensive ambient water quality sampling, aquatic toxicity studies, sediment or fish tissue analysis and/or dilution calculations of known discharges. In some cases the determination of causes and sources may not be possible.

Delisting of Impaired (303(d)) Waters

The assessment of surface waters for 305(b) reporting is an on-going process that will result in the removal of some waterbodies from the 303(d) portion of the impaired waters list (IWL), and the addition of others. A waterbody is removed from the 303(d) List when management efforts result in water quality meeting water quality standards. Additionally, a waterbody can be delisted for one of the following reasons:

- 1) An error was made in the initial assessment causing an erroneous listing. Erroneous listings include those based on anecdotal information that cannot be confirmed through direct observation or measurement using generally accepted, reproducible analytical methods. Such information is often transmitted orally and/or undocumented.
- 2) Quality controlled data, which are acceptable to CT DEP, demonstrate that designated uses are being met for the waterbody (with or without implementation of a TMDL).
- 3) Revisions in Water Quality Standards and Criteria may cause a waterbody to come into compliance with Water Quality Standards.

- 4) The waterbody or waterbody segment meets conditions described in 4a - 4c in the listing methodology above.

Reconciliation of Past and Present 303(d) Lists

Apart from the ongoing process of listing and delisting 303(d) waterbodies described in the previous sections, there are cases where a waterbody may be moved to another category based on re-assessment of available information. This occurred in several cases for waters listed as impaired in 1998 based on anecdotal information. In these circumstances, the waterbody usually was moved into EPA category 2 (supporting for some uses, other uses not assessed) or more often category 3 (no or insufficient data available to make any assessment).

Public Participation

As described previously, the CT DEP solicits data and information from a variety of sources, including volunteer groups, municipalities, utilities, and academia to incorporate into the assessment process. Additionally, there is a public review process for the 303(d) List and listing methodology. Public comments were actively solicited and considered in providing a final 305(b)/303(d) Report to the US EPA in April 2004.

Chapter 5. Water Quality (Use Support) Summaries

Geographic Coverage

Water quality monitoring in Connecticut has historically focused on "major" rivers and waste receiving waters, leaving many smaller streams un-assessed. To increase the number of monitored stream miles, CT DEP implemented a rotating basin approach in 1996, through which one major hydrologic area was targeted each year during a five-year cycle. Additionally, an increased effort was made to incorporate data from volunteers, academics and municipalities. At the completion of the full basin rotation in 2001, the number of assessed stream miles increased from 893 (15%) in 1996 to 1,461 (27%) for aquatic life use and 1,197 (22%) for contact recreation. Despite these gains, this type of focused monitoring cannot be feasibly used to meet the Federal Clean Water Act (CWA) requirement to assess all navigable waters of the State, since it would require monitoring every Connecticut stream.

To work toward the comprehensive assessment goal, CT DEP suspended the rotating basin approach during 2002 and 2003, and, through a cooperative agreement with US EPA, conducted monitoring at stream sites chosen by a probabilistic design. Data from probabilistic sites provide a statistically representative sample that can be extrapolated to characterize water quality conditions of all wadeable streams in the State. During the past two years, in addition to probabilistic sites, DEP staff conducted monitoring at reference sites, sites with known problems and intensive surveys prior to or following TMDL implementation (Table 5-10). Because laboratory analyses are not complete for all probabilistic sites at this time, the full statistical analysis will not be done until the 2006 305(b) Report. For this report, where new data were available (759.5 miles in 173 segments), assessments were made on a segment-by-segment basis. Forty-four of those segments comprising 94.4 miles had not been previously assessed. Where no new data were available, river and stream segment assessments remain the same as for the 2002 305(b) Report. Figure 5-1 depicts river segments assessed for 2002 and, where data were available for 2004.

In estuaries, CT DEP conducts probabilistic monitoring as part of the National Coastal Assessment (Strobel 2000), in addition to fixed sites monitored for hypoxia and nutrients as part of the ongoing Long Island Sound Study (<http://www.longislandsoundstudy.net/>). These programs plus coastal shellfish and beach monitoring, allows CT DEP to effectively assess all estuarine waters. For this report all estuarine segments were re-assessed using available information.

Lake assessments were updated for 77 of 147 assessed lakes, where new information existed. Data sources included information provided by consultants and qualified contractors working through the Lakes Grant Program, TMDL analyses, targeted monitoring by CT DEP and USGS, and beach closure information. CT DEP will embark on a three-year probabilistic lake project in 2004 with the goal of monitoring 20 lakes per year over a three-year period. Through this effort, using a statistically representative sample of lakes, CT DEP will be able to achieve the comprehensive monitoring goal as with probabilistic river monitoring. Table 5-1 below summarizes assessment coverage for all waterbody types for the 2004 reporting cycle.

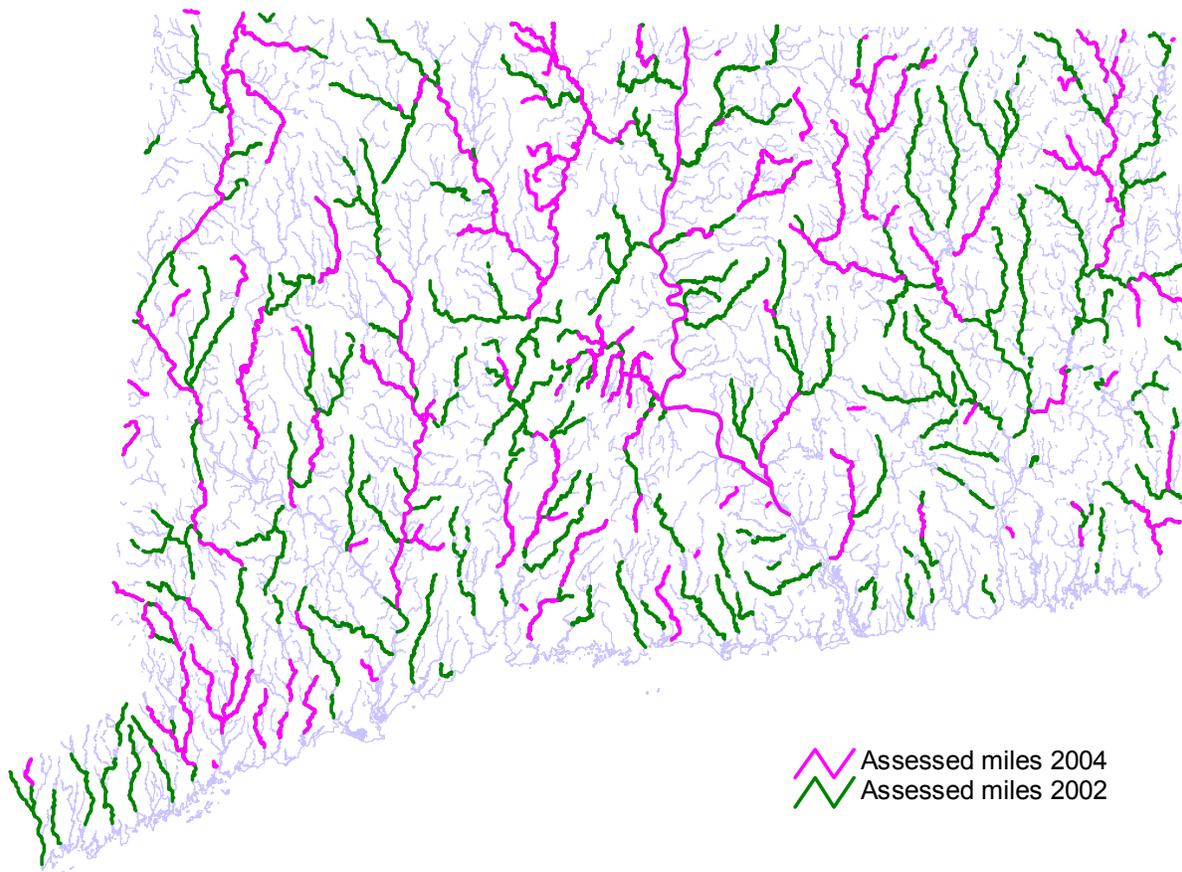


Figure 5-1. Assessed Connecticut stream miles 2002 and 2004.

Table 5-1. Summary of Evaluated and Monitored Waterbody Segments.

Waterbody Type	Rivers	Lakes	Estuaries
No. of Waterbodies	242	147	51
No. of Segments	487	149	112
Assessed Size	1,774.2 miles*	27,881.0 acres	613.4 square miles
No. of Segments Monitored	312	85	112
Size Monitored	1,278.4 miles	21,140.6 acres	613.4 square miles
No. of Segments Evaluated	175	64	0
Size Evaluated	495.8 miles	6,740.4 acres	0 square miles

* This total includes 156 river miles tracked in the Assessment Database (ADB) for which no aquatic life or primary contact assessment was made. Such cases may occur when un-assessed segments fall between assessed segments, or when rivers were added from the 1998 Impaired Waters List (CT DEP 1998) based on anecdotal information.

Segmentation of Waterbodies and Temporal Comparisons

Because of changes in assessment procedures over time including segmentation and re-measuring of rivers, the addition of many assessed river miles and inclusion of 303(d) impaired waters, it is not possible to make direct comparisons of present use support to historic assessment

of rivers. One notable change in procedure is the assessment of overall use support. In compliance with EPA guidance (US EPA 2003), and the Connecticut Consolidated Assessment and Listing Methodology (Chapter 4 and CT DEP 2004b), waters, for which some uses are supported and others not assessed, are now considered not assessed for overall use (EPA Category 2, see Chapter 4). In years past, CT DEP had considered waters to be fully supporting of overall use if data or information existed for at least one major use, and there was no evidence that other uses might be impaired. Thus, a number of waters were changed from fully supporting for overall use to unassessed. Many additions of impaired miles were made when incorporating the 303(d) list of impaired waters into the 305(b) assessment waters. The public comment process, required by Section 303(d) of the CWA, also resulted in the addition of impaired miles.

The segmentation of rivers into discrete sections, based on hydrology, land use or changes in water quality (Chapter 4), allows for a much more critical assessment of these waters with respect to data availability. While a significant number of river miles were added to the assessment database due to increased DEP, volunteer and academic monitoring, some assessed miles were actually lost. This may have occurred due to a more accurate measurement of river length, or the determination that there was insufficient information to make an assessment for a particular river segment. The impoundments of the Housatonic River (Lakes Zoar, Lillinonah and Housatonic) were historically double-counted as both river miles and lake acres. For the current assessment, these waters are considered as lakes, only. Appendix A provides the location of all waterbody segments assessed for this report.

Finally, the subset of assessed rivers in Connecticut has not been a statistically representative sample of the State's flowing waters, rather biased toward major and/or waste-receiving rivers. Therefore, it has not been possible to characterize use attainment of Connecticut rivers in general. However, data derived from the probabilistic monitoring project, once all analyses are complete, will allow for a statistically extrapolation of use support for all rivers of the state.

Rivers and Streams

A summary of use support for rivers in Connecticut is presented in Table 5-2. Water quality assessments for individual rivers and streams in these basins can be found in Appendix B of this report. Segments for which new information was available appear in boldface print. The benthic community analysis on which aquatic life use determinations were primarily based is presented in Appendix H. Summary information for causes and sources of impairment is presented in Tables 5-3 and 5-6, respectively.

Information provided by volunteers, academics, municipalities and utilities was used in the assessment of 345 miles in 106 segments of 73 rivers. Volunteers and academics, alone, provided information that was incorporated into the assessment of 81 segments comprising 257 miles. Major contributors, largely funded by Section 319 monies, included Connecticut RiverWatch, HarborWatch of Westport, Yale University, Project SEARCH and a number of watershed and fishing-interest groups using CT DEP's Rapid Bioassessment for Volunteers (<http://www.dep.state.ct.us/wtr/volunmon/volopp.htm>). Municipalities provided beach closure data and results from several intensive studies. Water utilities provided insights into potential causes and sources of impairment for tributaries to reservoirs within drinking water watersheds.

The most common cause of river impairment was exceedence of indicator bacteria criteria, which are used for determining primary contact use support (Table 5-2, Figure 5-2). The criteria are extremely protective of human health and are applied to all streams regardless of the feasibility of full body contact. Shallow urban streams, where body contact is highly unlikely, are held to the same standard as large rivers where contact recreation might realistically occur. Designated bathing areas have even more restrictive criteria (CT DEP 2002a, Appendix G). Of the 400 plus river miles listed as impaired for primary contact, more than 58% are affected by urban runoff, 16% by agriculture and 8% by waterfowl and natural sources. The latter source is believed to be underestimated. Potential sources of human sewage affect about 35% of impaired miles.

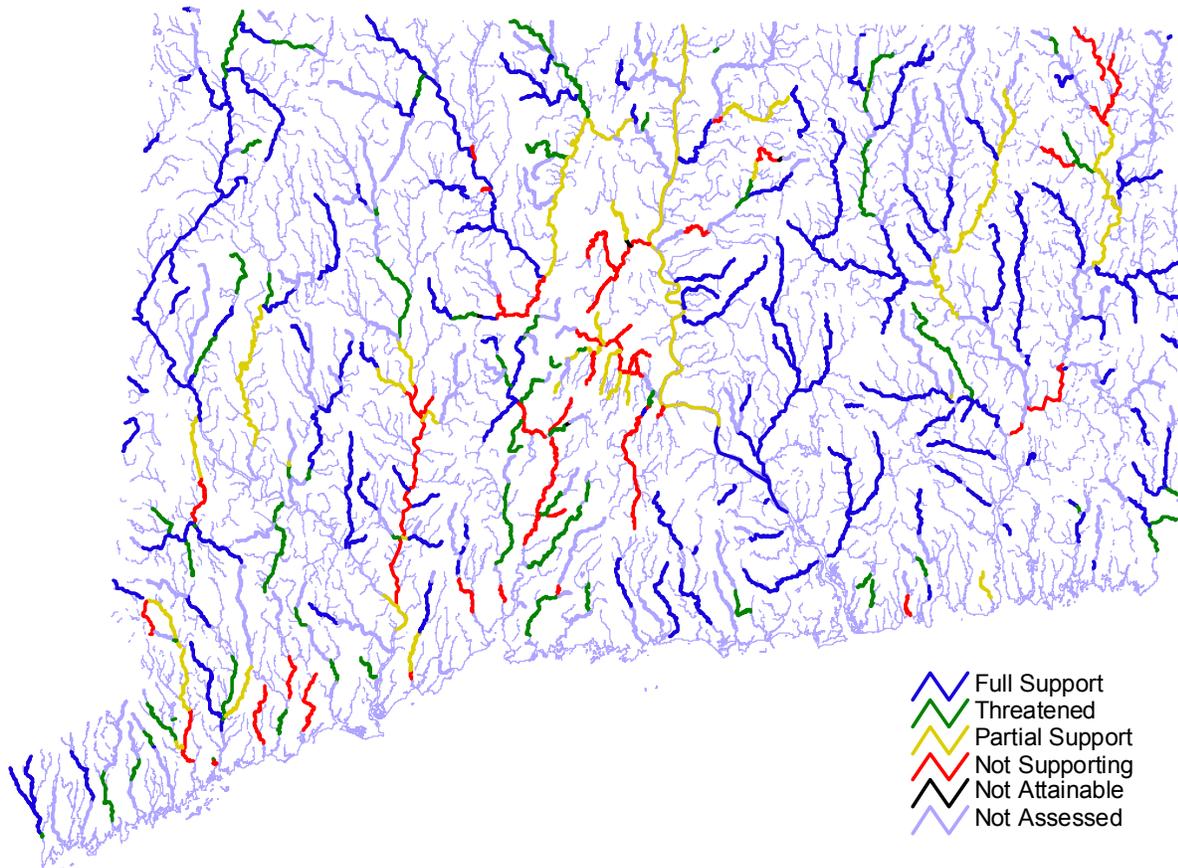


Figure 5-2. Primary contact use support in assessed non-tidal streams and rivers, 2004.

Significant progress has been made in the elimination and control of Combined Sewer Overflows (CSOs), especially in the Hartford and Middletown areas. Enfield has removed all CSOs. All CSOs in Middletown have been eliminated, but the wastewater treatment plant itself overflows to the Connecticut River during high rainfall events. In Hartford and greater Springfield, MA a number of CSOs have been eliminated, but many remain and are reflected in the assessments for the respective river segments (Appendix B).

More than 76% of river miles assessed for aquatic life use were considered fully supporting or fully supporting but threatened (Table 5-2, Figure 5-3). Assessments were based primarily on benthic invertebrate analysis, augmented by fisheries information and physical/chemical data. Monitoring staff reported potential causes and sources of impairment to aquatic life based on direct observations or knowledge of upstream land use. Often there are multiple potential causes and sources, and further investigative work is required to make direct linkages. Therefore, “Cause Unknown” or “Source Unknown” is usually reported along with potential causes and sources. Exceptions to this occur when more intensive investigations have been conducted or when there was a clear violation of water quality standards for some physical or chemical criteria. Special and/or intensive monitoring projects conducted during 2002 and 2003 are documented in Table 5-10.

In recent years, CT DEP staff has made an increased effort to document flow alteration due to water withdrawals or impoundments as a cause of impairment. Dewatering of streams has historically been under-reported as an impairing cause of aquatic life use. Flow alteration was reported as an impairing cause when stream segments were documented to run dry, and as a threatening cause when the flow was greatly reduced due to withdrawals or impoundments (Tables 5-3 and 5-6). An increased effort was also made to report siltation where it may be an impairing cause.

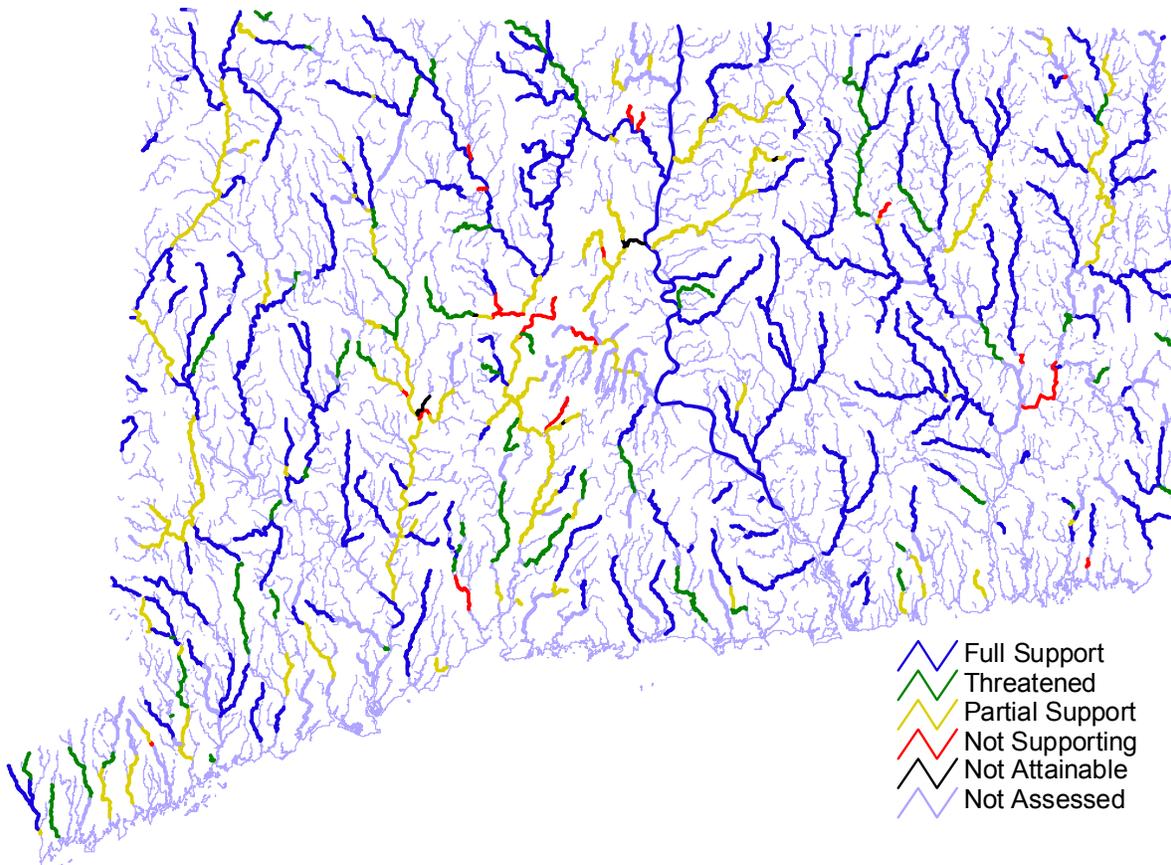


Figure 5-3. Aquatic life use support in assessed non-tidal rivers and streams, 2004.

Fifty of the 128 river miles impaired for fish consumption occur in the Housatonic River, impacted by PCB-contaminated sediments originating from historic releases at an industrial site in Pittsfield MA. This problem also affects the Housatonic Lakes (see Lakes and Reservoirs below), and some tributaries where the migration of contaminated fish is possible. Carp and catfish in the Connecticut River are also affected by PCBs believed to originate beyond the Connecticut border. The remaining miles are affected by local spills of contaminants, some of which are fully remediated but retain a fish consumption advisory until confirmatory tissue analyses are complete and approved by the CT Department of Health. Because of the statewide fish consumption advisory for mercury, fish consumption is technically impaired for all fresh waters of the State. River miles reported in Table 5-2, however, consider only those waters that carry an advisory beyond the statewide mercury advisory.

Lakes and Reservoirs

Prior to the 1998 305(b) reporting cycle, 115 “significant public” lakes had been traditionally assessed. They were considered “significant public” lakes based on public access and/or some unique ecosystem value. Since 1996, 34 lakes have been added to 305(b) assessments for various reasons. Most were added when the 1998 list of impaired waters (303(d) List, (CT DEP 1998a) was incorporated into the 305(b) process. Other additions were smaller ponds with locally monitored public beaches. Only two of the recently added lakes fit the “significant” definition. Both are flood control reservoirs, which support recreation and are managed by US Army Corps of Engineers. One lake, Aspinook Pond, was actually declassified as significant because CT DEP lake staff determined it did not meet the criteria.

A summary of the trophic status of all assessed lakes appears in Table 5-9. While trophic status in and of itself is not an indicator of water quality, increased eutrophication associated with human activities is considered impairment. Use support assessments for lakes are summarized in Table 5-2. Potential causes and sources of impairment are summarized in Tables 5-4 and 5-7 respectively. Appendix C contains use support and trophic information for individual lakes and lake segments (two assessed lakes in the State consist of two segments).

Exotic species and nuisance aquatic plants are considered impairing causes of about 2,300 lake acres in the State, but many more are considered threatened. This problem is largely attributable to the transport of vegetation from one lake to another as plant fragments attached to boats and boat trailers. Connecticut has an aggressive plant transport prevention program, and works with communities to control existing problems through the Connecticut Lakes Grant management program. Excessive algal growth is identified as an impairing cause of about 3,300 lake acres in Connecticut. Most of these waters are impoundments of rivers, which drain large watersheds and carry runoff and treated effluents from numerous point sources. For the 2004 assessment cycle, 1,900 acres comprising Lake Lillinonah, were added to the total of impaired acres due to nuisance algae and aquatic plant growth, as well as floating debris.

Eighty-four percent of assessed lake acres are considered supporting of primary contact. More than half of the affected acres are considered impaired due to extensive algal or aquatic weed growth rather than indicator bacteria. Exotic and invasive weeds are a significant emerging cause of impairment to aesthetic quality, as well as primary and secondary use support in lakes. Aquatic life use impairments can generally be attributed to eutrophication processes associated

with human activities. CT DEP has contracted with consultants to develop TMDLs for four lakes identified with eutrophication issues.

A significant portion, 3,150 of the 4,000, lake acres impaired for fish consumption can be attributed to PCB contamination of sediments in the large impoundments of the Housatonic River, Lakes Zoar, Lillinonah and Housatonic (see Rivers above). Lake McDonough, Silver Lake, Wyassup Lake and Dodge Pond carry advisories for Mercury. Two urban ponds, Union and Brewster Ponds, are affected by chlordane, a pesticide. All lakes carrying fish consumption advisories are listed in Chapter 8. As with rivers, due to the statewide consumption advisory for freshwater fish due to mercury, all lakes of the State are technically impaired for fish consumption. The tables in this chapter reflect only those lake acres that carry advisories beyond the statewide advisory.

Drinking Water Reservoirs

Water utilities report directly to the Connecticut Department of Public Health (CT DPH) with regard to water quality in reservoirs, and these waters are not tracked as waterbodies in the Assessment database for 305(b) reporting. However CT DEP does solicit information from water utilities regarding the trophic status of reservoirs and perceived threats to water quality. In 2000 and 2001, 33 public and private water supply utilities provided general information for 179 waterbodies managed as drinking water reservoirs, which was confirmed by completed Source Water Assessments in 2003 (see Chapter 8). Based on utility survey responses, the trophic status for Connecticut reservoirs was characterized as follows: 23 eutrophic reservoirs, 91 mesotrophic, 32 oligotrophic; 24 unknown and 9 with no information provided. A listing of activity and trophic status for all Connecticut drinking water supply reservoirs is presented in Appendix F. Violations of drinking water criteria as reported by CT DPH are summarized in Chapter 8 of this report.

Estuaries

Use support information for individual estuary segments is presented in Appendix D. Summary statistics for use support are found in Table 5-2; causes of impairment are summarized in Table 5-5 and sources of impairment in Table 5-8.

Hypoxia, or low oxygen conditions, has been identified as a major impairment of Long Island Sound, as reflected in aquatic life use assessments (Table 5-2). The condition is caused by excessive growth of phytoplankton, stimulated by nitrogen loading. When large amounts of phytoplankton eventually die and sink to the bottom, their decomposition uses up available oxygen. The extent of hypoxia varies from year to year, depending on weather conditions that promote stratification or layering of the Sound's waters. Under warm and relatively calm conditions, warmer lighter waters form a layer over cooler denser waters. Hypoxia occurs in the bottom waters during the summer when stratification seals off these lower layers, and prevents them from mixing with and being re-oxygenated by surface waters. This is particularly acute in the western part of the Sound. The stronger and longer the period of stratification, generally the worse the hypoxia in terms of area impacted and minimum levels of oxygen observed.

The 235 square miles identified as impacted by offshore hypoxia represent an average condition observed over several years. Although nitrogen control programs reduced point source nitrogen

loading about 29.8% between 1990 and 2001, natural variability precludes quantifying improvements in hypoxia with certainty. CT DEP and New York State, gained EPA approval for a nitrogen TMDL in April 2001. The TMDL formalizes a plan to meet oxygen goals established through the Long Island Sound Study partnership by 2014. CT is required to remove 64% of the baseline nitrogen load (based on 1990 loadings) from point sources and 10% of the baseline from urban and agricultural runoff. To achieve the point source wasteload allocation, the Connecticut General Assembly authorized a Nitrogen Credit Exchange in 2001. The overall nitrogen reduction goal was exceeded in both 2002 and 2003 (See Chapter 2 and CT DEP 2003).

For the assessment of shellfishing use support, the CT DEP made a change in its methodology in 2002. Approximately 236 square miles of estuary are no longer considered potential shellfishing areas because they are deeper than current technologies allow for harvesting. Approximately 187 square miles (49.6%) of the assessed waters did not meet direct shellfish harvest or relay conditions appropriate for their water quality classifications. For these waters, the Department of Agriculture / Bureau of Aquaculture associated high indicator bacteria levels primarily with stormwater runoff, marinas and waterfowl. Remaining CSOs in New Haven, Bridgeport and Norwalk are also cited as bacteria sources (Table 5-8, Appendix D).

Table 5-2. Use support summaries for Connecticut waters, 2004.

Use	Assessed	Not Assessed ^a	Full Support	Full Support but Threatened	Partial Support	Not Supporting	Not Attainable
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Rivers (numbers are in miles)

Overall Use Support	1,354.9	419.3	555.0	216.9	366.6	209.8	6.6
Aquatic Life Support	1,556.2	218.0	981.2	203.6	321.6	43.3	6.6
Fish Consumption ^b	1,773.4	0.8	1,644.6	1.3	108.0	19.5	0
Primary Contact (Recreation)	1,338.4	435.8	694.2	231.2	218.1	193.3	2.0

Freshwater Lakes (numbers are in acres)

Overall Use Support	26,249.7	1,613.3	8,132.9	12,644.8	5,309.6	162.4	0
Aquatic Life Support	27,650.1	230.9	12,086.6	14,534.1	1,028.8	0.6	0
Fish Consumption ^b	27,870.3	10.7	23,737.3	0	4,077.9	55.0	0
Primary Contact (Recreation)	25,996.9	188.5	10,800.3	11,039.4	4,050.4	106.8	0
Secondary Contact (Recreation)	25,055.3	2,825.7	15,441.3	7,225.9	2,388.1	0	0

Estuaries (numbers are in square miles)

Overall Use Support	613.4	0	218.7	1.9	384.6	8.2	0
Aquatic Life Support	613.4	0	371.3	0.4	240.9	0.8	0
Fish Consumption ^b	613.4	0	604.1	0	9.3	0	0
Shellfishing	377.6	235.8	190.3	0	16.9	170.4	0
Primary Contact (Recreation)	609.5	3.9	571.0	13.2	15.9	9.3	0

^a All fresh waters of the State are considered to be partially supporting for fish consumption due to a statewide limited consumption advisory for all fish except trout because of mercury contamination from atmospheric deposition. Similarly, all estuarine waters are considered partially supporting for fish consumption due to a limited statewide advisory for bluefish, striped bass and lobster tomalley because of PCB contamination. The waters summarized in these tables carry fish consumption advisories beyond these statewide advisories.

^b River miles, lake acres and estuarine square miles listed here represent the length or area of waterbodies which are tracked in the Assessment Database (ADB) but for which no assessment exists for the indicated use.

Table 5-3. Summary of Potential Causes Impairing Rivers, 2004.

<u>Cause/Stressor Category</u>	<u>Total Size (Miles)</u>
Cause Unknown	291.4
Unknown toxicity	3.3
Priority organics	0.1
Non-priority organics	16.3
PCB's	125.5
Metals	32.5
Copper	22.9
Lead	5.5
Mercury	3.4
Zinc	4.6
Unionized Ammonia	5.0
Chlorine	4.0
Nutrients	66.2
Siltation	98.9
Organic enrichment/Low DO	94.1
Thermal modifications	1.7
Flow alteration	69.2
Other habitat alterations	43.6
Indicator bacteria	408.4
Radiation	0.7
Algal Growth/Chlorophyll a	30.7
Total toxics	11.80
Turbidity	28.0

Table 5-4. Summary of Potential Causes Impairing Freshwater Lakes, 2004.

<u>Cause/Stressor Category</u>	<u>Total Size (Acres)</u>
Pesticides	54.00
Priority organics	2.0
PCB's	3412.6
Metals	821.4
Cadmium	5.0
Copper	0.6
Lead	23.6
Mercury	818.8
Unionized Ammonia	0.6
Nutrients	2892.8
Siltation	155.3
Organic enrichment/Low DO	896.9
Other habitat alterations	105.0
Indicator bacteria	1273.9
Taste and Odor	1900.0
Suspended solids	9.5
Noxious aquatic plants	2249.1
Algal Growth/Chlorophyll a	3284.9
Turbidity	205.6
Exotic species	2226.3

Table 5-5. Summary of Potential Causes Impairing Estuaries, 2004.

<u>Cause/Stressor Category</u>	<u>Square Miles</u>
Unknown toxicity	12.3
Priority organics	13.4
Nonpriority organics	0.4
PCB's	9.4
Dioxins	0.1
Metals	0.6
Copper	0.1
Lead	0.5
Mercury	0.4
Zinc	0.1
Nutrients	234.7
Organic enrichment/Low DO	236.8
Other habitat alterations	0.50
Indicator bacteria	187.5
Oil and grease	11.3

Table 5-6. Summary of Potential Sources Impairing Rivers, 2004.

<u>Source Category</u>	<u>Miles</u>
Industrial Point Sources	98.5
Municipal Point Sources	108.5
Combined Sewer Overflow	87.8
Collection System Failure	72.1
Agriculture	65.8
Land Development	35.5
Urban Runoff/Storm Sewers	239.0
Erosion and Sedimentation	3.8
Resource Extraction	13.2
Surface Mining	8.5
Dredge Mining	4.7
Land Disposal	47.2
Landfills	40.5
Onsite Wastewater Systems (Septic Tanks)	6.7
Hydromodification	105.0
Channelization	29.7
Upstream Impoundment	27.7
Flow Regulation/Modification	69.2
Habitat Modification (other than Hydromodification)	20.8
Removal of Riparian Vegetation	15.3
Bank or Shoreline Modification/Destabilization	1.7
Waste Storage/Storage Tank Leaks	24.7
Spills	4.7
Contaminated Sediments	47.4
Natural Sources	10.1
Waterfowl	21.5
Golf courses	18.5
Groundwater Loadings	1.0
Groundwater Withdrawal	23.2
Source Unknown	398.7
Sources outside State Jurisdiction or Borders	105.0

Table 5-7. Summary of Potential Sources Impairing Freshwater Lakes, 2004.

<u>Source Category</u>	<u>Total Size (Acres)</u>
Industrial Point Sources	3360.6
Municipal Point Sources	2168.0
Agriculture	2208.8
Urban Runoff/Storm Sewers	691.4
Highway/Road/Bridge Runoff	258.5
Erosion and Sedimentation	245.0
Resource Extraction	45.1
Land Disposal	90.5
Sludge	0.6
Landfills	0.6
Onsite Wastewater Systems (Septic Tanks)	89.9
Hydromodification	2225.0
Upstream Impoundment	325.0
Habitat Modification (other than Hydromodification)	114.5
Atmospheric Deposition*	630.4
Waste Storage/Storage Tank Leaks	73.0
Spills	33.0
Contaminated Sediments	3443.6
Debris and bottom deposits	2156.0
Internal nutrient cycling (primarily lakes)	346.0
Natural Sources	56.0
Waterfowl	68.4
Source Unknown	2206.1
Sources outside State Jurisdiction or Borders	3203.2

Table 5-8. Summary of Potential Sources Impairing Estuaries, 2004.

Source Category	Square Miles
Industrial Point Sources	78.1
Municipal Point Sources	343.4
Combined Sewer Overflow	172.8
Collection System Failure	2.4
Agriculture	1.5
Urban Runoff/Storm Sewers	382.3
Dredge Mining	0.5
Land Disposal	109.8
Landfills	16.7
Onsite Wastewater Systems (Septic Tanks)	93.1
Marinas	192.5
Atmospheric deposition	232.7
Waste Storage/Storage Tank Leaks	4.2
Spills	0.4
Contaminated Sediments	13.2
Natural Sources	0.4
Waterfowl	176.2
Source Unknown	18.5
Sources outside State Jurisdiction or Borders	1.1

Table 5-9. Summary of trophic status of “significant” and all assessed lakes, 2004.

Trophic Status	SIGNIFICANT LAKES		ALL ASSESSED LAKES	
	Number	Total Size (acres)	Number	Total Size (acres)
Eutrophic	22	5753.3	27	6280.9
Hyper-eutrophic	18	1505.7	19	1517.7
Mesotrophic	64	16145.9	65	16423.1
Oligotrophic	10	3116.3	10	3116.3
Unknown	2	31.1	24	501.9
Total	116	26552.3	145	27839.9

Table 5-10. CT DEP Intensive Surveys/Special Monitoring Projects 2002-2003

Basin Code	Project Date	Project Name	Media
6900	Multiple dates 2002-03	Naugatuck River, Waterbury POTW upgrade project	Water, aquatic community
6912	Multiple dates 2002-03	Steele Brk. Watertown, Waterbury, stressor ID study, TMDL	Water, sediment, aquatic community
6900	Multiple dates 2002-03	Naugatuck River, Thomaston stressor ID study, TMDL	Water, aquatic community, aquatic toxicity
3300	Summer 2002	French River nutrient study	Water
3100	Multiple dates 2002	Willimantic R. and tributaries, Stafford, stressor ID study	Water, aquatic community
4315	June 2002	Pequabuck River PCB spill	Fish tissue, sediment
2000	July 2002	Rocky Neck State Park Beach closure investigation	Water (indicator bacteria)
2000	Multiple dates 2002-03	Rocky Neck State Park Beach closure investigation	Bird survey
5207	Multiple dates 2002-03	Allen Brook, Wharton Brook State Park TMDL	Water (indicator bacteria)
	August 2002	State Hatchery fish tissue survey	Fish tissue (PCBs)
4400	Multiple dates 2002-03	Park River catfish survey	Fish tissue (PCBs)
	Multiple dates 2002-03	State Hatchery well sampling	Water
7404	April 2003	Mill River Fish Kill	Water, aquatic community
3000 4000 5000 6000	May 2003	Survey of Endocrine Disrupting Compounds (EDCs)	Water
4500	Multiple dates 2003	Hockanum River TMDL	Water, aquatic community
4601	Multiple dates 2003	Silver Lake Dredging Project	Aquatic toxicity
6000	Spring 2003	Housatonic River tributaries	Fish Tissue (PCBs)
6100	July 2003	Blackberry River, Fish Kill	Water, aquatic community
3700	Summer 2003	West Thompson Reservoir Eutrophication Study	Water, Phytoplankton

Chapter 6: Wetlands Assessments

Wetlands are vital and irreplaceable resources to the State of Connecticut. Undisturbed wetlands provide significant habitats for fish and wildlife, and act as buffers between terrestrial and aquatic environments. The ability of these unique areas to moderate effects of flooding and drought, and to trap and filter sediments, nutrients and contaminants makes them essential to the protection of water quality and quantity throughout the State.

Connecticut contains approximately 450,000 acres of freshwater wetlands, as designated by soil type, and 17,500 acres of tidal wetlands (Table 6-1). Estimates of wetland loss since colonial times vary widely between authors. Metzler and Tiner (1992) contend that Connecticut has lost between a one third and one half of its original wetlands based on existing data and personal observation of land development across the State. Passage of the Connecticut Tidal Wetland Act in 1969 and the Inland Wetlands and Watercourses Act in 1972 greatly slowed the loss of wetlands in the State.

Table 6-1. Present and historical wetland and watercourse acreage in Connecticut.

Category	Acres	Percent of Total Acres
Connecticut total land area	3,116,130	100.0
Watercourses (excluding Long Island Sound)	86,496	2.8
Freshwater wetlands (by soil type)	451,656	14.5
Estimated original freshwater wetlands (1780s)	670,000 (Dahl 1990) - ≈ 900,000 (Metzler & Tiner 1992)	21.5 – 28.9
Tidal wetlands	17,500	0.6
Estimated original tidal wetlands (1914)	23,360 (Goodwin & Niering 1966)	0.8

Many Connecticut wetlands are degraded by historic and ongoing activities. Tidal wetlands have been impacted by structures and practices that alter normal tidal flow, such as tide gates, undersized culverts, and of mosquito ditches. The damage caused by these activities has been successfully reversed over 1,800 acres through restoration efforts. Stormwater runoff from developed lands may carry contaminants and sediments to tidal wetlands, interfere with the natural fresh/saltwater balance, and exacerbate the spread of the invasive reed grass, *Phragmites australis*. Freshwater wetlands are degraded by a variety of sources including direct discharges, sedimentation, and contaminated stormwater or groundwater. Ongoing and pending stormwater permit programs will help reduce the effects of stormwater on both fresh and tidal wetlands.

Inland Wetlands and Watercourses Management Program

In 1972, the Connecticut Legislature passed the Inland Wetlands and Watercourses Act (Connecticut General Statutes Sections 22a-36 through 22a-45), recognizing the benefits of these resources in their natural condition and providing for the regulation of activities therein. By this legislation, wetlands are defined as "land, including submerged land, which consists of the soil types designated as poorly drained, very poorly drained, alluvial and floodplain by the National Soil Survey of the USDA Natural Resource Conservation Service". Watercourses include "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural and artificial, vernal or intermittent...". Marshes, swamps, bogs and areas that

meet the federal definition of wetlands are regarded as surface waters of the State and are accountable to Connecticut Water Quality Standards.

Municipal Jurisdiction: The CT DEP delegates jurisdiction over wetlands to municipal wetlands agencies who have adopted local regulations consistent with the State statutes and model regulations prepared by the DEP. Local commissions may adopt additional or more stringent regulations, as well as provisions for regulating activities in upland review areas, so long as the language is consistent with State statutes.

State Oversight: The CT DEP has authority to suspend or revoke regulatory authority of municipal wetland agencies that fail to act in conformance with state statutes and regulations. The CT DEP is empowered to intervene in municipal proceedings and to issue enforcement orders, individually or jointly with local regulatory commissions. By law, the Commissioner of the CT DEP is provided notice of all appeals of municipal agency decisions. The CT DEP may become a party in court cases dealing with matters of significance to State law, agency powers or important natural resources.

Training and Technical Assistance: The CT DEP inland wetlands management program provides assistance and training to all municipal wetlands agencies on a regular basis. Each year approximately 500 municipal commissioners and staff are reached through a series of educational workshops. These workshops are designed to instruct local commissioners on wetland identification, function and regulations. Site evaluations and technical assistance are also offered to communities on an “as needed” basis, available time and staff permitting.

The CT DEP provides guidance documents to support municipal agency decision-making and resource management efforts. These include model regulations, a commissioner’s handbook, a site plan manual, legal and technical advisories, and a manual for assessing functional values of wetlands. The latter is designed for use on a watershed-planning basis to identify and characterize wetlands of special value in order to help guide regulatory decision-making. In 2002, the CT DEP in cooperation with the Connecticut Council on Soil and Water Conservation, published a detailed guidance document for soil erosion and sediment control for use by municipal agencies.

Statewide Activity Reporting: CT DEP tracks wetland impacts reported by individual towns. The latest published data for 2001 show that 141 of the State’s 170 inland wetland agencies reported issuance of 2,622 permits resulting in loss or alteration of 125 acres of wetlands, and alteration of 24,238 linear feet of stream. Non-reporting towns were issued reminders of reporting requirements but those subsequent data were not available at the time of this report. As of July 2003, 29 towns had yet to report for 2001.

401 Water Quality Certifications: The CT DEP, Bureau of Water Management, Inland Water Resources Division processes 401 Water Quality Certifications for proposed activities requiring U.S. Army Corps of Engineers 404 permits in inland water and wetlands. Section 401 of the Clean Water Act requires applicants to obtain a certification or waiver from the state water pollution control agency to discharge dredged or fill materials into waters or wetlands. The State agency reviews the proposed activity's compliance with State Water Quality Standards. The 401

Water Quality Certification discourages unnecessary, avoidable, or inappropriate uses of wetlands and watercourses. DEP staff currently review each 401 application on its individual merit, according to professional judgment and provisions of the Connecticut Water Quality Standards.

Monitoring of Inland Wetlands

While the CT DEP does not have an biological monitoring program for inland wetlands at this time, staff from Inland Water Resources Division attend meetings of the National and New England Biological Assessment of Wetlands Workgroups and are evaluating the pilot wetlands monitoring programs in other states. Through the Intergovernmental Mobility Program, CT DEP agreed to allow one staff person to work in Washington at US EPA headquarters on this effort. In the future when staffing resources permit, CT DEP hopes to implement its own wetland-monitoring program.

Tidal and Coastal Wetlands Management Program

Table 6-2. Tidal wetlands and submerged aquatic vegetation.

Coastal Wetlands	
Tidal Wetlands	
Present Day	17,500 acres
Historic (1916)	23,360 acres
Restored - 1970's-present	>1,850 acres
Restored - 1996 to present	467 acres
Submerged Aquatic Vegetation	
Eelgrass Beds ¹	629 acres
Eelgrass Beds ²	1,269 acres
Connecticut River Beds ³	1,220 acres

1. Based upon a 1993-1994 boat/diver survey. Includes only the observed beds.
2. Based upon the 2002 aerial survey by the USFWS.
3. Based upon a GPS survey in 1994-1995 of the lower Connecticut River (Portland to Old Saybrook).

Tidal and Coastal Wetlands - Definitions, Policies and Legal Protection

In the broadest sense, coastal wetlands include tidal salt, brackish and freshwater marshes, intertidal flats, and shallow subtidal waters with or without submerged aquatic vegetation. Connecticut's Tidal Wetlands Act (TWA) of 1969 provided for State regulation of activities conducted in areas designated as "tidal wetlands", which are narrowly defined to include only wetlands that are flooded by the tides and support emergent wetland plants (CGS Section 22a-29(2)). Because of the specificity of the tidal wetland definition, not all coastal wetlands are covered under this Act. Other tidal and subtidal areas are regulated under the Coastal Management Act (CMA) of 1980 through the Structures, Dredging and Filling Permit program. Both Tidal Wetland and "Structures" permits are issued by DEP's Office of Long Island Sound Programs (OLISP).

Coastal management policies established by the TWA and CMA encourage preservation of specific types of coastal wetlands and restoration of those that are degraded. Management policies for sensitive wetland resources include:

- ◆ to manage **intertidal flats** so as to preserve their value as a nutrient source and reservoir, a healthy shellfish habitat and a valuable feeding area for invertebrates, fish and shorebirds; to encourage the restoration and enhancement of degraded intertidal flats; to allow coastal uses that minimize change in the natural current flows, depth, slope, sedimentation, and nutrient storage functions and to disallow uses that substantially accelerate erosion or lead to significant despoliation of tidal flats.
- ◆ to preserve **tidal wetlands** and to prevent the despoliation and destruction thereof in order to maintain their vital natural functions; to encourage the rehabilitation and restoration of degraded tidal wetlands and where feasible and environmentally acceptable, to encourage the creation of wetlands for the purposes of shellfish and finfish management, habitat creation and dredge spoil disposal.
- ◆ to manage **estuarine embayments** so as to insure that coastal uses proceed in a manner that assures sustained biological productivity, the maintenance of healthy marine populations and the maintenance of essential patterns of circulation, drainage and basin configuration.
- ◆ to protect, enhance and allow natural restoration of **eelgrass flats** except in special limited cases, notably shellfish management, where the benefits accrued through alteration of the flat may outweigh the long-term benefits to marine biota, waterfowl, and commercial and recreational fin-fisheries (CT DEP, OLISP 1999).

Coastal policies outlined in the CMA also provide uniform standards and criteria for public agencies that conduct or regulate activities in the coastal zone. The Act specifically defines adverse impacts to coastal resources that must be considered for all coastal development proposals. Examples of unacceptable adverse impacts include:

- ◆ Degrading or destroying essential wildlife, finfish or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alteration of the natural components of the habitat.
- ◆ Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or function.

These preservation oriented policies help to achieve the overall goal of no net loss of wetland function and acreage. All filling activities require a state Structures permit and a Section 404 permit from the U.S. Army Corps of Engineers. In these instances, OLISP concurrently prepares the 401 Water Quality Certificate and assures compliance with Connecticut's Water Quality Standards. These permit applications are distributed to the public and agency staff for review

thus providing additional expert evaluations on aspects such as fish passage, impacts to fish and wildlife habitats, and consistency with the state's Endangered Species Act.

Additionally, a provision in Stormwater General Permits, issued by CT DEP, requires that runoff associated with a one-inch storm event be retained before discharge to tidal wetlands. This requirement addresses three aspects of tidal wetland protection. It eliminates or greatly reduces the effects of 1) first flush pollution, 2) sedimentation, and 3) dilution of soil salt concentrations in salt and brackish marshes. The latter can exacerbate the spread of the invasive grass *Phragmites australis*.

While activities in tidal wetlands are regulated exclusively by the CT DEP, Coastal towns exert jurisdiction seaward to mean high water, the boundary between private lands and the public trust. The CMA requires municipalities to conduct a local environmental assessment, a Coastal Site Plan Review, within 1000 feet of this boundary as part of the local planning and zoning permit process. Through this review, coastal towns evaluate the impacts of proposed upland development upon aquatic resources and assure that activities are consistent with applicable standards and criteria in the CMA. Municipalities may require modifications to upland activities in order to minimize such impacts. Additionally, over 60 percent of coastal towns have adopted official setbacks from coastal waters/tidal wetlands for the purpose of planning and zoning.

Special Monitoring and Restoration Projects

Tidal Wetlands. Connecticut's Tidal Wetlands Act (1969) regulates all activities in tidal wetlands, which are predominantly salt marshes, brackish marshes and tidal-fresh marshes. Wetlands that are degraded or formerly connected to tidal waters are also regulated as tidal wetlands. The Act includes strict anti-degradation language "to preserve the wetlands and to prevent the despoliation and destruction thereof." Prior to the passage of this act in 1969, annual wetland losses are estimated at 70 acres. Current permitted losses average 0.25 acres per year. DEP has a tidal wetland compensation policy for public agency projects with significant public benefits, providing the project avoids and minimizes wetland impacts to the fullest extent possible. The primary use of the compensation policy is to offset the minor wetland losses, measured in square feet, for repair and replacement of existing state roads that cross wetlands

The Connecticut Coastal Management Act (1980) established a policy to "encourage the rehabilitation and restoration of degraded tidal wetlands". This is the basis of DEP's 20+ year-old wetland restoration program. Over 1800 acres of degraded tidal wetland have been restored chiefly through restoration of tidal flow (Table 6-2). While this type of restoration does not significantly increase the area of wetland, it restores significant functions and values. In a few instances, restoration is accomplished through the removal of fill, thus increasing the area of tidal wetland.

To facilitate restoration efforts, CT DEP's OLISP administers the Coves & Embayment and Tidal Wetland Restoration program. The current fund for this program, called the Long Island Sound Cleanup Account, was established by the legislature in 1989 and had appropriated \$5 million dollars. Wherever possible, the OLISP leverages these funds against public and private funds. For example, Connecticut may be the only State in the nation to use Intermodal Surface

Transportation Efficiency Act funds to support the restoration of degraded wetlands. The federal match for that program is 85%.

Since the late 1980's, the OLISP has been aware of localized wetland losses, especially in western Long Island Sound, that appeared to be the result of subsidence caused by an accelerated rate of sea level rise. Subsidence now appears more widespread than previously known. Within affected areas of certain sub-estuaries to the Sound, loss due to subsidence is estimated as high as 60% since 1974. The most extensive wetland losses are in the mid-estuary portion of the Quinnipiac River, affecting an area of approximately 200 acres. The New York Department of Environmental Conservation has recently confirmed similar loss rates for the north shore of Long Island.

The OLISP has applied for funds from the Long Island Sound Study for a long-term trend analysis to be conducted by the National Wetlands Inventory staff of the U.S. Fish & Wildlife Service. This analysis would help to quantify losses and changes in rates of loss since 1974, and identify patterns of subsidence within sub-estuaries. The CT DEP has provided Long Island Sound (LIS) Research Funds, from Long Island Sound license plate sales, to Connecticut College for the establishment of the first Sediment Erosion Table (SET) site at Barn Island in Stonington (<http://www.pwrc.usgs.gov/resshow/cahoon/>). This is one of the scientific procedures used to assess effects of sea level rise. It is the goal of OLISP to establish a Sound-wide network of SET stations that will be managed by a network of scientists from various academic institutions. DEP may use coastal management funding to support the establishment of the SET network.

Submerged Aquatic Vegetation. The dominant submerged aquatic vegetation in Long Island and Fishers Island Sounds is eelgrass. Historic data demonstrate that eelgrass occurred in shallow waters and coves throughout both Sounds. Maximum water depths at which eelgrass presently grows in Fishers Island Sound is 15-20 feet, but only 3-5 feet in western LIS. A grant from the LIS Research Fund was used to develop a map of eelgrass beds in 1993 and 1994 using boat/diver survey. That survey demonstrated that eelgrass is absent in western and central LIS, and the likely cause of this long-term decline is nitrogen enrichment from sewage treatment plants. Plankton blooms are creating shading impacts upon eelgrass. The westernmost bed in the Hammonasset River was also declining, perhaps due to nonpoint nitrogen sources. In 2001, the Long Island Sound Study provided funding for re-mapping to be undertaken in 2002 by the U.S. Fish and Wildlife Services' National Wetlands Inventory Program.

In 2002, there were 1269 acres of eelgrass in Long and especially Fishers Island Sound, compared to 629 acres in 1993/1994. The bed expansion took place in the open waters (well flushed) of the Sounds. One interpretation is that in 1993/94 beds eelgrass experienced one of the natural declines reported in the literature. It was also suggested that this was a recovery due to the nitrogen reduction efforts of NY and CT. However, that does not explain the continue retreat of eelgrass out of western and central Long Island Sound, and the absence of eelgrass on the north shore of Long Island except for two small patches near Orient Point. This might actually suggest that nitrogen enrichment in Long Island Sound has all but eliminated eelgrass from inner Long Island Sound and at the moment, Fishers Island Sound is the refuge for eelgrass. There was a decrease of eelgrass in estuarine embayments from 220 acres in 1993 to 122 acres in

2002. If one subtracts 48 acres of newly restored eelgrass at Mumford Cove in Groton (the result of relocating the sewage treatment plant discharge from this cove to the Thames River; a 15 year recovery timeframe) and 28 acres of eelgrass that were not mapped in 1993/1994, the embayments are witnessing a five-fold reduction in eelgrass. In the majority of these coves, the decline between the 1980's and 1993 was very significant but not quantified) and the decline between 1993 and 2002 is of a much smaller magnitude.

Invasive Species. DEP has been monitoring the rapid spread of common reed (*Phragmites australis*) into natural brackish and tidal fresh marshes. *Phragmites* is not invasive into healthy salt marsh but it is a symptom and dominant plant in drained and degraded salt marshes. On the lower Connecticut River for example, it appears that *Phragmites* colonization began in the late 1950's and currently it is spreading at a rate of 1-3% per year. DEP has long suspected that the invasive form of this grass is not of the native genetic material. Through the LIS Fund, OLISP funded a research project at Yale University to assess the status of this grass (<http://www.invasiveplants.net/phragmites/phrag/natint.htm>). That study confirmed that the invasive form is not native to the U.S. CT DEP has been experimenting with various control techniques on the lower Connecticut and Housatonic Rivers to identify the most efficacious approaches to preserving the biological diversity of these marshes. A series of restoration efforts are being conducted in the lower Connecticut River and several locations along the coast to control this invasive grass in brackish and fresh tidal marshes. These include applications of herbicide followed by mowing treatments and ditch plugging to restore hydrology and elevate the salt and sulfide content of the soil. Many of these sites are being monitored to evaluate these procedures to determine how to proceed in the future with *Phragmites* control. Some of the 2004 monitoring by Connecticut College scientists is being funded by the EPA LISS.

Since the 1999 discovery of the invasive aquatic plant water chestnut (*Trapa natans*), the CT DEP has coordinated efforts with local, state and federal government agencies, and non-profit organizations, to remove the plant from infested water bodies. Infestations of this plant can negatively impact water quality, recreation activities, and habitat quality for native plants and animals. Hand harvesting of water chestnut from 1999-2003 in Keeney Cove, a freshwater tidal cove of the Connecticut River, has proven largely successful since the plant has been nearly eradicated there, although two new patches located closer to the Connecticut River were discovered and removed in 2003. After two years (2000, 2001) of mechanical and hand harvesting to remove seven acres of water chestnut in the Hockanum River, the infestation declined to the point where only hand harvesting was needed in 2002 and 2003. Three new infestations in the state were discovered between 2002 and 2003, but the populations were all small enough to be hand-harvested. With a grant from the Silvio O. Conte National Fish & Wildlife Refuge, DEP hired a seasonal worker who conducted surveys of water bodies in the Connecticut River valley. He found a new population of chestnut in the lower Hockanum River, approximately 2 miles downstream of the 7-acre population, and located near to the confluence with the Connecticut River. Water chestnut has the potential to spread widely, as evidenced by an infestation in the Hudson River that, in the absence of any control work, has spread to cover over 1,400 acres of water. It is imperative that DEP and partners continue efforts to eradicate water chestnut as the potential for damage to the waters and wetlands of Connecticut, and to the Connecticut River in particular, is quite high.

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Chapter 7. Ground Water Protection

Connecticut's ground water is the source of drinking water for approximately one million people, about one-third of the State's population. It is anticipated that future potable water demands related to growth will be satisfied predominantly by ground water. Drinking water is withdrawn through 600 community water systems (public supply to residents), more than 2,600 non-community wells (restaurants, hospitals, schools, *etc.*), and roughly 250,000 individual private home wells. Additionally, ground water is the baseflow for most rivers, streams and wetlands. Therefore, the quality of ground water is inextricably linked to the quality of surface water resources.

The Resource

Connecticut has two major types of aquifers, stratified drift aquifers composed of unconsolidated sand and gravel of glacial origin, and bedrock aquifers that are differentiated into sedimentary, crystalline (non-carbonate), and carbonate-rock aquifers (see Figure 7-1). Stratified drift aquifers, which line the larger river valleys, are the most productive aquifers and the primary source of ground water for water utilities that serve populations of greater than 1,000 people. Bedrock aquifers underlie the entire State and are the source of supply for most non-community water supply systems and private, homeowner wells.

Connecticut's major aquifer systems are shallow, typically less than 300 feet deep, and the water table within 50 feet of the land surface, and therefore, are susceptible to contamination. Most wells tap the upper part of the saturated zone and produce water that has been in the aquifer only a few months to a few decades.

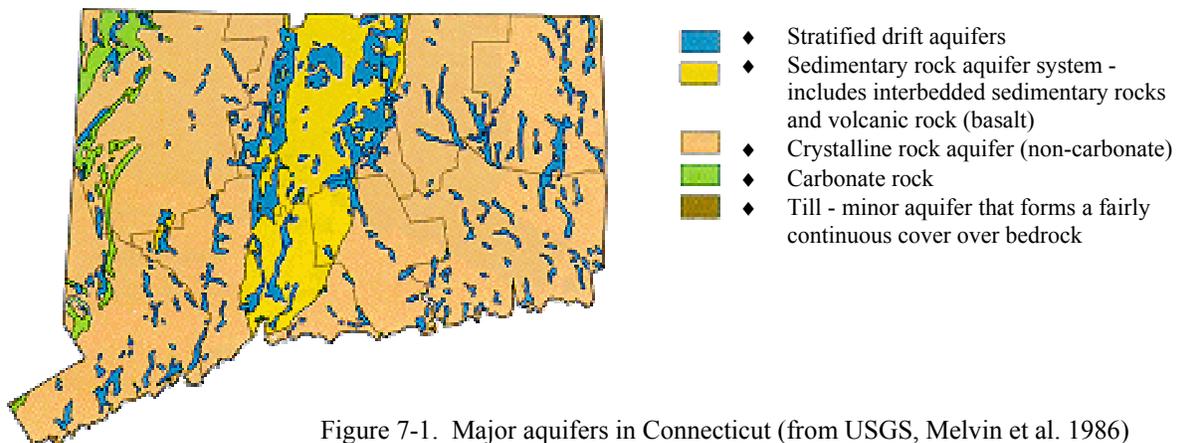


Figure 7-1. Major aquifers in Connecticut (from USGS, Melvin et al. 1986)

Groundwater Quality Monitoring

Connecticut does not implement an ambient ground water monitoring program. Instead, the DEP relies upon monitoring performed for thousands of other sites for purposes including, but not limited to:

- Safe Drinking Act compliance monitoring at more than 3,200 community and non-community water supply systems by the Department of Public Health (See Chapter 8);
- Ground water quality monitoring performed at known or suspected sources of contamination by DEP, EPA and responsible parties;
- DEP monitoring of private drinking wells in the vicinity of known contamination sources (roughly 700 to 1,000 private wells per year);
- Ground water discharge compliance monitoring;
- Hydrogeologic investigations by USGS; and
- Monitoring of private homeowner wells as typically occurs upon sale of a property, by local health department investigations or simply monitoring performed by a concerned homeowner.

Due to the multiple data sources and many thousands of monitoring results each year, data management is a DEP priority.

Groundwater Quality and Sources of Contamination

The quality of Connecticut's ground water is generally very good. The CT DEP estimates that more than 90% of the State is underlain by ground water suitable for drinking without treatment. However, incidents of ground water contamination have occurred in every municipality due many thousands of sources including historic industrial activities, underground storage tanks, landfills, salt storage facilities and road application, application of pesticides and fertilizers and countless accidental spills of chemicals at industrial, commercial, institutional and residential properties. There are currently (September 2002, DEP) more than 5,500 potentially contaminated sites in Connecticut and 672 sites on the State's inventory of hazardous waste disposal sites. More than 3,000 underground storage tanks are known to have leaked. As a result, more than 2,200 contaminated public and private drinking water supply wells have been identified since the 1970's. Roughly 50 to 70 contaminated drinking water supply wells are identified annually.

The most commonly identified contaminants are petroleum-based compounds associated with gasoline (including MTBE), fuel oil and kerosene. Halogenated solvents, often used for cleaning purposes for industrial and commercial processes, are the second most common class of ground water contaminants.

The most common sources of groundwater contaminants have been chemical leaks and spills at industrial and commercial facilities, underground storage tanks, landfills (both existing and closed; shallow injection wells (primarily industrial, commercial and institutional floor drains and dry wells), abandoned hazardous waste sites, and pesticides applications. While costs incurred by property owners and businesses at hundreds of sites are not reported, expenditures of State and Federal funds to remediate contaminated sites are in the range of tens of millions of dollars per year.

Groundwater Quality Management

The number of potential sources of contamination, most of which affect very localized areas of ground water, presents many challenges to achieving the State's goal of protecting and restoring ground water resources. As a result the Connecticut DEP developed ground water quality programs in four ways.

First, water quality goals and designated uses for all ground water resources are articulated in a manner similar to that done for surface water (Water Quality Standards and Classification System, CT DEP 1997). A complementary clean-up standards regulation was then developed consistent with the goals and designated uses described by Connecticut's Ground Water Quality Standards to guide remediation.

Second, a potable water program was developed to address the most critical human health risk caused by ground water contamination - the contamination of drinking water wells.

Third, the DEP developed a number of programs, in addition to Federal programs, that encourage or require the clean-up of contaminated sites. These include the State Superfund and remediation programs, which address sites that are high environmental priorities, and the property transfer and urban site remediation programs, which address sites of economic importance.

Fourth, the DEP implements preventive action programs including: The State Wellhead Protection Program; and State programs for Aquifer Protection Areas, Pollution Prevention, and contaminant source control, such as the Underground Storage Tank and Ground Water Discharge Permitting Programs. The DEP in cooperation with the Connecticut Department of Public Health also implements the federal Safe Drinking Water Act, Source Water Assessment Program.

The DEP addresses pollution prevention on a statewide basis with focused attention on public drinking water supplies, especially the most significant drinking water resources, stratified drift aquifers. Permitting requirements for discharges to ground water, such as those generated by landfills, protect ground water resources by prohibiting discharges in a setting that is or could be used for potable water supply; and by requiring best available technology, such as liners, to minimize ground water impacts in hydrologically suitable settings. The Aquifer Protection Area Program (APA) recognizes that the most effective way to prevent contamination of the state's most prolific drinking water resources is to control land uses in areas that recharge important water supply stratified drift aquifers. The APA program applies to 130 large stratified drift public wells (serving 1000 or > people). It requires specific mapping of wellhead protection areas, an inventory of high-risk land uses, establishment of land use restrictions on new land use, and protection controls on existing land uses. The APA land use regulations were enacted in February 2004, and implementation is now taking place. Another recent statewide initiative was the enactment of legislation requiring the eventual phase-out of the use of the gasoline additive MTBE (see text box).

MTBE Contamination in Connecticut's Ground Water

MTBE, methyl tertiary-butyl ether, is a highly soluble chemical compound, which has been used as a gasoline additive since 1979. It was first added to gasoline as a replacement for tetraethyl lead to increase the octane rating. This action resulted in significant reductions in ambient air levels of lead. More recently, MTBE has been used as an oxygenate. Oxygenates are additives that increase the oxygen content of gasoline and promote more complete fuel combustion, which subsequently reduces carbon monoxide and ozone emissions. MTBE has been used widely in Connecticut since the mid-1980s, and was first discovered locally in ground water in 1987.

Amendments to the Clean Air Act in 1990 required minimum concentrations of oxygenate in fuels in areas that did not meet National Ambient Air Quality Standards. Two regions in Connecticut were designated as not meeting standards. In order to comply with federal standards, the concentration of MTBE was increased in gasoline, which inadvertently increased the risk of ground water contamination.

Leaks from underground storage tanks and surface spills of fuel containing MTBE have caused significant pollution of Connecticut's ground water. Since 1987, the CT DEP has identified **282 public and private drinking wells polluted with MTBE** concentrations above that which the CT DPH considers an unacceptable risk to public health (*i.e.*, the DPH action level). Many additional private wells and over 90 public water systems have been reported to have MTBE in concentrations less than the action level (CT DPH 2002b).

Releases from underground gasoline storage tanks have occurred in every municipality in the state and account for more than 90 percent of the drinking water wells that have been polluted with MTBE above the DPH action level. Other sources include drippings on the ground at gas stations, spills related to traffic accidents and leaking residential fuel oil tanks.

The CT DEP implements several programs that address water pollution by MTBE. The Underground Storage Tank (UST) program identifies and requires the closure or upgrade of tanks prone to failure. As of the year 2000, 8620 of 14253 (60.5 percent) of such tanks were documented to be in compliance with requirements. The Petroleum Clean Up Account funds the remediation of ground water and soil polluted by leaking underground motor fuel storage tanks. In 1999, 19 million dollars was reimbursed to tank owners for the remediation of motor fuel releases. For residents whose wells have been contaminated by MTBE, the Potable Water Program provides bottled water until the drinking water source has been remediated or the residence is connected to a public drinking water supply.

The CT DEP made recommendations concerning the use of MTBE to the Connecticut General Assembly (CT DEP 2000) to further prevent and remediate ground water pollution and protect air quality. These recommendations included: working to find a feasible alternative to MTBE; reducing the concentration of MTBE in gasoline; increasing staffing in the UST program and possibly incorporate additional spill and leak detection measures; requiring all gasoline retailers to provide information to the public concerning the proper handling of gasoline; and prohibiting large UST's for gasoline near public water supply wells in sand and gravel aquifers. As of January 1, 2004 MTBE is no longer used as an oxygenate in gasoline in Connecticut, and has been replaced by ethanol.

Chapter 8. Public Health and Aquatic Life Concerns

Public Drinking Water Supplies

The Connecticut Department of Public Health (CT DPH) implements and enforces the Federal Safe Drinking Water Act (SDWA) through State statutes and Public Health Code regulations. CT DPH has the responsibility to insure that water utilities perform adequate planning and protection for public drinking water supplies. The Drinking Water Division of CT DPH evaluates and reports on monitoring data from approximately 3200 Public Water Systems (PWS) throughout the State, including ground water and surface water supplies.

Public Water Supply Definitions

Community Water System: serves at least 25 year-round residents (*e.g.*, municipality, subdivision, mobile home park). There are approximately 600 community systems in Connecticut serving approximately 84 % of the population. These systems include surface water reservoirs.

Non-Transient Non-Community Water System – A non-community water (non-residential) system that serves at least 25 of the same persons over six months per year (*e.g.*, schools, factories, industrial parks, office buildings). There are approximately 600 such systems in Connecticut.

Transient Non-Community Water Systems - A non-community water system that serves 25 or more people at least 60 days a year (*e.g.*, highway rest stops, restaurants, motels, golf courses, parks). There are approximately 2000 such systems in Connecticut.

During calendar year 2002, CT DPH reported that 270 PWS were issued a total of 494 maximum contaminant levels (MCL) violations. Ninety-five percent of those violations were for coliform bacteria. The remaining violations were for nitrate (4), nitrite (2), arsenic (1), trichloroethylene (1), gross alpha (4) and radium 226 and 228 (10). More than 84 % (226 systems) returned to compliance at the end of the reporting period; seven additional systems were determined to no longer meet the definition of PWS. Seventy community and 1,255 non-community water systems were also issued monitoring and reporting violations.

For 2002, 232 systems in 109 towns reported organic chemicals present at concentrations below legally enforceable standards or for which no legally enforceable standard exist or for which no public health risk is defined. Only one system was issued an MCL violation (trichloroethylene, see above paragraph). Sixty-one public utilities treated their water to remove organic chemical contaminants to meet legal standards.

More detailed information regarding Connecticut PWS monitoring is published annually by the CT DPH in two major reports: the *Public Water Systems Violations Report* (CT DPH 2003a) submitted to US EPA and the *Monitoring, Health Risks, and Treatment Costs for Organic Chemicals in Public Drinking Water Supply* (CT DPH 2003b) submitted to the Governor and General Assembly. These reports and other information about drinking water are available from the CT DPH Drinking Water Division (<http://www.dph.state.ct.us/BRS/Water/DWD.htm>).

The CT DEP in cooperation with CT DPH also implements the federal Safe Drinking Water Act, Source Water Assessment Program. Source water assessments were completed for all public surface and ground water drinking sources in April 2003. This included over 3400 systems and

over 4500 sources. Assessments included delineation of source water protection areas, inventory of significant potential pollution sources, determination of susceptibility to contamination, and public participation and availability (<http://www.dph.state.ct.us/BRS/Water/SWAP/swap.htm>). The assessments results are used in regulatory and non-regulatory state source water protection programs.

Connecticut's public (community) water systems include 179 waterbodies managed as drinking water reservoirs by 33 public and private utilities throughout the State. The drinking water watersheds that protect these reservoirs cover more than 735 of Connecticut's approximately 5009 square miles (Figure 8-1). Surface reservoirs serve approximately two thirds of the State's population.

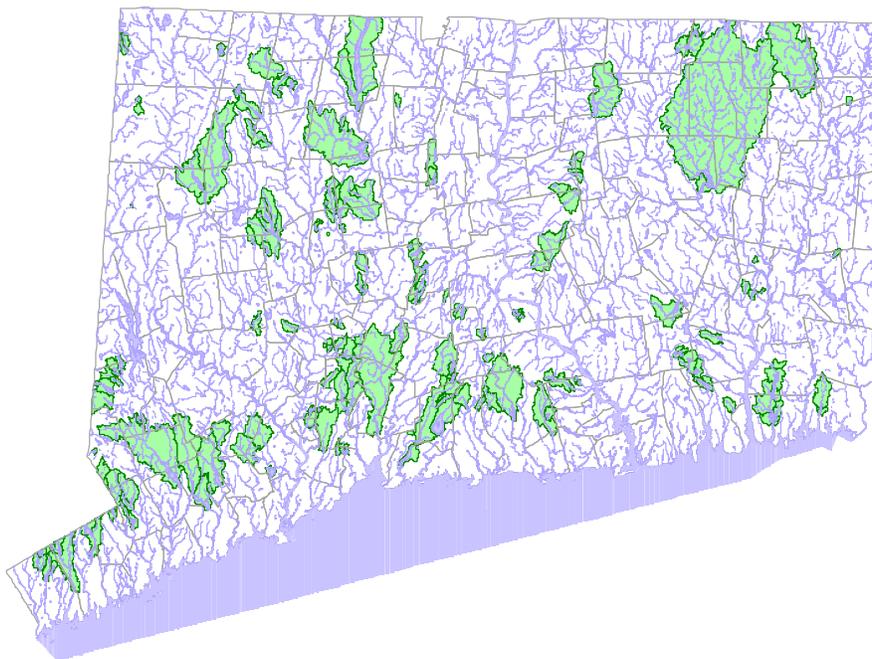


Figure 8-1. Drinking water watersheds in Connecticut.

The CT DEP periodically solicits information from Connecticut water supply utilities concerning reservoir activity and trophic status, and potential threats to drinking water reservoirs. The most recent survey responses from water utility officials identified eutrophication, turbidity, and siltation as the most common causes of contamination (aside from iron and manganese, which are not generally associated with anthropogenic sources). These were attributed mostly to nonpoint source inputs from roads, land development, septic systems and lawn care. Appendix F lists the activity and trophic status of Connecticut drinking water reservoirs.

Fish Tissue Contamination

Fish consumption advisories are issued annually by the Connecticut Department of Public Health (CT DPH) in cooperation with the DEP, and publicized by means of print and electronic news media. The most recent advisory can be viewed and downloaded from the CT DPH website at <http://www.dph.state.ct.us/Publications/BCH/EEOH/fishweb02.pdf>. The advisories are also incorporated into the Connecticut Anglers Guide (CT DEP 2002a), an annual abstract of fishing

regulations that is distributed with recreational fishing licenses. For 305(b) reporting, assessment of designated use support for fish consumption is based on the annual consumption advisories issued by the CT DPH.

In spring 1997 a statewide consumption advisory was issued due to mercury residue in fish tissue attributed to atmospheric deposition. Similarly, all Long Island Sound (estuarine) waters carry a consumption advisory for migratory bluefish and striped bass, as well as lobster tomalley, due to PCB contamination. As a result of these blanket advisories, all Connecticut waters technically only partially support fish consumption. Several waterbodies in Connecticut carry fish consumption advisories beyond the statewide advisories (Table 8-1).

Table 8-1. Fish Consumption Advisories for Connecticut Waters, 2003 (CT DPH 2003c).

Advisory Type	Waterbody	Fish Species	High Risk Group ^a Advice	Low Risk Group Advice	Contaminant
Statewide Freshwater Fish	All fresh waterbodies (See specific advice below)	-Trout	No Limits on Consumption	No Limits on Consumption	- -
		-All other fish	One meal per month	One meal per week	Mercury
More Restrictive Advice For Specific Freshwater Fish	Dodge Pond, Lake McDonough, Silver Lake, Wyassup Lake	-Largemouth Bass, Smallmouth Bass, Pickerel	Do not eat	One meal per month	Mercury
	Housatonic River above Derby Dam (Includes Lakes Zoar, Lillinonah, and Housatonic)	-Trout, Catfish, Eels, Carp	Do not eat	Do not eat	PCBs Mercury
		-Bass, White Perch, Bullheads	Do not eat	One meal per 2 months	
		-Other Species	One meal per month	One meal per week	
	Quinnipiac River above Quinnipiac Gorge	-All Species	Do not eat	Do not eat	PCBs
	Q Gorge/Hanover Pond (Meriden)		One meal per month	One meal per month	
	Eight Mile River(Southington)	-All Species	Do not eat	Do not eat	PCBs
	Connecticut River	-Carp-Catfish	Do not eat Do not eat	One meal per 2 months One meal per month	PCBs
	Blackberry River Downstream of "Blast Furnace" (North Canaan)	-Smallmouth Bass	One meal per month	One meal per month	PCBs
	Konkapot River (North Canaan)	-White Suckers	Do not eat	One meal per month	Mercury
	Versailles Pond, Paper Mill Pond and connecting section of the Little River (Sprague)	- All Species	Do not eat	One meal per month	PCBs Mercury
Brewster Pond (Stratford)	-Catfish & Bullheads	Do not eat	Do not eat	Chlordane	
Union Pond (Manchester)	-Carp, Catfish, Bass	Do not eat	Do not eat	Chlordane	
Specific Saltwater Fish	Long Island Sound and connected rivers	-Striped Bass -Bluefish over 25" -Bluefish 13- 25 " -Lobster tomalley	Do not eat Do not eat One meal per month Do not eat	One meal per 2 months One meal per 2 months One meal per month One meal per 2 months	PCBs PCBs PCBs PCBs

^a High Risk Group includes pregnant women, women planning to become pregnant within one year, and children under six years old. Low risk group includes everyone not in the High Risk Group.

Fish Kills

During 2002 and 2003, 75 fish kills were investigated by CT DEP (Table 8-2). The DEP Bureau of Natural Resources Fisheries Division investigates these events with assistance, when needed, from the Bureau of Water Management. Fish kills can result from a variety of causes including effects of pollution or naturally occurring phenomena. Determination of cause depends to a large degree on professional judgment and experience.

Table 8-2. Fish kills reported in Connecticut during 2002 and 2003.

Waterbody	Town	Date	Species Affected	Suspected Cause
Private Pond	Wilton	2/21/2002	Unknown	Unknown
Private Pond	Cornwall	3/27/2002	Largemouth Bass	Chemicals (Pyrethrum) or Winterkill
Crystal Lake	Middletown	4/18/2002	Bluegill and Chain Pickerel	Unknown
Hop Brook	Manchester	4/23/2002	Longnose Dace, Blacknose Dace, White Sucker, Native Brook Trout, American Eel and Bluegill	Chemical Spill
Middle Bolton Lake	Coventry - Vernon - Bolton	5/21/2002	Pumpkinseed, Pickerel	Bacterial infection
Private Pond	Canterbury	5/21/2002	Bass, Pumpkinseeds	Unavailable
Lower Bolton Lake	Bolton	5/29/2002	Bluegill and Crappies	Spawning stress
Terramuggus Lake	Marlborough	6/7/2002	Black Crappie, Bluegill, Pumpkinseed	Bacterial infection
Mono Lake	Columbia	6/12/2002	Brown Bullhead	Bacterial infection
Crystal Lake	Ellington	6/19/2002	Sunfish	Unavailable
Connecticut River	Glastonbury	7/1/2002	Triploid Grass Carp	Unavailable
Mirror Lake	Storrs	7/2/2002	Sunfish	Summerkill
Salmon Brook	Granby	7/2/2002	Sunfish and Catfish	Summerkill
Park Pond				
Salmon River	Colchester	7/5/2002	Rainbow Trout	Drought / High temperatures
Shetucket River	Scotland	7/5/2002	Rainbow and Brown Trout	Drought / High temperatures
Private Pond	Norwich	7/15/2002	Triploid Grass Carp	Copper sulfate treatment
Private Pond	Cornwall	7/16/2002	Unknown	Severe drawdown
Private Pond	Thomaston	7/22/2002	Sunfish and Bass	Summerkill
Private Pond	Durham	7/22/2002	Sunfish and Bass	Summerkill
Southport Harbor	Fairfield	7/23/2002	Unknown	Chemical Spill
Squantz Pond	New Fairfield - Sherman	8/5/2002	Walleye	Unknown
West River	New Haven	8/21/2002	Crabs and unidentified fish species	Unavailable
Hammonasset River	Clinton	8/26/2002	Unknown	Saltwater intrusion related to low instream flow.
Wilton Pond	Plymouth	8/26/2002	Golden Shiner	Disease or low DO (Dissolved Oxygen)
Bloomfield Reservoir #3	Bloomfield	9/16/2002	Crayfish	Unknown
Private Pond	Ashford	9/20/2002	Unknown	Severe drawdown
Naugatuck River	Seymour	01/16/03	Herring species	Unknown

Waterbody	Town	Date	Species Affected	Suspected Cause
Connecticut River	Enfield	01/27/03	Yellow Perch	Winterkill
Private Pond	E. Haven	03/17/03	Bluegills	Winterkill
Stony Brook	Darien	03/24/03	Sunfish, Bass	Oil spill
Private Pond	Naugatuck	03/24/03	Sunfish, Minnows	Winterkill
Foxwood Lake	Stamford	03/24/03	Bass, Bluegills, and Triploid Grass Carp	Winterkill
Private Pond	Darien	03/24/03	Sunfish	Oil spill
Private Pond	Easton	03/25/03	Sunfish, Bass	Winterkill
Churchill Park Pond	Newington	03/27/03	Unknown	Winterkill
Owen Bell Pond	Killingly	03/28/03	Bass and other species	Winterkill
Nettis Pond	Middletown	03/28/03	Bass, Bluegill and Triploid Grass Carp	Winterkill
Bishop Swamp	Andover	03/31/03	Bass, Pickerel, Bullheads and other species	Winterkill
Private Pond	Cornwall	03/31/03	Sunfish, Largemouth Bass	Winterkill
Ball Pond	New Fairfield	03/31/03	Stocked Brook, Brown and Rainbow Trout	Winterkill
Pine Lake	Bristol	04/01/03	Largemouth Bass, Sunfish	Winterkill
Private Pond	Cornwall	04/01/03	Largemouth Bass, Sunfish	Winterkill
Jensen's Lakeview Pond	Danbury	04/02/03	Bass, Pickerel and other unknown species	Winterkill
Mill River	Easton	04/03/03	Brook, Brown, Rainbow Trout, Suckers and Bluegills	Chemical spill
Private Pond	Stafford	04/03/03	Shiners, Bullhead, Sunfish	Winterkill
Private Pond	Lebanon	04/04/03	Sunfish	Winterkill
Private Pond	New Hartford	04/04/03	Triploid Grass Carp, Largemouth Bass	Winterkill
Private Pond	Bristol	04/08/03	Sunfish, Largemouth Bass	Winterkill
Knowlton Pond	Ashford	04/10/03	Sunfish, Largemouth Bass, Brown Bullhead	Winterkill
Private Pond	Colchester	04/10/03	Catfish, Brown Bullheads	Winterkill
Private Pond	Kent	04/14/03	Triploid Grass Carp	Winterkill
Private Pond	Preston	04/14/03	Smallmouth Bass	Winterkill
Private Pond	Colchester	04/21/03	Pickerel, Bluegill, Smallmouth Bass	Winterkill
Private Pond	Ridgefield	04/21/03	Triploid Grass Carp, Sunfish	Winterkill
Padanaram Brook	Danbury	04/22/03	Brown Trout and other unknown species	Spawning stress
Still River - Padanaram Brook	Danbury	04/22/03	Brown, Brook and Rainbow Trout, Blacknose Dace, Tessellated Darter, Common Shiners, White Suckers, Fallfish.	Chemical spill
Winwood Pond	West Hartford	05/06/03	Sunfish, Bass	Unknown
Lagoon / Rockwell Park	Bristol	05/11/03	Bluegill	Spawning stress
Lake Basile	Simsbury	05/27/03	Panfish, Sunfish, Crappies	Spawning stress
Lower Bolton Lake	Bolton	06/06/03	Largemouth Bass, Brown Bullhead, Yellow Perch, Sunfish, Black Crappie	Natural causes

Waterbody	Town	Date	Species Affected	Suspected Cause
Pine Brook	East Hampton	06/08/03	Black Crappie, Sunfish	Spawning stress
Dunning Lake	Farmington	06/23/03	Sunfish	Natural causes
Private Pond	Ellington	06/26/03	Sunfish	Spawning stress
Private Pond	Weston	06/27/03	Sunfish	Dissolved oxygen depletion
Private Pond	Middletown	07/07/03	Brown Bullhead	Dissolved oxygen depletion
Blackberry River	Canaan	07/10/03	Brown and Rainbow Trout, Burbot, Smallmouth Bass, White Sucker, Fallfish, Common Shiner and Blacknose Dace	Chemical spill
Private Pond	Greenwich	07/24/03	Carp, Sunfish, Bass	Hypoxia
Niantic River	Waterford and East Lyme	07/28/03	American Eel, Winter Flounder, Cunner or Blackfish, Pipefish, Blue Crab, Mantis Shrimp	Hypoxia
Quinebaug River	Rocky Hill	08/13/03	Carp, Sunfish, Catfish and White Suckers	Natural causes
Private Pond	Bolton	08/21/03	Rainbow Trout	Hypoxia
Pond/Dividend Brook	Rocky Hill	08/26/03	Unknown, numerous	Dissolved oxygen depletion
Private Pond	Ridgefield	09/09/03	Largemouth Bass	Hypoxia
Bladens Brook	Seymour	09/22/03	Brook and Rainbow Trout	Oil spill
Muddy River	North Haven	11/14/03	Unknown, numerous	Oil & Chemical spill
Deep Brook Tributary	Newtown	12/08/03	Brook and Brown Trout, Blacknose Dace	Oil Spill

Bathing Area Closures

The Connecticut DEP and DPH cooperatively monitor and regulate designated bathing areas located on state owned lands (Figure 8-2). Municipal beaches are monitored by local or regional public health officials following State guidance (CT DPH and CT DEP 2003). Indicator bacteria levels along with sanitary surveys are used to determine the quality of bathing waters in Connecticut (see Chapter 4, Assessment Methodology of Surface Waters). Monitoring data combined with reports of spills, sewage treatment plant upsets and other pollution incidents are evaluated to determine when swimming area closures are warranted. Table 8-3 lists closures of state and municipal bathing areas that occurred in 2002 and 2003. This summary includes administrative beach closures resulting from exceedence of predetermined rainfall thresholds. Beach closure information is provided to CT DEP as a courtesy by local health departments. Questions regarding specific municipal beach closures should be directed to the respective local health authority.

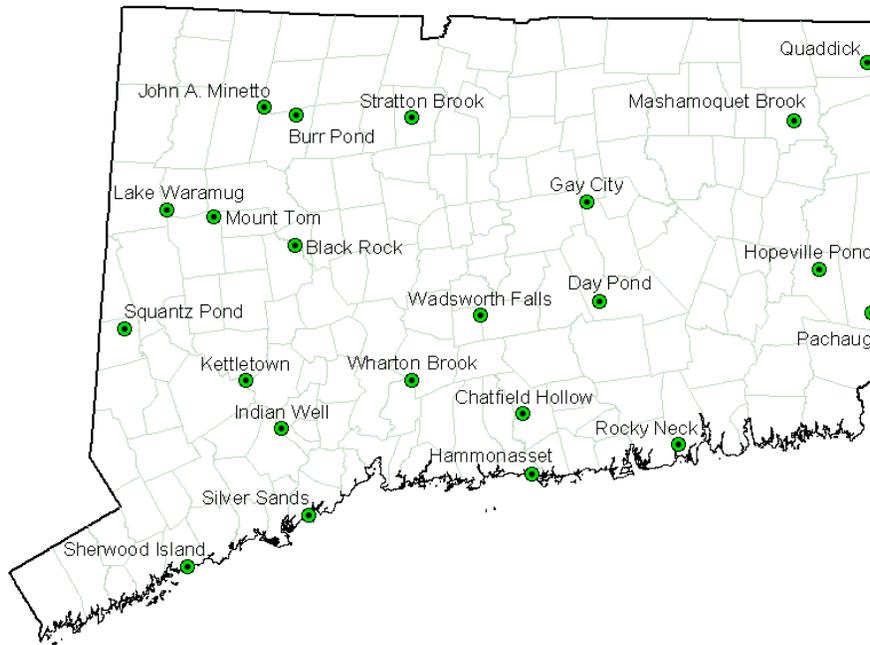


Figure 8-2. State Park beaches monitored by CT DEP and CT DPH.

Table 8-3. Public bathing beach closures reported in Connecticut for 2002 and 2003.

Town	Beach Name	Waterbody	Date Closed	Date Reopened	Days Closed	Reason for Closure
Branford	Clark Avenue Beach	LIS -Branford Harbor	7/29/2003	8/1/2003	3	Elevated levels of bacteria
Bridgeport	Seaside Park (5 sites)	LIS - Bridgeport Harbor	8/6/2003	8/8/2003	2	Bypass overflow
Clinton	Esposito Beach	LIS - Clinton Harbor	8/19/2003	8/20/2003	1	Elevated bacteria - heavy rainfall
	Town Beach	LIS - Clinton Harbor	8/19/2003	8/20/2003	1	Elevated bacteria - heavy rainfall
Colchester	Day Pond State Park	Day Pond	7/30/2002	8/1/2002	2	Elevated levels of bacteria
			5/28/2003	5/30/2003	2	Elevated levels of bacteria
Darien	Pear Tree Point	LIS - Cove Harbor	6/2/2003	6/5/2003	3	Administrative Closure/ Heavy Rain
			6/15/2003	6/16/2003	1	Administrative Closure/ Heavy Rain
			6/23/2003	6/24/2003	1	Administrative Closure/ Heavy Rain
			7/30/2003	8/1/2003	2	Elevated levels of bacteria
			8/4/2003	8/5/2003	1	Elevated levels of bacteria
	Weed Beach	LIS - Cove Harbor	6/2/2003	6/5/2003	3	Administrative Closure/ Heavy Rain
			6/15/2003	6/16/2003	1	Administrative Closure/ Heavy Rain
			6/23/2003	6/24/2003	1	Administrative Closure/ Heavy Rain
			7/30/2003	8/1/2003	2	Elevated levels of bacteria
			8/4/2003	8/5/2003	1	Elevated levels of bacteria
East Lyme	Rocky Neck State Park	LIS - between Pattagansett & Fourmile Rivers	6/29/2002	7/2/2002	3	Elevated levels of bacteria
			8/7/2003	8/9/2003	2	Elevated levels of bacteria
Ellington	Ellington Public Beach	Crystal Lake	8/6/2002	8/15/2002	9	Elevated bacteria, probably due to waterfowl
Fairfield	Jennings Beach	LIS - Bridgeport Harbor	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain
			5/27/2003	5/28/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
	8/4/2003	8/6/2003	2	Administrative Closure/ Heavy rain & Bridgeport bypass overflow		
Lake Mohegan	Lake Mohegan	Lake Mohegan, Mill River	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			7/24/2002	7/25/2002	1	Administrative Closure/ Heavy Rain

Town	Beach Name	Waterbody	Date Closed	Date Reopened	Days Closed	Reason for Closure
Fairfield	Lake Mohegan	Lake Mohegan, Mill River	8/3/2002	8/4/2002	1	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain
			5/27/2003	5/28/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
			6/4/2003	6/6/2003	2	Administrative Closure/ Heavy Rain
	Penfield Beach	LIS - Bridgeport Harbor	6/13/2003	6/14/2003	1	Administrative Closure/ Heavy Rain
			6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain
			5/27/2003	5/28/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
			8/4/2003	8/6/2003	2	Administrative Closure/ Heavy rain & Bridgeport bypass overflow
	Sasco Beach	LIS - Southport Harbor	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain
			5/27/2003	5/28/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
			8/4/2003	8/6/2003	2	admin. closure/heavy rain & Bpt bypass overflow
	South Pine Creek Beach	LIS - Southport Harbor	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain
			5/27/2003	5/28/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
8/4/2003			8/6/2003	2	Administrative Closure/ Heavy rain & Bridgeport bypass overflow	
Southport Beach	LIS - Sasco Brook Estuary	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain	
		8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain	
		9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain	
		5/27/2003	5/28/2003	1	Administrative Closure/ Heavy Rain	
		6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain	
		6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain	
		8/4/2003	8/6/2003	2	Administrative Closure/ Heavy rain & Bridgeport bypass overflow	
Glastonbury	Eastbury Pond	Angus Park Pond	7/22/2003	7/24/2003	2	Elevated bacteria, probably due to waterfowl
			7/29/2003	8/1/2003	3	Elevated bacteria, probably due to waterfowl
			8/6/2003	8/8/2003	2	Elevated bacteria, probably due to waterfowl
			8/12/2003	8/14/2003	2	Elevated bacteria, probably due to waterfowl
			8/19/2003	8/21/2003	2	Elevated bacteria, probably due to waterfowl
			8/26/2003	8/27/2003	1	Elevated bacteria, probably due to waterfowl
Greenwich	Byram Beach	LIS - Byram Harbor	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			6/14/2002	6/16/2002	2	Administrative Closure/ Heavy Rain
			6/27/2002	6/29/2002	2	Administrative Closure/ Heavy Rain
			7/10/2002	7/11/2002	1	Administrative Closure/ Heavy Rain

Town	Beach Name	Waterbody	Date Closed	Date Reopened	Days Closed	Reason for Closure
Greenwich	Byram Beach	LIS - Byram Harbor	7/25/2002	7/26/2002	1	Elevated levels of bacteria
			8/3/2002	8/4/2002	1	Administrative Closure/ Heavy Rain
			8/17/2002	8/18/2002	1	Administrative Closure/ Heavy Rain
			8/29/2002	8/31/2002	2	Administrative Closure/ Heavy Rain
			9/2/2002	9/3/2002	1	Administrative Closure/ Heavy Rain
			5/26/2003	5/28/2003	2	Administrative Closure/ Heavy Rain
			6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain
			6/4/2003	6/9/2003	5	Administrative closure: rainfall & sewage bypass
			6/12/2003	6/15/2003	3	Administrative Closure/ Heavy Rain
			6/18/2003	6/20/2003	2	Administrative Closure/ Heavy Rain
	6/22/2003	6/24/2003	2	Administrative Closure/ Heavy Rain		
	7/22/2003	7/24/2003	2	Administrative Closure/ Heavy Rain		
	8/1/2003	8/13/2003	12	Elevated bacteria - heavy rainfall		
	8/18/2003	8/19/2003	1	Administrative Closure/ Heavy Rain		
	Greenwich Point	LIS - Stamford Harbor	6/7/2002	6/8/2002	1	Administrative Closure/ Heavy Rain
			8/29/2002	8/31/2002	2	Administrative Closure/ Heavy Rain
			9/2/2002	9/3/2002	1	Administrative Closure/ Heavy Rain
6/1/2003			6/3/2003	2	Sewage overflow	
6/5/2003			6/10/2003	5	Sewage overflow	
8/1/2003			8/2/2003	1	Elevated levels of bacteria	
8/4/2003			8/5/2003	1	Administrative Closure/ Heavy Rain	
8/10/2003			8/11/2003	1	Administrative Closure/ Heavy Rain	
Guilford	Jacobs Beach	LIS - Guilford Harbor	5/29/2003	6/5/2003	7	Elevated bacteria, storm water
Hebron	Gay City State Park	Gay City Pond	5/29/2003	6/4/2003	6	Elevated bacteria, probably due to waterfowl
			6/25/2003	6/26/2003	1	Elevated bacteria, probably due to waterfowl
			7/23/2003	7/30/2003	7	Elevated bacteria, probably due to waterfowl
			8/13/2003	8/14/2003	1	Elevated bacteria, probably due to waterfowl
			8/27/2003	9/2/2003	6	Elevated bacteria, probably due to waterfowl
Killingworth	Chatfield Hollow State Park	Schreeder Pond	5/28/2003	5/30/2003	2	Elevated levels of bacteria
			8/19/2003	8/21/2003	2	Elevated levels of bacteria
Middlebury	Hop Brook Lake Beach	Hop Brook Lake	6/7/2002	6/13/2002	6	Administrative Closure/ Heavy Rain
			8/3/2002	8/4/2002	1	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			5/27/2003	6/6/2003	10	Administrative Closure/ Heavy Rain
			6/20/2003	7/10/2003	20	Administrative Closure/ Heavy Rain
			7/22/2003	8/16/2003	25	Administrative Closure/ Heavy Rain
			8/20/2003	8/23/2003	3	Administrative Closure/ Heavy Rain
Middlefield	Wadsworth Falls State Park	Wadsworth Falls Park Pond	9/3/2003	9/4/2003	1	Administrative Closure/ Heavy Rain
			6/18/2002	6/20/2002	2	Elevated levels of bacteria
			6/26/2002	6/28/2002	2	Elevated levels of bacteria
			7/30/2002	8/2/2002	3	Elevated levels of bacteria
			7/15/2003	7/29/2003	14	Elevated levels of bacteria
Middletown	Beach & Camping, City of Middletown	Crystal Lake	8/12/2003	8/14/2003	2	Elevated levels of bacteria
			8/13/2003	8/25/2003	12	Elevated bacteria, probably due to waterfowl
			8/13/2003	8/25/2003	12	Elevated bacteria, probably due to waterfowl
	City of Middletown Beach (Main Beach)	Crystal Lake				

Town	Beach Name	Waterbody	Date Closed	Date Reopened	Days Closed	Reason for Closure
Middletown	City of Middletown Beach (Main Beach)	Crystal Lake	7/31/2003	8/3/2003	3	Elevated bacteria, probably due to waterfowl
	Falcon Park	Crystal Lake	8/7/2002	8/25/2002	18	Elevated bacteria, probably due to waterfowl
Milford	Silver Sands State Park	LIS - The Gulf	8/5/2003	8/7/2003	2	Elevated levels of bacteria
Monroe	Great Hollow Lake	Pequonnock River (Great Hollow Lake)	7/20/2002	7/21/2002	1	Administrative Closure/ Heavy Rain
			8/25/2003	9/3/2003	9	Administrative Closure/ Heavy Rain
New Fairfield	Squantz Pond State Park	Squantz Pond	7/17/2002	7/19/2002	2	Elevated bacteria, probably due to waterfowl
New Milford	Lynn Deming Park Beach	Candlewood Lake	8/4/2003	8/11/2003	7	Elevated bacteria - heavy rainfall
Norwalk	Bell Island Beach	LIS - Norwalk - adjacent waters	6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
	Calf Pasture Beach	LIS - Norwalk Harbor - Offshore	6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
	Hickory Bluff Beach	LIS - Norwalk - adjacent waters	6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
	Marvin Beach	LIS - Norwalk Harbor	7/8/2003	7/9/2003	1	Elevated levels of bacteria
			6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain
	Rowayton Beach	LIS - Norwalk - adjacent waters	6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain
Shady Beach	LIS - Norwalk Harbor - offshore	6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain	
		6/1/2003	6/3/2003	2	Administrative Closure/ Heavy Rain	
Norwich	Spaulding Pond Beach	Spaulding Pond	6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
			6/14/2003	6/21/2003	7	Elevated bacteria, probably due to waterfowl
			6/24/2003	6/26/2003	2	Elevated bacteria, probably due to waterfowl
			8/8/2003	8/10/2003	2	Elevated bacteria, probably due to waterfowl
Pomfret	Mashamoquet Brook State Park	Braytons Pond	8/14/2003	8/20/2003	6	Elevated bacteria, probably due to waterfowl
			7/10/2002	7/13/2002	3	Elevated levels of bacteria
Shelton	Indian Well State Park	Lake Housatonic	8/6/2003	8/7/2003	1	Elevated levels of bacteria
			5/28/2003	6/3/2003	6	Elevated levels of bacteria
			8/5/2003	8/7/2003	2	Elevated levels of bacteria
			8/12/2003	8/14/2003	2	Elevated levels of bacteria
Simsbury	Stratton Brook State Park	Stratton Brook Pond	8/19/2003	8/21/2003	2	Elevated levels of bacteria
			5/30/2002	5/31/2002	1	Elevated levels of bacteria
Southbury	Kettletown State Park	Lake Zoar	5/28/2003	5/30/2003	2	Elevated levels of bacteria
			6/3/2003	6/10/2003	7	Elevated levels of bacteria
Stamford	Cummings Park Beach	LIS - Westcott Cove	8/5/2003	8/7/2003	2	Elevated levels of bacteria
			5/26/2003	5/27/2003	1	Administrative Closure/ Heavy Rain
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
			6/4/2003	6/5/2003	1	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
			6/8/2003	6/9/2003	1	Administrative Closure/ Heavy Rain
6/13/2003	6/14/2003	1	Administrative Closure/ Heavy Rain			
				6/22/2003	6/23/2003	1

Town	Beach Name	Waterbody	Date Closed	Date Reopened	Days Closed	Reason for Closure		
Stamford	Cummings Park Beach	LIS - Westcott Cove	8/4/2003	8/5/2003	1	Administrative Closure/ Heavy Rain		
			8/10/2003	8/11/2003	1	Administrative Closure/ Heavy Rain		
			9/1/2003	9/2/2003	1	Administrative Closure/ Heavy Rain		
			7/3/2003	7/4/2003	1	Septic pumpout truck noted in area		
			7/10/2003	7/11/2003	1	Septic pumpout truck noted in area		
			7/22/2003	7/23/2003	1	Septic pumpout truck noted in area		
			6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain		
	West Beach	LIS - Westcott Cove	6/4/2003	6/5/2003	1	Administrative Closure/ Heavy Rain		
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain		
			6/8/2003	6/9/2003	1	Administrative Closure/ Heavy Rain		
			6/13/2003	6/14/2003	1	Administrative Closure/ Heavy Rain		
			6/22/2003	6/23/2003	1	Administrative Closure/ Heavy Rain		
			8/4/2003	8/5/2003	1	Administrative Closure/ Heavy Rain		
			8/10/2003	8/11/2003	1	Administrative Closure/ Heavy Rain		
			9/1/2003	9/2/2003	1	Administrative Closure/ Heavy Rain		
			East (Cove Island) Beach	LIS - Holly Pond/Cove Harbor	5/26/2003	5/27/2003	1	Administrative Closure/ Heavy Rain
					6/1/2003	6/2/2003	1	Administrative Closure/ Heavy Rain
	6/4/2003	6/5/2003			1	Administrative Closure/ Heavy Rain		
	6/5/2003	6/6/2003			1	Administrative Closure/ Heavy Rain		
	6/8/2003	6/9/2003			1	Administrative Closure/ Heavy Rain		
6/13/2003	6/14/2003	1			Administrative Closure/ Heavy Rain			
6/22/2003	6/23/2003	1			Administrative Closure/ Heavy Rain			
Stratford	Long Beach	LIS - Bridgeport Harbor	8/4/2003	8/5/2003	1	Administrative Closure/ Heavy Rain		
			8/10/2003	8/11/2003	1	Administrative Closure/ Heavy Rain		
			9/1/2003	9/2/2003	1	Administrative Closure/ Heavy Rain		
			6/13/2002	6/15/2002	2	Administrative Closure/ Heavy Rain		
			8/3/2002	8/4/2002	1	Administrative Closure/ Heavy Rain		
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain		
			5/26/2003	5/28/2003	2	Administrative Closure/ Heavy Rain		
			6/1/2003	6/4/2003	3	Administrative Closure/ Heavy Rain		
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain		
			6/13/2003	6/14/2003	1	Administrative Closure/ Heavy Rain		
Stratford	Short Beach	LIS - Housatonic River Estuary	8/8/2003	8/9/2003	1	Administrative Closure/ Heavy Rain		
			8/10/2003	8/11/2003	1	Administrative Closure/ Heavy Rain		
			6/13/2002	6/15/2002	2	Administrative Closure/ Heavy Rain		
			8/3/2002	8/4/2002	1	Administrative Closure/ Heavy Rain		
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain		
			5/26/2003	5/28/2003	2	Administrative Closure/ Heavy Rain		
			6/1/2003	6/4/2003	3	Administrative Closure/ Heavy Rain		
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain		
			6/13/2003	6/14/2003	1	Administrative Closure/ Heavy Rain		
			8/5/2003	8/6/2003	1	Elevated levels of bacteria		
Thomaston	Northfield Brook Lake	Northfield Brook Lake	8/8/2003	8/9/2003	1	Administrative Closure/ Heavy Rain		
			8/10/2003	8/11/2003	1	Administrative Closure/ Heavy Rain		
			5/18/2002	5/23/2002	5	Administrative Closure/ Heavy Rain		
			6/1/2002	6/4/2002	3	Administrative Closure/ Heavy Rain		
			6/7/2002	6/12/2002	5	Administrative Closure/ Heavy Rain		
			6/15/2002	6/16/2002	1	Administrative Closure/ Heavy Rain		
			7/24/2002	7/25/2002	1	Administrative Closure/ Heavy Rain		
			8/3/2002	8/4/2002	1	Administrative Closure/ Heavy Rain		
			8/29/2002	8/31/2002	2	Administrative Closure/ Heavy Rain		
			9/3/2002	9/5/2002	2	Administrative Closure/ Heavy Rain		
Thomaston	Northfield Brook Lake	Northfield Brook Lake	5/27/2003	5/30/2003	3	Administrative Closure/ Heavy Rain		
			6/1/2003	6/4/2003	3	Administrative Closure/ Heavy Rain		

Town	Beach Name	Waterbody	Date Closed	Date Reopened	Days Closed	Reason for Closure
Thomaston	Northfield Brook Lake	Northfield Brook Lake	6/13/2003	6/15/2003	2	Administrative Closure/ Heavy Rain
			6/22/2003	6/24/2003	2	Administrative Closure/ Heavy Rain
			7/10/2003	7/11/2003	1	Administrative Closure/ Heavy Rain
			7/22/2003	7/26/2003	4	Administrative Closure/ Heavy Rain
			8/4/2003	8/9/2003	5	Administrative Closure/ Heavy Rain
			8/10/2003	8/16/2003	6	Administrative Closure/ Heavy Rain
			8/18/2003	8/19/2003	1	Administrative Closure/ Heavy Rain
			8/20/2003	8/22/2003	2	Administrative Closure/ Heavy Rain
Thompson	Quaddick State Park	Quaddick Reservoir	9/2/2003	9/3/2003	1	Administrative Closure/ Heavy Rain
			8/14/2002	8/16/2002	2	Elevated levels of bacteria
Tolland	Crandall's Beach	Crandall's Pond	8/26/2003	8/29/2003	3	Elevated levels of bacteria
Trumbull	Twin Brooks Beach	Twin Brooks Lake	5/30/2002	9/2/2002	95	Elevated bacteria, probably due to waterfowl
			5/30/2003	9/1/2003	94	Elevated bacteria, probably due to waterfowl
Vernon	Valley Falls Park	Valley Falls Pond	6/25/2003	6/30/2003	5	Elevated bacteria, probably due to waterfowl
Wallingford	Wharton Brook State Park	Allen Brook Pond	6/19/2002	6/20/2002	1	Elevated levels of bacteria
			5/28/2003	6/5/2003	8	Elevated levels of bacteria
			6/10/2003	6/12/2003	2	Elevated levels of bacteria
			6/24/2003	6/24/2003	0	Elevated levels of bacteria
			8/5/2003	8/14/2003	9	Elevated levels of bacteria
Washington	Washington Town Beach	Lake Waramaug	8/19/2003	8/21/2003	2	Elevated levels of bacteria
			7/23/2003	7/25/2003	2	failing septic system discharge to storm drain
Waterford	Kiddie Beach	LIS - Niantic Bay	8/2/2002	8/6/2002	4	Elevated levels of bacteria
Westport	Burying Hill Beach	LIS - Sherwood Mill Pd/Compo Cove	6/7/2002	6/7/2002	0	Administrative Closure/ Heavy Rain
			8/30/2002	8/31/2002	1	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
			8/5/2003	8/7/2003	2	Administrative Closure/ Heavy Rain
			6/5/2003	6/6/2003	1	Administrative Closure/ Heavy Rain
Westport	Compo Beach	LIS - Sherwood Mill Pond/Compo Cove	8/5/2003	8/7/2003	2	Administrative Closure/ Heavy Rain
			8/5/2003	8/7/2003	2	Elevated bacteria, probably due to waterfowl
Westport	Sherwood Island Beach	LIS - Sherwood Mill Pd/Compo Cove	8/5/2003	8/7/2003	2	Elevated bacteria, probably due to waterfowl
Willimantic	Lauter Park	Natchaug River	6/12/2002	6/21/2002	9	Elevated bacteria, rain events and dam release
Wolcott	Mattatuck Beach	Hitchcock Lake	8/12/2003	8/16/2003	4	Elevated levels of bacteria
			6/21/2002	7/1/2002	10	Elevated levels of bacteria

Chapter 9. References

- Altobello, M.A. 1992. The Economic Importance of Long Island's Water Quality Dependent Activities. Univ. of Connecticut, Dept. of Agricultural and Resource Economics., Storrs. Prepared for US EPA, Region 1, Boston.
- Arnold, C.L., Jr. and C.J. Gibbons. 1996. *Impervious Surface Coverage: The Emergence of a Key Environmental Indicator*. J. Amer. Planning Assoc. 62(2): 243-258.
- Barbour, M.T., J. Gerritsen, B.D. Snyder and J.B. Stribling. 1999. *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish, Second Edition*. EPA 841-B-99-002. U.S. Environmental Protection Agency; Office of Water; Washington D.C.
- Canavan, R.W. IV and P.A. Siver. 1995. *Connecticut Lakes: A Study of Chemical and Physical Properties of Fifty-six Connecticut lakes*. Connecticut College Arboretum, New London, CT.
- CT DEP. 1981. *Natural Drainage Basins in Connecticut (map)*. CT Dept. of Environmental Protection, Natural Resources Center, Hartford, CT.
- CT DEP. 1996. *Quality Assurance Project Plan for Ambient Biological Monitoring*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 1998a. *Connecticut Waterbodies Not Meeting Water Quality Standards 1998*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 1998c. *Trophic Classifications of Twelve Connecticut Lakes*. CT Dept. of Environmental Protection, Bureau of Water Management, Lakes Program, Hartford, CT.
- CT DEP. 1999a. *1998 Water Quality Report to Congress, prepared pursuant to Clean Water Act Section 305(b)*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 1999b. *Ambient Monitoring Strategy for Rivers and Streams: Rotating Basin Approach*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 1999c. *Reference Guide to Coastal Policies*. CT Dept. of Environmental Protection, Office of Long Island Sound Programs, Hartford, CT. DEP-OLIS-Guid-200.
- CT DEP. 2000. Use of Methyl Tertiary Butyl Ether (MTBE) as a Gasoline Additive. Report to the Joint Standing Committees on Public Health and the Environment, Connecticut General Assembly. CT Dept. of Environmental Protection, Hartford, CT.

- CT DEP. 2001. *Quality Assurance Project Plan for Monitoring Fish Community Structure*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2002a. *Water Quality Standards*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2002b. *Connecticut Angler's Guide, 2002*. CT Dept. of Environmental Protection, Bureau of Natural Resources, Fisheries Division, Hartford, CT.
- CT DEP. 2002c. *Environmental Quality Branch Strategic Plan*. CT Dept. of Environmental Protection, Hartford, CT.
- CT DEP. 2002d. *2002 List of Connecticut Waterbodies Not Meeting Water Quality Standards*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2002e. *2002 Water Quality Report to Congress, prepared pursuant to Clean Water Act Section 305(b)*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2002e. *Connecticut Consolidated Assessment and Listing Methodology for 305(b) and 303(d) Reporting*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2003. *Report of the Nitrogen Credit Advisory Board to the Joint Standing Environmental Committee of the General Assembly*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2004a. *2004 List of Connecticut Waterbodies Not Meeting Water Quality Standards*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DEP. 2004b. *Connecticut Consolidated Assessment and Listing Methodology for 305(b) and 303(d) Reporting - 2004*. CT Dept. of Environmental Protection, Bureau of Water Management, Planning Division, Hartford, CT.
- CT DPH. 2003a. *Public Water Systems Violations Report Calendar Year 2002*. CT Department of Public Health, Hartford, CT.
- CT DPH. 2003b. *Report per Section 25-39a of the Connecticut General Statutes: Monitoring, Health Risks, and Treatment Costs for Organic Chemicals in Public Drinking Water for the Year 2002*. CT Department of Public Health, Hartford, CT.

- CT DPH. 2003c. *If I Catch It, Can I Eat It? A Guide to Safe-Eating of Fish Caught in Connecticut*. CT Department of Public Health, Hartford, CT.
- CT DPH and CT DEP. 2003. *State of Connecticut Guidelines for Monitoring Bathing Water and Closure Protocol: revised 2003*. CT Dept. of Health Services, CT Dept. of Environmental Protection, Hartford, CT.
- Dahl, T.E. 1990. *Wetlands Losses in the United States 1780's to 1980's*. U.S. Fish and Wildlife Service. Washington , D.C.
- Frink, C.R. and W.A. Norvell. 1984. *Chemical and Physical Properties of Connecticut Lakes*. The Connecticut Agricultural Experiment Station, New Haven, CT.
- Goodwin, R.G. and W.A. Niering. 1966. Connecticut's Coastal Marshes: A Vanishing Resource. Connecticut Arboretum Bulletin No. 12. revised with supplement. New London.
- Healy, D.F. and K.P. Kulp. 1995. *Water Quality Characteristics of Selected Public Recreational Lakes and Ponds in Connecticut*. U.S. Geologic Survey Water-Resources Investigations Report 95-4098, prepared in cooperation with the State of Connecticut Department of Environmental Protection, Hartford, CT.
- Kildow, J.T. C.S. Colgan, H.Kite-Powell, S. Shivendu, and R. Tindall. 2004. Estimates of Water-Quality Related Values and Other Relevant Data for Long Island Sound. Prepared for the Long Island sound Study, US EPA by The National Ocean Economics Project.
- Melvin, R.L., S.J. Grady, D.F. Healy, and F. Banach. 1986. *Connecticut Ground-Water Quality in the National Water Summary 1986 - Ground Water*. U.S, Geologic Survey Water-Supply Paper 2325.
- Metzler, K.J. and R.W. Tiner. 1992. *Wetlands of Connecticut*. State Geological and Natural History Survey, CT Dept. of Environmental Protection, Hartford, CT / U.S. Fish & Wildlife Service, National Wetlands Inventory, Newton Corner, MA.
- Neumann, R.M., R.J. Carley, C.P. Perkins, and R. Pirrie. 1996. *Preliminary Assessment of Total Mercury Concentrations in Fishes from Connecticut Water Bodies*. Department of Natural Resource Management and Engineering and Environmental Research Institute. University of Connecticut, Storrs, CT.
- Plafkin, J.L., M.T. Barbour, K.D. Porter, S.K. Gross, and R.M. Hughes. 1989. *Rapid Bioassessment Protocols for use in Streams and Rivers: Benthic Macroinvertebrates and Fish*. EPA/444/4-89-00. U.S. Environmental Protection Agency, Office of Water, Washington, DC.
- Strobel, C.J. 2000. *Coastal 2000 - Northeast Component: Field Operation Manual*. EPA/620/R-00.002. U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, Narragansett, RI.

- US EPA. 1993. *Total Waters Database: Version 1.0*. Office of Water, Washington, DC.
- US EPA. 1997. *Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Report Contents*. EPA-841-B-97-002A. Office of Water, Washington, DC.
- U.S. EPA. 2000. Ambient aquatic life water quality criteria for dissolved oxygen (saltwater): Cape Cod to Cape Hatteras. EPA-822-R-00-012. Office of Water, Washington, DC. 49 p.
- US EPA. 2002. *National Water Quality Inventory, 2000 Report to Congress*. EPA-841-R-02-001. Office of Water, U.S. Environmental Protection Agency, Washington, DC.
- US EPA. 2003. *Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act*. Assessment and Watershed Protection Division, Office of Wetlands, Oceans and Watersheds, U.S. Environmental Protection Agency, Washington, DC.
- Wright – Pierce. 2003. *Technical Report on the Impact of the General Permit on Concentrated Animal Feeding Operations in Connecticut*. Prepared for the CT Department of Environmental Protection. Wright Pierce, 700 Plaza Middlesex, Middletown, CT.

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT1000-00_01	PAWCATUCK RIVER	5.3	From head of tide, Rte 1 crossing in Pawcatuck-Westerly, US to RI border.	River
CT1001-00_01	Wyassup Brook	5.3	From mouth at Green Fall River, US to Wyassup Lake, North Stonington.	River
CT1002-00_01	Green Fall River_01	1.5	From RI border (very close to mouth) US to confluence with Wyassup Brook, North Stonington.	River
CT1002-00_02	Green Fall River_02	5.1	From confluence with Wyassup Brook, North Stonington US to Green Fall Reservoir.	River
CT1002-00_03	Green Fall River_03	1.9	From Green Fall Reservoir to headwaters, Voluntown.	River
CT1004-00_01	Shunock River_01	4.3	Mouth at Pawcatuck River US to small impoundment in North Stonington Center.	River
CT1004-00_02	Shunock River_02	4.0	Small impoundment in North Stonington Center US to headwaters.	River
CT1100-00_01	Wood River	5.0	From Hazard Pond @ RI border US to Porter Pond, Sterling.	River
CT2000-30_01	Fenger Brook	3.0	From head of tide @ Alewife Cove US to headwaters.	River
CT2102-00_01	Copps Brook_01	0.8	From mouth at Quiambog Cove US to outlet of Palmer Reservoir	River
CT2102-00_02	Copps Brook_02	4.2	From inlet to Palmer Reservoir US to headwaters.	River
CT2103-00_01	Seth Williams Brook_01	0.4	From mouth at Whitford Brook US to Shewville Road.	River
CT2103-00_02	Seth Williams Brook_02	0.6	From Shewville Road US to Highlands POTW.	River
CT2103-00_03	Seth Williams Brook_03	1.0	From Highlands POTW US to headwaters.	River
CT2104-00_01	Whitford Brook_01	1.6	From mouth at head of Mystic River estuary US end of Gallup Hill Road, Ledyard.	River
CT2104-00_02	Whitford Brook_02	0.7	From end of Gallup Hill Road, Ledyard, US to "Lantern Hill" wellfield, Ledyard.	River
CT2104-00_03	Whitford Brook_03	0.7	From "Lantern Hill" wellfield, Ledyard US to Whitford Pond..	River
CT2104-00_04	Whitford Brook_04	1.3	From Whitford Pond US to Long Pond, Ledyard.	River
CT2202-00_01	Latimer Brook_01	4.2	From mouth at head of tide, Niantic River, US to confluence with Cranberry Meadow Brook	River
CT2202-00_02	Latimer Brook_02	3.4	From confluence with Cranberry Meadow Brook US to Beckwith Pond (boundary of drinking water watershed).	River
CT2202-00_03	Latimer Brook_03	1.3	From Beckwith Pond US to headwaters @ Barnes Reservoir.	River
CT2205-00_01	Patagansett River_01	1.2	From head of tide @ Rte 156 crossing US to Gorton Pond.	River
CT2205-00_02	Patagansett River_02	1.9	From inlet to Gorton Pond US to Pattagansett Lake.	River
CT2205-00_03	Patagansett River_03	1.0	From inlet to Pattagansett Lake US to Powers Lake.	River
CT2206-00_01	Bride Brook_01	0.7	From mouth at head of estuary, just DS of Rte 156 US to Bride Lake.	River
CT2206-00_02	Bride Brook_02	2.0	From inlet to Bride Lake US to headwaters.	River
CT3000-08_01	Flat Brook, Ledyard_01	1.1	From mouth at Thames River in Gales Ferry - Ledyard us to headwaters.	River
CT3001-00_01	Trading Cove Brook	7.2	From head of tide @ Trading Cove US to headwaters.	River
CT3003-00_01	Poquetanuck Brook/Hewitt Brook	1.6	From mouth of Poquetanuck Brook US to Hewitt Brook, then up Hewitt Brook to Hallville Pond. (Segment actually contains a portion of Hewitt and Poquetanuck Brooks).	River
CT3004-00_01	Oxoboxo Brook_01	2.6	From mouth at head of tide, Horton Cove, US to Wheeler Pond. (includes Rockland Pond)	River
CT3004-00_02	Oxoboxo Brook_02	2.9	From Wheeler Pond US to Oxoboxo Lake.	River
CT3100-00_01	WILLIMANTIC RIVER_01	2.7	From mouth US to confuence with the Tenmile River.	River
CT3100-00_02	WILLIMANTIC RIVER_02	6.4	From confluence with Tenmile River US to Eagleville Pond.	River
CT3100-00_03	WILLIMANTIC RIVER_03	9.5	Inlet to Eagleville Pond, Brigham Road, Mansfield, US to Rte 84 crossing, Willington/Tolland.	River
CT3100-00_04	WILLIMANTIC RIVER_04	3.1	Rte 84 crossing, Willington, US to Bonemill Brook	River
CT3100-00_05	WILLIMANTIC RIVER_05	1.6	Bonemill Brook US to Stafford POTW.	River
CT3100-00_06	WILLIMANTIC RIVER_06	0.5	Stafford POTW US to confluence of Middle River and Furnace Brook.	River
CT3100-19_01	Eagleville Brook_01	0.7	From mouth at Eagleville Pond US to confluence with Kings (Roberts) Brook, Mansfield.	River
CT3100-19_02	Eagleville Brook_02	1.7	From confluence with Kings (Roberts) Brook, Mansfield US to headwaters near UConn campus.	River
CT3102-00_01	MIDDLE RIVER_01	0.2	From mouth at confluence with Furnace Brook to 800 ft US of Rte 32, Stafford Springs center.	River
CT3102-00_02	MIDDLE RIVER_02	3.7	From 800 ft US of Rte 32 to Orcutts Pond.	River
CT3102-00_03	MIDDLE RIVER_03	2.5	From Orcutts Pond US to State Line Pond. Trout stocked.	River
CT3102-03_01	Still Brook	0.3	from mouth at State Line Pond US to first major confluence.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT3103-00_01	Furnace Brook_01	0.2	From mouth at confluence with Middle River US to beginning of concrete channel (~1000 ft.)	River
CT3103-00_02	Furnace Brook_02	4.6	From beginning of concrete channel (~1000 ft US of mouth) US to Staffordville Reservoir.	River
CT3104-00_01	Roaring Brook_01	7.3	From mouth at Willimantic River US to Reservoir No2 (Willington, Stafford).	River
CT3104-00_02	Roaring Brook_02	3.0	From Reservoir No2 us to headwaters.	River
CT3104-00-2-L8 outlet_01	Ruby Lake outlet stream_01	0.1	From mouth at Roaring Brook Willington, US to wetland adjacent to truck stop, SW of Exit 71 off Rte 84.	River
CT3104-00-2-L8 outlet_02	Ruby Lake outlet stream_02	0.2	From wetland adjacent to truck stop, SW of Exit 71 off Rte 84, Willington US to Ruby Lake.	River
CT3104-01_01	Stckney Hill Brook	2.4	From mouth at Roaring Brook US to headwaters at small unnamed pond, Union.	River
CT3106-00_01	SKUNKAMAUG RIVER_01	15.6	Mouth at Hop River, Andover, us to headwaters, Tolland	River
CT3108-00_01	HOP RIVER_01	14.5	From mouth at Willimantic River near Rte 6, Willimantic, US to headwaters.	River
CT3110-00_01	Tenmile River - Willimantic_01	7.6	From mouth at Willimantic River near Rte 66, Willimantic, US to Stiles Pond.	River
CT3200-00_01	NATCHAUG RIVER_01	3.3	From mouth at confluence with Willimantic River US to Willimantic Reservoir (Natchaug River Dam).	River
CT3200-00_02	NATCHAUG RIVER_02	11.7	From inlet to Mansfield Hollow Reservoir at Basset Bridge Rd US to headwaters (confluence of Bigalow and Still Rivers).	River
CT3201-00_01	Bungee Brook_01	5.5	From mouth @ Still River US to Lake Bungee	River
CT3201-00_02	Bungee Brook_02	1.9	From Lake Bungee US to headwaters (excluding Chamberlain Pond)	River
CT3202-00_01	STILL RIVER_01	2.5	Mouth at Natchaug River US to confluence with Bungee Brook	River
CT3202-00_02	STILL RIVER_02	3.9	From confluence with Bungee Brook US to Dickenson Pond	River
CT3203-00_01	BIGELOW BROOK_01	5.2	From mouth at Still River, Eastford, US to Westford Rd crossing (US of confluence with Branch Brook).	River
CT3203-00_02	BIGELOW BROOK_02	4.6	From Westford Road crossing US to Myers Pond.	River
CT3203-00_03	BIGELOW BROOK_03	1.7	From Myers Pond US to headwaters, Mashpaug Pond.	River
CT3206-00_01	MOUNT HOPE RIVER_01	5.3	From mouth at Mansfield Hollow Reservoir, Atwoodville Rd, US to first Rte 89 crossing, near southern Ashford border.	River
CT3206-00_02	MOUNT HOPE RIVER_02	9.6	From first Rte 89 crossing US to headwaters, Morey Pond @ Union/Ashford border..	River
CT3207-00_01	FENTON RIVER_01	5.8	From mouth near Mansfield Hollow Reservoir, 0.5 miles DS of trib from Hansens Pond, US to Rte 44	River
CT3207-00_02	FENTON RIVER_02	10.3	From Rte 44 crossing US to headwaters.	River
CT3208-00_02	Sawmill Brook (Mansfield)	4.2	From Conantville Road crossing US to headwaters, Mansfield.	River
CT3300-00_01	FRENCH RIVER_01	4.6	From mouth at Quinebaug River US to North Grosvenordale Pond, Thompson.	River
CT3300-00_02	FRENCH RIVER	1.1	From inlet to North Grosvenordale Pond US to MA state line. Segment includes Langers Pond.	River
CT3400-00_01	FIVEMILE RIVER_01	1.0	From mouth @ confluence with Quinebaug, near Rte 6 in Danielson, US to upper end of Fivemile Pond.	River
CT3400-00_02	FIVEMILE RIVER_02	4.2	From mouth at upper end of Fivemile Pond US to confluence with Attawaugan Brook @ Rte. 395.	River
CT3400-00_03	FIVEMILE RIVER_03	9.7	From confluence with Attawaugan Brook @ Rte. 395 US to Quaddick Reservoir.	River
CT3400-00_04	FIVEMILE RIVER_04	4.5	From Quaddick Reservoir US to Little (Schoolhouse) Pond, Thompson.	River
CT3401-00_02	Rocky Brook_02	0.2	From East Thompson Rd Crossing US to MA border, Thompson.	River
CT3404-00_01	Whetstone Brook_01	4.3	From the confluence with Fivemile River US to Bog Meadow Reservoir.	River
CT3500-00_01	MOOSUP RIVER_01	1.5	From mouth @ Quinebaug River, Plainfield, US and including Plainfield North POTW outfall, Central Village.	River
CT3500-00_02	MOOSUP RIVER_02	4.1	From POTW outfall, Central Village, US to dam at first impoundment in Almyville.	River
CT3500-00_03	MOOSUP RIVER_03	6.4	From first impoundment in Almyville US to RI border.	River
CT3501-00_01	Quanduck Brook_01	3.9	From mouth @ Moosup River US to state line.	River
CT3503-00_01	Ekonk Brook	4.5	From mouth at Moosup River US to headwaters at Lockes Meadow Pond, Plainfield.	River
CT3600-00_01	PACHAUG RIVER_01	0.7	From mouth @ Quinebaug River, Griswold, US to Ashland Pond.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT3600-00_02	PACHAUG RIVER_02	0.7	Ashland Pond US to Hopeville Pond.	River
CT3600-00_03	PACHAUG RIVER_03	1.9	Upper end of Hopeville Pond @ Bitgood Road US to Patchaug Pond.	River
CT3600-00_04	PACHAUG RIVER_04	1.2	Doanville Pond US to Beachdale Pond.	River
CT3600-00_05	PACHAUG RIVER_05	2.6	Beachdale Pond US to Beach Pond.	River
CT3600-05_01	Crooked Brook	1.9	From mouth at Patchaug River US to Welsh Pond, Griswold.	River
CT3601-00_01	Great Meadow Brook	1.1	From mouth at Patchaug River, Voluntown, US to Mason-Gray Pond.	River
CT3604-00_01	Myron Kinney Brook_01	4.2	From mouth at Doaneville Pond, @ Voluntown/Griswold border, US to headwaters.	River
CT3700-00_01	QUINEBAUG RIVER_01	7.6	From mouth @ Shetucket River, Lisbon/Norwich border, US to outlet of Aspinook Pond, Lisbon/Griswold border.	River
CT3700-00_02	QUINEBAUG RIVER_02	3.0	From inlet to Aspinook Pond US to confluence with Mill Brook.	River
CT3700-00_03	QUINEBAUG RIVER_03	6.4	From confluence with Mill Brook, near Yawarsky Landfill, US to confluence with Moosup River	River
CT3700-00_04	QUINEBAUG RIVER_04	17.5	From confluence with Moosup River US to Putnum POTW.	River
CT3700-00_05	QUINEBAUG RIVER_05	3.3	From just US of Putnum POTW US to confluence with French River.	River
CT3700-00_06	QUINEBAUG RIVER_06	0.3	From confluence with French River US to West Thompson Reservoir.	River
CT3700-00_07	QUINEBAUG RIVER_07	6.3	From inlet to West Thompson Reservoir US to MA border.	River
CT3708-00_01	LITTLE RIVER (PUTNAM)_01	2.5	From mouth, at Quinebaug River, Putnum, US to drinking watershed boundary, just DS of Sheperds Pond in the southeast corner of Woodstock.	River
CT3708-00_02	LITTLE RIVER (PUTNAM)_02	1.7	From drinking watershed boundary, just DS of Sheperds Pond in the southeast corner of Woodstock, US to Roseland Lake. Includes confluence with Peake Brook.	River
CT3708-01_01	Muddy Brook - Woodstock_01	5.2	From mouth @ Roseland Lake, Woodstock, US to Rte 197 crossing.	River
CT3708-01_02	Muddy Brook_02	2.0	From Rte 197 crossing US to Moss Brook trib just DS of Rte 169.	River
CT3708-01_03	Muddy Brook_03	1.8	From unnamed trib just DS of Rte 169, US to Muddy Pond.	River
CT3708-10_01	North Running Brook_01	0.3	From mouth at Muddy Brook US to input from ditch in farm field (50 m US of farm road crossing).	River
CT3708-10_02	North Running Brook_02	2.7	From ditch in farm field (50 m US of farm road crossing) US to headwaters	River
CT3709-00_01	Wappaquoia Brook	3.2	From mouth at Mashamoquet US to Brayman Hollow Road (at pond).	River
CT3710-00_01	MASHAMOQUET BROOK_01	3.0	From mouth @ the Quinebaug River, Pomfret, US to confluence with Wolf Den Brook.	River
CT3710-00_02	MASHAMOQUET BROOK_02	4.4	From confluence with Wolf Den Brook US to Taft Pond. Includes diversion to swimming pond in Mashamoquet State Park.	River
CT3711-00_01	BLACKWELL BROOK	12.1	From mouth @ Quinebaug River, NE corner of Canterbury, US to headwater, Pomfret.	River
CT3712-02_01	Horse Brook	2.2	From mouth at Fry Brook, Plainfield, US to headwaters.	River
CT3713-00_01	Mill Brook - Plainfield_01	1.9	From mouth @ Quinebaug River, Canterbury, US to RR crossing, Plainfield.	River
CT3713-00_02	Mill Brook - Plainfield_02	2.2	From RR crossing, Plainfield, US to headwaters in a large wetland near Rhode Road, Griswold.	River
CT3800-00_01	SHETUCKET RIVER_01	1.6	From end of estuary, at Rte 2 crossing US to Greenville dam, Norwich.	River
CT3800-00_02	SHETUCKET RIVER_02	6.0	From Greenville Dam US through Greenville Dam impoundment, Taftvill Pond and Occum Pond to Baltic WPCF.	River
CT3800-00_03	SHETUCKET RIVER_03	5.0	From Sprague WPCF, near head of Occum Pond, US to confluence with Merrick Brook (ds of Scotland Dam).	River
CT3800-00_04	SHETUCKET RIVER_04	2.3	From confluence with Merrick Brook (ds of Scotland Dam) US to confluence with Cold Brook (Franklin Mushroom Farm STP).	River
CT3800-00_05	SHETUCKET RIVER_05	5.0	From Cold Brook DS of Franklin Mushroom Farm STP, US to confluence of Natchaug & Willimantic Rivers.	River
CT3803-00_01	Merrick Brook_01	11.8	From mouth @ Shetucket River, Scotland, US to headwaters, Hampton.	River
CT3805-00_01	LITTLE RIVER (SPRAGUE)_01	0.5	From mouth @ Shetucket River, Sprague/Lisbon, US to dam at Versailles Pond.	River
CT3805-00_02	LITTLE RIVER (SPRAGUE)_02	1.0	Inlet to Versailles Pond US to Papermill Pond, Sprague.	River
CT3805-00_03	LITTLE RIVER (SPRAGUE)_03	17.3	Upper end of Paper Mill Pond, Sprague, US to headwaters @ Hampton Reservoir, Hampton.	River
CT3900-00_01	YANTIC RIVER	6.3	From Vermont RR crossing in Norwich US to Fitchville Pond, Bozrah.	River
CT3900-00_02	YANTIC RIVER	5.8	From the inlet to Fitchville Pond US to headwaters @ the confluence of Sherman Brook and Deep River.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT3900-07_01	Kahn Brook_01	0.6	From mouth at Yantic River, Bozrah, US to chicken farm.	River
CT3900-07_02	Kahn Brook_02	2.3	From mouth at Yantic River, Bozrah, US to chicken farm.	River
CT3900-09_01	Bentley Brook	2.1	From mouth at Yantic River, Bozrah, us to headwaters.	River
CT3903-00_01	Sherman Brook	1.0	Mouth at Deep River, Norwich US to headwaters, Colchester.	River
CT3905-00_01	Pease Brook	9.2	From mouth at Yantic River, Bozrah, US to headwaters, Lebanon	River
CT3906-00_01	Gardner Brook	4.8	From inlet to Fitchville Pond US to outlet of Gardner Lake, Bozrah	River
CT3907-00_01	Susquetonscut Brook	12.7	From mouth at Yantic River, Franklin, US to headwaters, Lebanon.	River
CT4000-00_01	CONNECTICUT RIVER_01	9.0	From head of estuary near Chapman Pond outlet, East Haddam, US to Hurd State Park, East Hampton.	River
CT4000-00_02	CONNECTICUT RIVER_02	11.1	From Hurd State Park, East Hampton, US to confluence with Reservoir Brook, Portland.	River
CT4000-00_03	CONNECTICUT RIVER_03	34.5	From Reservoir Brook confluence, Portland, US to MA border.	River
CT4000-54_02	Clark Creek	0.5	From falls near Rte 154 US to headwaters at confluence of Roaring and Deep Hollow Brooks, Haddam	River
CT4003-00_04	Freshwater Brook_01	0.3	From North Road crossing in Enfield US to Jawbuck Brook confluence	River
CT4006-00_01	Salmon Brook Glastonbury	2.9	From mouth at Keeney Cove US to Addison Pond, Glastonbury.	River
CT4006-00_02	Salmon Brook Glastonbury	4.1	From Addison Pond US to headwaters, Glastonbury (includes Addison Pond).	River
CT4007-00_01	Hubbard Brook	5.1	From mouth at Ct. River, Glastonbury, US to headwaters.	River
CT4009-00_01	ROARING BROOK	6.4	From mouth at Connecticut River US to Angus Park Pond.	River
CT4009-00_02	ROARING BROOK	2.8	From Angus Park Pond US to Buckingham Reservoir.	River
CT4009-00_03	ROARING BROOK	2.4	From Buckingham Reservoir US to headwaters. Segment entirely within Manchester drinking water supply watershed.	River
CT4013-00_01	Sumner Brook	0.8	From mouth at Connecticut River, Middletown, US to confluence with Long Hill Brook.	River
CT4013-08_01	Long Hill Brook	0.4	From mouth at Sumner Brook US 0.4 miles to Pameacha Pond outlet.	River
CT4015-02_01	Beaver Meadow Brook	2.6	From mouth at Mill Creek US to headwaters	River
CT4017-03_01	Pattaconk Brook_01	4.0	From mouth at confluence with Great Brook, at head of Chester Creek, US to Cedar Lake.	River
CT4017-03_02	Pattaconk Brook_02	1.4	From Cedar Lake, US to Pattaconk Reservoir, Chester.	River
CT4018-00trib_01	Un-named Trib to the Deep River	0.4	From Deep River Transfer Station, Rte 80 to mouth at the Deep River	River
CT4019-00_01	Fall River	9.3	From mouth at CT River, Essex, US to headwaters (feeder to Tower Hill Lake), Deep River. Messerschmidts & Wrights Ponds treated as separate waterbodies.	River
CT4020-06_01	Mill Brook - Old Lyme_01	1.2	From mouth at Lieutenant River US to Upper Millpond, Old Lyme.	River
CT4020-06_02	Mill Brook - Old Lyme_02	0.7	Upper Millpond US to Rogers Lake.	River
CT4021-00_01	Black Hall River	2.6	From head of tide (.25 mi ds of confluence with Sawmill Brook) US to Blackhall Pond.	River
CT4100-00_01	Stony Brook	3.4	From mouth at canal parallel to CT River US to confluence with Muddy Brook.	River
CT4100-00_02	Stony Brook	3.9	From Muddy Brook US, past airport, to DeGraves Brook.	River
CT4100-00_03	Stony Brook	3.6	DeGraves Brook US to headwaters (confluence of Rocky Gutter Brook and Rattlesnake Brook).	River
CT4101-00_01	Muddy Brook_01	2.2	From mouth at Stony Brook, Suffield, US to confluence with Philo Brook.	River
CT4101-00_02	Muddy Brook_02	7.4	From confluence with Philo Brook US to headwaters (confluence of Still Brook and Spears Brook).	River
CT4200-00_01	SCANTIC RIVER_01	8.5	From mouth US to confluence with Broad Brook, East Windsor.	River
CT4200-00_02	SCANTIC RIVER_02	10.9	From confluence with Broad Brook, East Windsor, US to Somersville Pond, Somers.	River
CT4200-00_03	SCANTIC RIVER_03	5.9	From Somersville Pond, Somers, US to MA border.	River
CT4206-00_01	Broad Brook_01	0.8	From mouth US to Broad Brook Mill Pond, East Windsor.	River
CT4206-00_02	Broad Brook_02	8.9	From Broad Brook Mill Pond, East Windsor, US to headwaters, Ellington.	River
CT4300-00_01	FARMINGTON RIVER -01	8.5	From mouth US to Rainbow Reservoir dam, Windsor.	River
CT4300-00_02	Farmington River -02	19.6	From inlet to Rainbow Reservoir US to confluence with the Pequabuck River	River
CT4300-00_03	Farmington River - 03	8.4	From confluence with the Pequabuck River, Farminton US to lower Collinsville dam.	River
CT4300-00_04	Farmington River - 04	14.9	From lower Collinsville Dam US to confluence with Sandy Brook.	River
CT4300-00_05	Farmington River - 05	2.3	From confluence with Sandy Brook US to West Branch Reservoir.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT4300-48_01	Perkins Brook	0.7	Tributary to Farmington River at Rainbow Reservoir section in Windsor; drains Goodwin Pond.	River
CT4300-50_01	Rainbow Brook	1.7	From mouth at Farmington River, Windsor Locks, to headwaters, south of Bradley International Airport.	River
CT4300-51_01	Seymour Hollow Brook	1.3	From mouth at Farmington River, Windsor Locks, US to headwaters, south of Bradley International Airport	River
CT4302-00_01	MAD RIVER (WINCHESTER)	2.3	From mouth at the Still River US to Mad River Dam in Winsted.	River
CT4302-00_02a	MAD RIVER (WINCHESTER)	1.7	From Mad River Dam in Winsted US to outlet from Rugg Brook Reservoir	River
CT4302-00_02b	MAD RIVER (WINCHESTER)	0.5	From outlet of Rugg Brook Reservoir US to canal diversion into Rugg Brook Reservoir.	River
CT4302-00_03	MAD RIVER (WINCHESTER)	4.6	From boundary of drinking water watershed (at head of canal diversion to Rugg Brook Reservoir) US to headwaters.	River
CT4302-09_01	Indian Meadow Brook_01	0.5	From mouth at Mad River US to confluence with Colebrook Brook, Winchester Mouth at Farmington River, Barkhamsted, US to confluence with Sandy Brook, Colebrook.	River
CT4303-00_01	STILL RIVER_01	1.3		River
CT4303-00_02	STILL RIVER_02	2.5	Confluence with Sandy Brook, Colebrook, US to POTW, Winsted.	River
CT4303-00_03	STILL RIVER_03	1.7	From Winsted POTW US to confluence with Mad River.	River
CT4303-00_04	STILL RIVER_04	7.4	From confluence with Mad River US to headwaters.	River
CT4304-00_01	SANDY BROOK	8.6	From mouth at Still River, SE Colebrook, US to MA border, NE Norfolk.	River
CT4308-00_01	FARMINGTON RIVER, EAST BRANCH	1.0	Mouth at Farmington River mainstem, New Hartford, US to dam at Lake McDonough.	River
CT4310-00_01	NEPAUG RIVER_01	0.9	From mouth US to Nepaug Reservoir.	River
CT4310-00_02	NEPAUG RIVER_02	5.6	From inlet to Nepaug Reservoir US to headwaters (confluence of Bakersville & Cedar Swamp Brooks).	River
CT4311-00_01	Burlington Brook	4.6	Mouth at Farmington River US to headwaters (confluence of No. & So. Branches of Bunnell Brook), Burlington.	River
CT4314-00_01	Coppermine Brook_01	2.4	From mouth at Pequabuck River US to New Britain drinking water watershed boundary and water diversion (just us of confluence with Polkville Brook).	River
CT4314-00_02	Coppermine Brook_02	2.6	From drinking water watershed boundary and water diversion (just us of confluence with Polkville Brook) US to headwaters (confluence of Whigville & Wildcat Brooks).	River
CT4314-04trib_01	Wildcat Brook tributary	0.3	Unnamed trib that enters Wildcat Brook from the West, approximately 0.6 miles US from mouth of Wildcat Brook.	River
CT4315-00_01	PEQUABUCK RIVER_01	5.1	From mouth at Farmington River, US to RR crossing, US (south) of Rte 72, Plainville.	River
CT4315-00_02	PEQUABUCK RIVER_02	3.5	From RR crossing, south of Rte 72, Plainville, US to Bristol POTW outfall.	River
CT4315-00_03	PEQUABUCK RIVER_03	1.3	From Bristol POTW outfall US to exit of box culvert, downtown Bristol.	River
CT4315-00_04	PEQUABUCK RIVER_04	0.3	From exit of box culvert US to entrance of box culvert, center of Bristol.	River
CT4315-00_05	PEQUABUCK RIVER_05	2.6	From entrance to box culvert, center Bristol, US to Plymouth POTW.	River
CT4315-00_06	PEQUABUCK RIVER_06	5.2	From Plymouth POTW US to headwaters.	River
CT4317-00_01	Nod Brook	1.0	From mouth at dredge holes (Twin Lakes North & South) near Farmington River, Avon US to headwaters, Simsbury.	River
CT4318-00_01	Hop Brook	6.7	From mouth at Farmington River, Simsbury, US to headwaters at Tuller Reservoir.	River
CT4318-03_01	Stratton Brook	1.0	From mouth on Hop River in Simsbury US to headwaters.	River
CT4319-00_01	SALMON BROOK, WEST BRANCH	10.0	From mouth at Farmington River, Granby, US to headwaters, Hartland.	River
CT4319-07_01	Beach Brook_01	2.4	From mouth at West Branch of Salmon River US to headwaters, Granby.	River
CT4320-00_01	SALMON BROOK	13.3	From mouth at Farmington River, E. Granby US to headwaters.	River
CT4320-05_01	Beldon Brook	4.1	from mouth at East Branch of Salmon River, Granby US to headwaters, Hartland	River
CT4320-08_01	Mountain Brook	2.5	From mouth at East Branch of Salmon River US to headwaters of main tributary, Granby.	River
CT4320-09_01	Dismal Brook	3.5	From mouth at East Branch of Salmon River Us to MA border.	River
CT4400-00_01	PARK RIVER	2.2	From mouth at Connecticut River US to confluence with North Branch.	River
CT4400-01_01	South Branch of Park River_01	0.2	From mouth at confluence with North Branch US through and up to conduit entrance.	River

Waterbody Segment Locations

Appendix A

WBIDSEgid	Segment Name	Segment Size	Location Description	Waterbody Type
CT4400-01_02	South Branch of Park River_02	2.7	From entrance to conduit US to confluence of Piper and Trout Brooks.	River
CT4402-00_01	Piper Brook_01	0.1	From mouth, at South Branch of Park River, West Hartford, through conduit under New Britain Ave.	River
CT4402-00_02	Piper Brook_02	4.8	From New Britain Ave, West Hartford, US to St. Mary's cemetery where it emerges from pipe under New Britain.	River
CT4403-00_01	Trout Brook_01	1.1	From mouth at South Branch of the Park River (confluence with Piper Brook), West Hartford, US to Rte 84, Park Road Exit 42.	River
CT4403-00_02	Trout Brook_02	0.9	From Rte 84 at Trout Brook Exit (42), W. Hartford, US to Park Road crossing. Entire segment flows through concrete channel.	River
CT4403-00_03	Trout Brook_03	5.9	From Boulevard crossing US to Woodbridge Lake.	River
CT4404-00_01	PARK RIVER, NORTH BRANCH	0.5	From mouth at confluence with South Branch US through and up to entrance of conduit, Farmingotn Ave.	River
CT4404-00_02	PARK RIVER, NORTH BRANCH	4.3	From entrance to conduit, Farmington Ave, US to confluence of Tumble and Wash Brooks.	River
CT4500-00_01	HOCKANUM RIVER_01	4.1	From mouth at Ct River, E. Hartford, US to 1st dam at Scotland Impoundment, includes impoundment behind E. Hartford town hall.	River
CT4500-00_02	HOCKANUM RIVER_02	3.6	From 1st dam at Scotland Impoundment US to confluence with South Fork of Hockanum (sometimes known as Hop) River.	River
CT4500-00_03	HOCKANUM RIVER_03	3.4	From confluence with the South Fork of the Hockanum River (just US of "Laurel Lake") US to Union Pond, Manchester.	River
CT4500-00_04	HOCKANUM RIVER_04	3.2	From inlet to Union Pond, Manchester US to one mile DS of Dart Hill Road, Vernon (~ 1.5 mi US of confl w/ Tankerhoosen). Segment includes confluence with Tankerhoosen River. Union Pond treated as separate waterbody.	River
CT4500-00_05	HOCKANUM RIVER_05	2.3	From one mile DS (south) of Dart Hill Road, Vernon, US to Vernon POTW.	River
CT4500-00_06	HOCKANUM RIVER_06	3.8	From Vernon POTW US to Vernon Ave, Rockville.	River
CT4500-00_07	HOCKANUM RIVER_07	0.7	From Vernon Ave (outlet of culvert), Rockville, US to Paper Mill Pond (inlet to culvert).	River
CT4500-00_08	HOCKANUM RIVER_08	0.7	From Paper Mill Pond US to Shenipsit Lake.	River
CT4501-00_01	Charters Brook	6.1	From mouth at Shenipsit Lake Tolland US to headwaters near Webster Rd Ellington	River
CT4503-00_01	Tankerhoosen River_01	1.5	From mouth at Hockanum River, near Vernon/Manchester border, US to Tankerhoosen Lake, Vernon.	River
CT4503-00_02	Tankerhoosen River_02	4.1	From Tankerhoosen Lake, Vernon, US to headwaters @ Walker Reservoir.	River
CT4503-01_01	Gages Brook	2.0	From mouth at Walker Reservoir East (head of Tankerhoosen River), Vernon, US to headwaters, Tolland.	River
CT4600-00_01	MATTABASSET RIVER_01	3.3	From mouth at CT River, Cromwell, US to Rte 3 & 217.	River
CT4600-00_02	MATTABASSET RIVER_02	3.8	From Rte 3 & 217 US to dam just US of Berlin St, East Berlin.	River
CT4600-00_03	MATTABASSET RIVER_03	3.8	From dam just US of Berlin St, East Berlin, US to just US of Willow Brook.	River
CT4600-00_04	MATTABASSET RIVER_04	1.8	From just US of Willow Brook US to dam on Railroad Pond.	River
CT4600-00_05	MATTABASSET RIVER_05	1.0	From dam on Railroad Pond US to inlet to Paper Goods Pond.	River
CT4600-00_06	MATTABASSET RIVER_06	1.3	From inlet to Paper Goods Pond US to Hart Pond dam.	River
CT4600-00_07	MATTABASSET RIVER_07	1.6	From inlet Hart Pond US to Wasel Reservoir.	River
CT4600-01_01	John Hall Brook_01	2.3	From mouth at Mattabasset, just below Hart Pond, US to Kenmere Reservoir.	River
CT4600-01_02	John Hall Brook_02	1.0	From Kenmere Reservoir US to Hallmere Reservoir.	River
CT4600-07_01	Little Brook (Rocky Hill)	1.9	From mouth at Mattabasset River US to source near Trinity Rd, Rocky Hill.	River
CT4600-13_01	Spruce Brook (Berlin)	5.1	From mouth at Mattabasset River US to source at Lamentation Mountain.	River
CT4600-23_01	Coles Brook	3.5	From mouth at Mattabasset US to source at Shunpike Rd, Cromwell.	River
CT4600-26_01	Miner Brook	2.9	From mouth at Mattabasset US to source just south of Westfield St, Middletown	River
CT4600-27_01	Willow Brook (Cromwell)	1.4	From mouth at Mattabasset River US to headwaters near junctin of Coles Road and Willow Brook Road, Cromwell	River
CT4601-00_01	Belcher Brook	3.6	From mouth at Mattabasset River US to source at Silver Lake, Berlin.	River
Ct4601-01_01	Crooked Brook_01	1.1	From mouth at Belcher Brook US to Swede Pond, Berlin.	River
Ct4601-01_02	Crooked Brook_02	0.3	From Swede Pond US to Elton Rd crossing, Berlin.	River
Ct4601-01_03	Crooked Brook_03	1.4	From Elton Rd crossing US to headwaters, Berlin.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT4602-00_01	Willow Brook_01	3.6	From mouth at Mattabasset River US to outlet of conduit east of Hart Park, New Britain.	River
CT4602-00_02	Willow Brook_02	2.5	From outlet of conduit east of Hart Park, New Britain, US through conduit and then US to Shuttle Meadow Reservoir.	River
CT4603-00_01	Webster Brook	3.4	From mouth at Mattabasset River to source in Newington.	River
CT4604-00_01	Sawmill Brook (Middletown)	3.0	From mouth at Mattabasset River US to Source at Atkin Street Pond (Highland Pond) Middletown.	River
CT4607-00_01	COGINCHAUG_01	1.9	From mouth at Mattebessett River, at Cromwell border, US to Rte 3 crossing, Middletown.	River
CT4607-00_02	COGINCHAUG_02	0.3	From Rte 3 US to just US of Veterans Memorial Park (just ds of Rte 66).	River
CT4607-00_03	COGINCHAUG_03	0.9	From Veterans Memorial Park US to Starr Mill Pond dam.	River
CT4607-00_04	COGINCHAUG_04	4.2	From Starr Mill Pond US (past Wadsworth Falls) to Strictland Road, Middlefield.	River
CT4607-00_05	COGINCHAUG_05	4.7	From Strictland Road, Middlefield, US to Meeting House Road, Durham.	River
CT4607-00_06	COGINCHAUG_06	3.1	From Meeting House Road, Durham, US to headwaters, near Bluff Head, north Guilford.	River
CT4700-00_01	Salmon River	10.3	Mouth at Ct River, East Haddam, US to headwaters at confluence of Blackledge and Jeremy Rivers, Colchester.	River
CT4703-01_01	Cabin Brook	1.5	From mouth at Nelkin Brook US to Rte 2/Rte 11 interchange (small trib near exit 20 ramp), Colchester.	River
CT4705-00_01	JEREMY RIVER_01	1.2	From mouth at Salmon River, US to dam at Rte 149 crossing, North Westchester (Colchester).	River
CT4705-00_02	JEREMY RIVER_02	7.3	From dam at Rte 149 crossing, North Westchester (Colchester) US to headwaters at Holbrook Pond, Hebron.	River
CT4707-00_01	BLACKLEDGE RIVER	10.2	From mouth at Salmon River, Colchester, US to headwaters, Bolton.	River
CT4707-06_01	Flat Brook, Marlborough	2.0	From mouth at Blackledge River, Marlborough, US to headwaters at Diamond lake, Glastonbury.	River
CT4707-12_01	Lyman Brook	3.7	From mouth at Blackledge River, just US of Rte 2 to headwaters, Marlborough.	River
CT4709-00_01	Pine Brook_01	2.9	From mouth at Salmon River, Haddam, US to Pocotopaug Creek.	River
CT4709-00_02	Pine Brook_02	4.5	From confluence with Pocotopaug Creek US to headwaters, US of Rte 66, E. Hampton.	River
CT4709-04_01	Pocotopaug Creek_01	2.0	From mouth at Pine Brook, US of Rte 151 in E. Hampton, US to Old Chestnut Hill Rd.	River
CT4709-04_02	Pocotopaug Creek_02	2.1	From Old Chestnut Hill Rd, E. Hampton US to dam on Lake Pocotopaug US of Rte 66.	River
CT4800-00_01	EIGHTMILE RIVER - Lyme	8.1	From mouth at Hamburg Cove, Ct River, US to headwaters.	River
CT4802-00_01	Eightmile River, E. Branch - Salem	8.1	From mouth at Eight Mile River, US of Rte 156, Lyme.	River
CT5000-55_01	Oyster River trib_01 - Milford	1.3	Tributary to Oyster River, Milford. From Rte. 162, Merwin Ave., crossing US to Amtrak crossing above Quirk's Pond.	River
CT5000-55_02	Oyster River trib_02 - Milford	0.4	Tributary to Oyster River, Milford. From Amtrak crossing above Quirk's Pond, US to unnamed swamp (headwaters) adjacent to Light Sources Inc., Cascade Blvd.	River
CT5103-00_01	MENUNKETESUCK RIVER_01	2.0	From Chapman Pond US to Bushy Pond, Clinton.	River
CT5103-00_02	MENUNKETESUCK RIVER_02	2.0	From Bushy Pond, Clinton, US to Kelseytown Reservoir, Clinton-Killingworth border.	River
CT5103-00_03	MENUNKETESUCK RIVER_03	5.7	From Kelseytown Reservoir US to North Roast Meat Hill Road crossing.	River
CT5104-00_01	Indian River - Clinton	5.7	Head of tide (ds of Rte 95) to headwaters.	River
CT5105-01_01	Pond Meadow Brook	0.7	From mouth on Chatfield Hollow Brook just ds of the Old Mill Pond in Chatfield Hollow State Park, Killingworth, US to Kroupa Pond.	River
CT5106-00_01	HAMMONASSET RIVER	7.8	From Rt 95 US to Hammonasset Reservoir	River
CT5106-00_02	HAMMONASSET RIVER	2.6	From Hammonasset Reservoir US to Old County Road.	River
CT5106-00_03	HAMMONASSET RIVER	3.3	From Old County Rd, Killingworth, US to Rt. 79 crossing at Madison/Durham border.	River
CT5107-00_01	Neck River	9.0	From head of tide/saltwater intrusion US to headwaters.	River
CT5108-00_01	East River - Guilford	3.0	Coastal river, mostly tidal, no appropriate benthic habitat.	River
CT5110-00_01	WEST RIVER (GUILFORD)	2.1	From Rt 1 US to Thirsty Lake, Guilford.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT5110-00_02	WEST RIVER (GUILFORD)	5.2	From Thirsty Lake US to confluence with Branch Brook just DS of lake Quonnipaug	River
CT5111-00_01	BRANFORD RIVER	2.8	From Rt 1 US to confluence with Notch Hill Brook.	River
CT5111-00_02	BRANFORD RIVER	3.0	From confluence with Notch Hill Brook US to Lake Gaillard.	River
CT5112-00_01	FARM (EAST HAVEN) RIVER	6.0	From confluence with Lake Saltonstall outlet US to Burrs Brook.	River
CT5112-00_02	FARM (EAST HAVEN) RIVER	1.1	From confluence with Burrs Brook US to Pages Mill Pond, at Mill Road, North Branford.	River
CT5112-00_03	FARM (EAST HAVEN) RIVER	8.3	From Pages Mill Pond US to headwaters.	River
CT5112-10_01	Burrs Brook	1.6	From mouth at Farm River US to discharge stream from Vic's Pond on Tomasso property. Tributary to Farm River leading to drinking water supply, Lake Saltonstall.	River
CT5200-00_01	QUINNIPIAC RIVER_01	5.0	From Rt. 5, North Haven, US to head of tide at Toelles Road, Wallingford.	River
CT5200-00_02	QUINNIPIAC RIVER_02	8.3	From Toelles Road, Wallingford, US to Hanover Pond, Meriden.	River
CT5200-00_03	QUINNIPIAC RIVER_03	1.5	From Hanover Pond, Meriden, US through Gorge to Waterworks (breached dam), at Cheshire-Meriden line.	River
CT5200-00_04	QUINNIPIAC RIVER_04	4.6	From breached dam at Cheshire-Meriden border US to confluence with Tenmile River.	River
CT5200-00_05	QUINNIPIAC RIVER_05	7.7	From confluence with Tenmile River US to Rt 10 crossing, north of Rt. I-84, Southington.	River
CT5200-00_06	QUINNIPIAC RIVER_06	2.9	From Rt 10 crossing, Southington, US to Hamlin Pond, Plainville.	River
CT5200-00_07	QUINNIPIAC RIVER_07	3.6	From Hamlin Pond US to headwaters.	River
CT5200-02_01	Patton Brook	2.6	From mouth at Quinnipiac River US to headwaters.	River
CT5200-07_01	Honeypot Brook	4.1	Mouth at Quinnipiac River US to Wiese Road.	River
CT5200-23_01	Hemingway Creek	0.8	From end of saline water, 200 m ds of Quinipiac St crossing, US to Golf Pond just over East Haven border.	River
CT5201-00_01	EIGHTMILE RIVER - Southington	3.3	From mouth at confluence with Quinnipiac River US to Grannis Pond.	River
CT5201-00_02	EIGHTMILE RIVER - Southington	2.4	From Grannis Pond, Southington, US to headwaters at Bristol Fish & Game Club Pond.	River
CT5201-04_01	Dayton Brook	1.7	From mouth at confluence with Eightmile river to headwaters, Southington.	River
CT5201-08_01	Roaring Brook	2.1	From mouth at Dayton Brook, Southington, US to Wolcott Reservoir.	River
CT5202-00_01	Tenmile River - Southington_01	3.6	From mouth at Q River, Southington, US to Moss Farms Pond (just US of Jarvis St.).	River
CT5202-00_02	Tenmile River - Southington_01	1.7	From Moss Farms Pond (just US of Jarvis St) to headwaters at Mixville Pond.	River
CT5203-00_01	Misery Brook_01	4.2	From mouth at Quinnipiac River at Southington-Cheshire border US to Slopers Pond, Southington.	River
CT5203-00_02	Misery Brook_02	0.8	From Slopers Pond, Southington, US to Smith Pond.	River
CT5205-00_01	Sodom Brook	3.8	From mouth at Quinnipiac River US to headwaters, Meriden.	River
CT5206-00_01	Harbor Brook_01	2.1	From mouth at Quinnipiac River US to box culvert near railroad and Main St.	River
CT5206-00_02	Harbor Brook_02	0.4	From culvert exit near Rt. 71 US to culvert entrance, US of Fire Station.	River
CT5206-00_03	Harbor Brook_03	1.5	From box culvert near fire station US to Baldwin's Pond.	River
CT5207-00_01	Wharton Brook_01	3.8	From mouth at Quinnipiac River at Wallingford - No. Haven border US to Simpson Pond, Wallingford.	River
CT5207-00_02	Wharton Brook_02	2.8	From Simpson Pond US to North Farms Reservoir, Wallingford.	River
CT5207-02_01	Allen Brook_01	0.1	From mouth at Wharton Brook us to Allen Brook Pond	River
CT5207-02_02	Allen Brook_02	1.8	From Allen Brook Pond US to headwaters, Wallingford.	River
CT5208-00_01	Muddy Brook_01	0.8	From mouth at Q River, North Haven US to Muddy River Pond.	River
CT5208-00_02a	Muddy Brook_02a	8.2	From Muddy River Pond, at Rte 91, North Haven US to unnamed tributary just DS of Tyler Mill Road crossing, Wallingford.	River
CT5208-00_02b	Muddy Brook_02b	1.7	From unnamed tributary just DS of Tyler Mill Road crossing US to MacKenzie Reservoir, Wallingford.	River
CT5208-00_03	Muddy Brook_03	2.0	From MacKenzie Reservoir US to Spring Lake, Wallingford.	River
CT5208-00_04	Muddy Brook_04	0.9	From Spring Lake US to Rt. 68, Wallingford.	River
CT5302-00_01	Mill River - New Haven_01	1.7	From Rt. 91 crossing US to Lake Whitney.	River
CT5302-00_02	Mill River - Hamden/Cheshire_02	8.8	From Lake Whitney US to Cook Hill Road, Cheshire.	River
CT5302-00_03	Mill River - Cheshire_03	3.0	From Cook Hill Road, Cheshire US to headwaters.	River
CT5303-00_01	Sargent River	3.9	From mouth at West River, just US of lake Dawson, Woodbridge, US to headwaters, excluding L. Chamberlain and L. Glen.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT5305-00_01	WEST RIVER (WEST HAVEN)	3.3	From head of tide at Chapel St US to Konold's Pond, Woodbridge.	River
CT5305-00_02	WEST RIVER (WEST HAVEN)	3.2	From Konold's Pond US to Lake Bethany.	River
CT5306-00_01	Indian River - Milford	4.9	Milford.	River
CT5307-00_01	WEPAWAUG RIVER	0.8	From Rt 162, head of tide, US to Rt 1.	River
CT5307-00_02	WEPAWAUG RIVER	4.2	From Rt 1 US to Lake Wepawaug.	River
CT5307-00_03	WEPAWAUG RIVER	2.3	From Lake Wepawaug US to Wepawaug Reservoir.	River
CT5307-00_04	WEPAWAUG RIVER	3.1	From Wepawaug Reservoir US to Milan Road, Woodbridge.	River
CT5307-00_05	WEPAWAUG RIVER	1.0	From Milan Road US to headwaters.	River
CT6000-00_01	HOUSATONIC RIVER_01	2.8	From end of saltwater at Wooster Island US to confluence with Naugatuck River	River
CT6000-00_02	HOUSATONIC RIVER_02	1.5	From confluence with Naugatuck River US to Derby Dam (Lake Housatonic Dam).	River
CT6000-00_03	HOUSATONIC RIVER_03	5.1	From head of Lake Lillinonah @ confluence with Town Farm Brook, Bridgewater, US to Boardman Bridge (Road) crossing, New Milford.	River
CT6000-00_04	HOUSATONIC RIVER_04	8.0	From Boardman Bridge (Road) crossing New Milford, US to dam @ Bulls Bridge, near Rte 114, Kent.	River
CT6000-00_05	HOUSATONIC RIVER_05	6.6	From dam @ Bulls Bridge, near Rte 114, Kent US to confluence with Mauwee Brook, Kent.	River
CT6000-00_06	HOUSATONIC RIVER_06	18.3	From confluence with Mauwee Brook, Kent US to Great Falls dam, Amesville, Salisbury.	River
CT6000-00_07	HOUSATONIC RIVER_07	7.3	From Great Falls dam, Amesville, Salisbury US to state line.	River
CT6000-62_01	Fivemile Brook	2.2	Mouth at the Housatonic River in Oxford US to headwaters.	River
CT6001-00_01	Sages Ravine Brook_01	0.7	from mouth at Schenob Brook US to Rte 44 crossing, Salisbury	River
CT6001-00_02	Sages Ravine Brook_02	0.7	from Rte 44 crossing US to MA border, Salisbury	River
CT6004-00_01	Konkapot River	2.0	From MA border to MA border, North Canaan (small loop through CT).	River
CT6005-00_01	FACTORY BROOK	1.7	From mouth at Salmon Creek, Salisbury US to Salsbury WPCF, just ds of confluence with Burton Brook.	River
CT6005-00_02	FACTORY BROOK	1.1	From Salisbury WPCF us to headwaters @ Wonoskopomuc Lake	River
CT6006-00_01	SPRUCE SWAMP CREEK	2.7	Mouth @ Salmon Creek US to confluence of Ball and Moore Brooks, Salisbury.	River
CT6006-01_01	Moore Brook	1.7	From mouth at confluence with Ball Brook and head of Spruce Swamp Creek US to headwaters at Fisher Pond	River
CT6007-00_01	SALMON CREEK	5.8	Mouth @ Housatonic River, southeast Salisbury, US to headwaters.	River
CT6008-00_01	Mill Brook - Cornwall_01	1.6	From mouth at Housatonic River, Cornwall, US to confluence with Heffers Brook (just US of Rte 128 crossing).	River
CT6008-00_02	Mill Brook - Cornwall_02	2.2	From confluence with Heffers Brook (just US of Rte 128 crossing) US to headwaters at Cream Hill Lake.	River
CT6010-00_01	FURNACE BROOK	3.6	From mouth @ the Housatonic River @ Cornwall US to headwaters @ confluence of Valley & Birdseye Brooks.	River
CT6013-00_01	COBBLE BROOK	3.3	From mouth at east bank of Housatonic River, US to headwaters, Kent.	River
CT6016-03_02	Bull Mountain Brook	3.0	Mud Pond US to headwaters at Geer Mountain Pond, Kent.	River
CT6019-00_01	DEEP BROOK	5.3	Mouth @ Pootatuck River US to headwaters, Newtown.	River
CT6020-00_01	POOTATUCK RIVER_01	2.3	From mouth on west bank of Housatonic River, Newtown, US to Newtown WPCF (just DS of confluence with Deep Brook).	River
CT6020-00_02	POOTATUCK RIVER_02	7.7	From mouth on west bank of Housatonic River, Newtown, US to Newtown WPCF (just DS of confluence with Deep Brook).	River
CT6023-00_01	EIGHTMILE BROOK	11.4	From mouth at Housatonic River US to headwaters at Lake Quassapaug.	River
CT6025-00_01	FARMILL RIVER	0.6	From mouth at Housatonic River in Shelton US to Rte 110 crossing.	River
CT6025-00_02	FARMILL RIVER_02	3.9	From Rte 110 crossing in Shelton US to confluence with Means Brook	River
CT6025-00_03	FARMILL RIVER_03	3.0	From confluence with Means Brook US to Far Mill Reservoir at beginning of drinking water watershed.	River
CT6025-00_04	FARMILL RIVER_04	3.6	From Far Mill Reservoir at beginning of drinking water watershed US to headwaters.	River
CT6026-00_01	Pumpkin Ground Brook	2.9	From Mouth at Housatonic River US to Beaver Dam Lake, Stratford.	River
CT6100-00_01	BLACKBERRY RIVER_01	0.8	Mouth @ Housatonic River in North Canaan US to North Canaan WPCF.	River
CT6100-00_02a	BLACKBERRY RIVER_02a	2.5	North Canaan WPCF US to drainage ditch at upper boundary of Lime Quarry.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT6100-00_02b	BLACKBERRY RIVER_02b	1.3	From drainage ditch at upper boundary of Lime Quarry on Lower Road US to Blast Furnace near Lower Pond dam, Canaan.	River
CT6100-00_03	BLACKBERRY RIVER_03	3.6	From crossing of Lower Rd and Furnace Hill Rd (Blast Furnace) at 1st dam US to 1 mile ds of Norfolk WPCF.	River
CT6100-00_04	BLACKBERRY RIVER_04	1.0	From 1 mile ds of Norfolk WPCF US to Norfolk WPCF.	River
CT6100-00_05	BLACKBERRY RIVER_05	1.0	From Norfolk WPCF us to headwaters @ confluence of Wood Creek and Spaulding Brook	River
CT6200-00_01	HOLLENBECK RIVER	12.9	From mouth US to headwaters.	River
CT6300-00_01	Tenmile River - Sherman_01	0.6	From mouth at Housatonic River, Sherman, CT us to NY state line	River
CT6301-00_01	Mudge Pond Brook_01	1.2	From NY border in Sharon US to Sharon WPCF.	River
CT6301-00_02	Mudge Pond Brook_02	1.3	From Sharon WPCF US to Mudge Pond..	River
CT6401-00_01	Sawmill Brook (Sherman)	2.4	From mouth at Candlewood Lake in Sherman US to MA border.	River
CT6500-00_01	ASPETUCK RIVER	12.9	From mouth at Housatonic River in New Milford US to headwaters @ North Spectacle Pond.	River
CT6502-00_01	EAST ASPETUCK RIVER	1.4	From mouth at confluence with West Aspetuck River US Wellsville Road Crossing, New Milford.	River
CT6502-00_02	EAST ASPETUCK RIVER	4.6	From Wellsville Road crossing US to Wheaton Road Crossing, New Milford.	River
CT6502-00_03	EAST ASPETUCK RIVER	3.3	From Wheaton Road crossing US to Lake Wauramaug.	River
CT6502-01_01	Lake Waramaug Brook	5.0	From mouth at Lake Waramaug us to headwaters at Eel Pond, Warren.	River
CT6600-00_01	STILL RIVER_01	6.8	From mouth at Housatonic River, Brookfield, US to Silvermine Road crossing (USGS station), Brookfield (just DS of confluence with Charles Pickneys Brook).	River
CT6600-00_02	STILL RIVER_02	5.7	From Silvermine Road crossing US to confluence with Limekiln Brook.	River
CT6600-00_03	STILL RIVER_03	2.2	From confluence with Limekiln Brook US to confluence with Sympaug River.	River
CT6600-00_04	STILL RIVER_04	1.5	From confluence Sympaug River US to confluence with Padanaram Brook.	River
CT6600-00_05	STILL RIVER_05	3.3	From confluence with Padanaram Brook US to Lake Kenosia.	River
CT6600-00_06	STILL RIVER_05	0.9	From Lake Kenosia US to headwaters.	River
CT6603-00_01	PADANARAM BROOK	3.7	From mouth at Still River in Danbury US to headwaters @ Lake Kenosia	River
CT6604-00_01	SYMPAUG BROOK_01	0.6	From mouth at Still River, Cross Street, US to Wooster St crossing.	River
CT6604-00_02	SYMPAUG BROOK_02	2.9	From Wooster St. crossing US to headwaters @ Sympaug Pond.	River
CT6606-00_01	LIMEKILN BROOK_01	0.3	From mouth US to Rte 6 crossing, and US to confluence with Danbury WPCF outfall channel, behind shopping plaza @ pump station.	River
CT6606-00_02	LIMEKILN BROOK_02	1.1	From confluence with Danbury WPCF outfall channel US to first road crossing above landfill, Shelter Rock Road.	River
CT6606-00_03	LIMEKILN BROOK_03	5.3	From Shelter Rock Road crossing US to headwaters.	River
CT6700-00_01	SHEPAUG RIVER	17.7	From head of Lake Lillinonah, just ds of Minor Bridge Road, US to confluence with the Bantam River.	River
CT6700-00_02	SHEPAUG RIVER	3.5	From confluence with Bantam River US to Shepaug Reservoir.	River
CT6705-00_01	BANTAM RIVER_01	4.4	From mouth @ Shepaug River US to confluence with Bizell Brook.	River
CT6705-00_02	BANTAM RIVER_02	2.0	From confluence with Bizell Brook US to hydropower dam @ Rte 209 crossing in Bantam.	River
CT6705-00_03	BANTAM RIVER_03	1.5	From hydropower dam @ Rte 209 crossing US to outlet of Bantam Lake	River
CT6705-00_04	BANTAM RIVER_04	10.8	From inlet to Bantam Lake US to headwaters.	River
CT6705-12_01	Hill Brook	2.5	From mouth at Bantam River near Litchfield WPCF US to headwaters.	River
CT6800-00_01	POMPERAUG RIVER_01	2.6	From mouth @ Housatonic River, Southbury, US to confluence with Transylvania Brook.	River
CT6800-00_02	POMPERAUG RIVER_02	2.0	From confluence with Transylvania Brook US to Flood Bridge Road.	River
CT6800-00_03	POMPERAUG RIVER_03	1.3	From Flood Bridge Road US to confluence with Bullet Hill Brook, includes Heritage Village POTW discharge.	River
CT6800-00_04	POMPERAUG RIVER_04	7.2	From confluence with Bullet Hill Brook US to headwaters @ confluence of Nonewaug and Weekepeeme Rivers.	River
CT6802-00_01	NONEWAUG RIVER_01	4.0	From mouth at Pomperaug River US to confluence with Harvey Brook.	River
CT6802-00_02	NONEWAUG RIVER_02	4.4	From confluence with Harvey Brook US to Big Meadow Pond (Judd Reservoir).	River
CT6802-00_03	NONEWAUG RIVER_03	1.1	From Big Meadow Pond (Judd Reservoir) US to headwaters.	River
CT6802-05_01	Harvey Brook	2.1	From mouth at Nonewaug River US to headwaters, northern Woodbury, near Bethlehem border.	River

Waterbody Segment Locations

Appendix A

WBIDSEgid	Segment Name	Segment Size	Location Description	Waterbody Type
CT6804-00_01	WEEKEEPPEEMEE RIVER	9.0	From mouth at confluence with Nonewaug US to headwaters.	River
CT6804-04_01	Wood Creek	3.3	From mouth at Weekepeemee River, Bethlehem, US to headwaters at Zieglers Pond,	River
CT6806-00_01	TRANSYLVANIA BROOK_01	1.1	From mouth @ Pomperaug River US to Southbury Training School STP.	River
CT6806-00_02	TRANSYLVANIA BROOK_02	0.4	From Southbury Training School STP US to Gravel Pit Pond	River
CT6806-00_03	TRANSYLVANIA BROOK_03	3.8	From Gravel Pit Pond US to headwaters.	River
CT6900-00_01	NAUGATUCK RIVER_01	6.0	From mouth @ Housatonic River, Derby, US to Rimmon (Tingue) Dam, Seymour (just DS of confluence with Bladens River).	River
CT6900-00_02	NAUGATUCK RIVER_02	11.0	From Rimmon Dam, Seymour, US to Waterbury WPCF. Segment includes Wtby, Naug & Beacon Falls WPCFs, & dredge holes in river between Rts 42 & 67 in Beacon Falls.	River
CT6900-00_03	NAUGATUCK RIVER_03	3.9	From Waterbury WPCF US to confluence with Steele Brook.	River
CT6900-00_04	NAUGATUCK RIVER_04	1.5	From confluence with Steele Brook US to sewage leak at drain pipe (near old bridge abutment) along Chase River Road, Waterbury.	River
CT6900-00_05	NAUGATUCK RIVER_05	4.7	From just us of pipe (with sewage lead) off of Chase River Road US to Thomaston WPCF (just US of confluence with Branch Brook).	River
CT6900-00_06	NAUGATUCK RIVER_06	8.9	From Thomaston WPCF US to Spruce Brook, Litchfield.	River
CT6900-00_07	NAUGATUCK RIVER_07	2.6	Confluence with Spruce Brook, Litchfield, US to Torrington WPCF.	River
CT6900-00_08	NAUGATUCK RIVER_08	1.5	Torrington WPCF us to headwaters @ confluence of East & West Branches of Naugatuck River.	River
CT6900-22_01	Great Brook	2.0	Mouth on east bank of Naugatuck River, Waterbury US to Great Brook Reservoir. Mostly in culvert under city.	River
CT6900-27_01	SPRUCE BROOK	2.5	From mouth @ Naugatuck River US to headwaters, Beacon Falls.	River
CT6900-28_01	HOCKANUM BROOK	3.0	From mouth @ Naugatuck River, Beacon Falls US to headwaters.	River
CT6902-00_01	Hart Brook	0.5	From mouth at West Branch of Naugatuck River US to Reubin Hart Reservoir, Torrington.	River
CT6903-00_01	Nickel Mine Brook	0.3	From mouth at West Branch of Naugatuck River US to Crystal Lake, Torrington.	River
CT6903-02_01	Lovers Lane Brook	2.9	From mouth at Nickel Mine Brook, US to headwaters, Torrington.	River
CT6904-00_01	NAUGATUCK RIVER, WEST BRANCH	1.0	From mouth at confluence with East Branch to form main stem of Naugatuck US to 1st impounded area (Old Brass Mill Pond), Torrington.	River
CT6904-00_02	NAUGATUCK RIVER, WEST BRANCH_02	0.6	From dam at Old Brass Mill Pond US to head of impounded area (Wolcott Ave crossing).	River
CT6904-00_03	NAUGATUCK RIVER, WEST BRANCH_03	2.0	From head of Old Brass Mill Pond (Wolcott Ave crossing) US to Stillwater Pond.	River
CT6904-00_04	NAUGATUCK RIVER, WEST BRANCH_04	1.1	From inlet to Stillwater Pond US to headwaters @ confluence of Hart and Hall Meadow Brooks.	River
CT6905-00_01	Naugatuck River, East Branch_01	0.8	From mouth @ confluence with West Branch, Torrington, US to Rte 4 crossing.	River
CT6905-00_02	Naugatuck River, East Branch_01	6.6	From Rte 4 crossing, Torrington, US to headwaters @ Park Pond, Winchester.	River
CT6910-00_01	Branch Brook_01	2.0	From mouth at Naugatuck River, US to Black Rock Dam, Watertown-Thomaston.	River
CT6910-00_02	Branch Brook_2	1.9	From Black Rock Dam US to Wigwam Reservoir, Watertown-Thomaston.	River
CT6912-00_01	STEELE BROOK_01	1.0	From mouth at Naugatuck River in Waterbury US to Sherwood Medical (American Home Products) site near Municipal Stadium.	River
CT6912-00_02	STEELE BROOK_02	3.7	From Sherwood Medical site near Municipal Stadium US up to and including Heminway Pond.	River
CT6912-00_03	STEELE BROOK_03	3.6	From Heminway Pond US to headwaters.	River
CT6914-00_01	MAD RIVER (WATERBURY)_01	1.7	From mouth at Naugatuck River US to Rte 69 crossing (just US of Brass City Mall).	River
CT6914-00_02	MAD RIVER (WATERBURY)_02	0.8	Rte 69 crossing near Brass City Mall, Waterbury US to Scoville Ponds.	River
CT6914-00_03	MAD RIVER (WATERBURY)_03	3.9	From inlet to Scoville Ponds US to Scoville Reservoir.	River
CT6914-00_04	MAD RIVER (WATERBURY)_04	3.9	From Scoville Reservoir US to headwaters @ Cedar Swamp Pond.	River
CT6919-00_01	BLADENS RIVER_01	0.6	From mouth US to North Street crossing, @ upper end of industrial area.	River
CT6919-00_02	BLADENS RIVER_02	3.8	From North Street crossing, @ upper end of industrial area, US to headwaters.	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT6919-04_01	Bladdens River Trib	0.3	From mouth at the Legion Pool in Seymour US to Bunting Road crossing.	River
CT6920-00_01	LITTLE RIVER (SEYMOUR)_01	1.1	From mouth US to inlet to 1st impoundment.	River
CT6920-00_02	LITTLE RIVER (SEYMOUR)_02	2.8	From inlet to 1st impoundment US to confluence with Jacks Brook.	River
CT6920-00_03	LITTLE RIVER (SEYMOUR)_02	4.4	From confluence with Jacks Brook US to headwaters.	River
CT7000-22_01	Indian River_01	0.6	From mouth at Burritt Cove, Saugatuck River Estuary, US to Rte 95 crossing, Westport.	River
CT7000-22_02	Indian River_02	0.2	From Rte 95 crossing, Westport, US to headwaters.	River
CT7105-00_01	Pequonnock River - lower section	1.4	Tidal influence to Rt. 8 (upper end of Bunnells/Beardsley Park Pond), Bridgeport.	River
CT7105-00_02	Pequonnock River	2.1	Rt. 8 (upper end of Bunnells Pond) US to 2000 ft. downstream of Beldon Brook at bridge off Rt. 127, Trumbull (just north of Rte 15 crossing).	River
CT7105-00_03	PEQUONNOCK RIVER	3.8	Bridge off Rt. 127 (DS of Riverside Cemetary and 2000 ft. DS of Beldon Brook) US to Rt. 111, Trumbull.	River
CT7105-00_04	PEQUONNOCK RIVER	1.5	Rt. 111 US to unnamed pond (impoundment) 0.5 miles north of Purdy Hill Road, Trumbull.	River
CT7105-00_05	Pequonnock River	2.5	Unnamed pond north of Purdy Hill Road, Monroe, US to Stepney Pond, Monroe.	River
CT7106-00_01	Rooster River	5.4	From mouth at Ash Creek, border of Fairfield and Bridgeport, US to headwaters, at Bridgport/Trumbull border.	River
CT7108-00_01	MILL RIVER - Fairfield_01	2.8	Dam on Perrys Millpond US to Samp Mortar Reservoir, Fairfield.	River
CT7108-00_02	MILL RIVER - Fairfield/Easton_02	4.0	Upper end of Samp Mortar Reservoir, Fair field US to Easton Reservoir, Easton; passes thru but does not include Lake Mohegan.	River
CT7108-00_03	MILL RIVER - Easton/Monroe_03	3.3	Upper end of Easton Reservoir to headwaters	River
CT7109-00_01	Sasco Brook	1.3	Route 1 in Westport (Southport) US to Hulls Farm Road, below confluence with Great Brook.	River
CT7109-00_02	Sasco Brook	4.8	Hulls Farm Road below Confluence with Great Brook, US to headwaters	River
CT7200-00_01	SAUGATUCK RIVER	0.8	Dam on Lee Pond (end of Estuary) US to 0.2 miles DS of West Branch confluence, Westport.	River
CT7200-00_02	SAUGATUCK RIVER	5.9	0.2 miles DS of confluence with West Branch US to Saugatuck Reservoir Dam, Weston.	River
CT7200-00_03	Saugatuck River	3.6	Saugatuck Reservoir US to confluence with Bogus Mountain Brook.	River
CT7200-00_04	SAUGATUCK RIVER	5.0	From the confluence with Bogus Mountain Brook, Redding, US to Wataba Lake (headwaters), Ridgefield.	River
CT7202-00_01	Aspetuck River	5.1	Confluence with Saugatuck River, US to Pfeiffer Pond, Weston, continuing on US to Aspetuck Reservoir, Easton.	River
CT7202-00_02	Aspetuck River	8.6	From Aspetuck Reservoir US to headwaters in Newtown.	River
CT7203-00_01	West Branch Saugatuck River_01	6.1	From mouth at Saugatuck River, Westport, US to Godfrey Road crossing in Weston.	River
CT7203-00_02	West Branch Saugatuck River_02	3.2	From Godfrey Road crossing in Weston US to headwaterd.	River
CT7300-00_01	NORWALK RIVER	5.6	Wall Street/Commerce Street crossing US to confluence with Bryant Brook (includes Winnipauk).	River
CT7300-00_02	NORWALK RIVER	5.6	Confluence with Bryant Brook US to Old Mill Road, Wilton (bridge off Rt. 7 south of Georgetown).	River
CT7300-00_03	NORWALK RIVER	0.7	From Old Mill Road US to Georgetown POTW.	River
CT7300-00_04	NORWALK RIVER	0.7	Inlet to Factory Pond US to confluence with Cooper Pond Brook, Ridgefield.	River
CT7300-00_05	NORWALK RIVER	4.4	Confluence with Cooper Pond Brook, Ridgefield, US to outlet of Little Pond and Ridgefield Brook.	River
CT7300-02_01	Ridgefield Brook_01	1.0	From confluence with outlet of Little Pond and head of Norwalk River US to Taylor Pond.	River
CT7300-02_02	Ridgefield Brook_02	3.6	From Taylor Pond US to to headwaters in Great Swamp, including Ridgefield POTW outfall.	River
CT7300-07_01	Cooper Pond Brook - DS of Candees	0.4	From mouth at confluence with Norwalk River US to Candees Pond.	River
CT7300-07_02	Cooper Pond Brook - US of Candees	1.8	From Candees Pond US to headwaters	River
CT7302-00_01	Silvermine River_01	1.1	From Mouth at Deering Pond US to Rt 15.	River
CT7302-00_02	Silvermine River_02	4.8	From Rt 15 US to Grupes Reservoir.	River
CT7302-13-trib_01	Tributary to Belden Hill Brook	1.5	From mouth at Beldon Hill Brook below the South Norwalk Reservoir, US to headwaters (discharge from private STPI).	River

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT7401-00_01	Fivemile River	5.0	From Amtrack crossing US to Old Norwalk Road (0.2 miles DS of POTW), New Canaan.	River
CT7401-00_02	Fivemile River	0.2	Old Norwalk Road US to New Canaan POTW	River
CT7401-00_03	Fivemile River	1.4	New Canaan POTW outfall US to unnamed tributary near Parade Hill Cemetary.	River
CT7401-00_04	Fivemile River	1.7	From unnamed tributary US to headwaters (New Canaan Reservoir).	River
CT7403-00_01	Noroton River	2.7	From Rt 1 (head of Holly Pond) US to southern end of St. John's Cemetary, Stamford.	River
CT7403-00_02	Noroton River	2.4	From southwest corner of St. John's Cemetary US to Rt 15.	River
CT7403-00_03	Noroton River	3.6	From Rt. 15 to headwaters.	River
CT7405-00_01	RIPPOWAM RIVER_01	5.3	From tidewater (dam US of Rt 1) US to West North Street, Stamford (0.6 miles) and from West North Street US to Rt. 15 (4.7 miles).	River
CT7405-00_02	RIPPOWAM RIVER_02	2.0	From Rt 15 US to North Stamford Reservoir.	River
CT7405-00_03	RIPPOWAM RIVER_03	4.3	From North Stamford Reservoir US to head waters at Siscowit Reservoir at NY border. This segment is fully within BHC drinking water watershed.	River
CT7407-00_01	MIANUS RIVER_01	1.9	From Mianus Pond outlet US to filtration plant, Stamford.	River
CT7407-00_02	MIANUS RIVER_02	5.8	From upper end of impoundment at filtration plant, Stamford to Bargh Reservoir (Mianus Reservoir on topo) at NY border.	River
CT7409-00_01	Horseneck Brook	5.2	From mouth at Greenwich Harbor (Rte 95) us to outlet of Putnam Lake.	River
CT7410-00_01	East Branch of Byram River_01	2.8	From confluence with main stem of Byram River near Rt. 15, Riversville, US to Old Pond that is south (ds) of John Street, Greenwich	River
CT7410-00_02	East Branch of Byram River_02	2.7	From Old Pond (ds of John Street) US to NY border.	River
CT7411-00_01	BYRAM RIVER_01	0.5	From tidewater (Upland St, US of Rte 1) to Pemberwick dam at Glenville, just us of confluence with Pemberwick Brook.	River
CT7411-00_02	BYRAM RIVER_02	6.9	From Pemberwick Dam at Glenville US to NY border.	River
CT8101-00_01	Quaker Brook	4.7	NY border, New Fairfield, us to NY border, Sherman	River
CT8104-00_01	Titicus River	3.0	NY border to headwaters, Ridgefield.	River
CT1001-00-1-L1_01	Wyassup Lake North Stonington	92.4	North central North Stonington, east of Rte 49. Headwaters of Wyassup Brook.	Lake
CT1002-00-1-L1_01	Green Falls Reservoir Voluntown	46.9	SE Voluntown, east of Rte 49, south of Rte 138, in Pachaug State Forest	Lake
CT1100-00-1-L1_01	Porter Pond	10.4	Headwaters of Wood River near Rhode Island border, Sterling.	Lake
CT2104-00-1-L1_01	Lantern Hill Pond Ledyard, North Stonington	15.1	Border of Ledyard and North Stonington; now part of Mashentucket Reservation.	Lake
CT2104-00-1-L2_01	Long Pond Ledyard, North Stonington	98.6	Ledyard, North Stonington border.	Lake
CT2205-00-1-L1_01	Powers Lake East Lyme	152.6	East Lyme, Headwaters of Pataganset River.	Lake
CT2205-00-1-L2_01	Pataganset Lake East Lyme	123.0	East Lyme, Pataganset River system.	Lake
CT2205-00-1-L3_01	Gorton Pond East Lyme	53.0	East Lyme. Impoundment of Pataganset River.	Lake
CT2205-02-1-L1_01	Dodge Pond East Lyme	33.0	East Lyme; near Niantic village center, east of Rte 161, north of Rte 156.	Lake
CT3002-02-1-L2_01	Amos Lake Preston	105.1	East of Rte 164, Preston.	Lake
CT3002-04-1-L1_01	Avery Pond Preston	50.6	East of Rte 164, north of Rte 2, Preston.	Lake
CT3002-06-1-L1_01	Lake Of Isles North Stonington	87.1	Near western border of North Stonington, north of Rte 2.	Lake
CT3100-00-3-L1_01	Eagleville Lake Mansfield	80.0	Impoundment of Willimantic River, just south of Mansfield Depot, along Mansfield/ Coventry border.	Lake
CT3101-03-1-L1_01	Crystal Lake Ellington Stafford	201.0	Northeast section of Ellington, small part in southwestern section of Stafford.	Lake
CT3105-00-1-L1_01	Waumgumbaug Lake Coventry	378.0	East - Central Coventry	Lake
CT3106-00-2_L2_01	Crandau Pond	2.5	Cider Mill Road, Tolland (just north of Rte 84)	Lake
CT3108-02-1-L2_01	Bolton Lake, Middle Vernon	114.9	Southeast section of Vernon.	Lake
CT3108-02-1-L3_01	Bolton Lake, Lower Bolton - Vernon	178.4	Mostly in NE corner of Bolton, continues into SE corner of Vernon.	Lake
CT3108-13-1-L1_01	Columbia Lake Columbia	277.2	NW Columbia	Lake
CT3109-01-1-L1_01	Mono Pond Columbia	94.8	Southern Columbia, south of Rte 66.	Lake
CT3200-01-1-L1_01	Halls Pond Eastford Ashford	82.3	SW corner of Eastford.	Lake
CT3201-01-1-L1_01	Black Pond Woodstock	73.4	Eastern Woodstock, south of Rte 197.	Lake
CT3203-00-1-L1_01	Mashapaug Lake Union	297.1	Northeastern Union near MA border.	Lake
CT3203-00-1-L2_01	Bigelow Pond Union	18.5	DS of Mashapaug Lake in northern Union.	Lake
CT3206-00-1-L1_01	Morey Pond Ashford, Union	40.0	Straddles Ashford - Union line and is split by Rte 84.	Lake
CT3300-00-3+L3_01	North Grosvenordale Impoundment	59.0	Impoundment of French River in north central Thompson, near MA border.	Lake

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT3400-00-1-L1_01	Little (schoolhouse) Pond Thompson	65.4	Northeast corner of Thompson, near MA border. Headwaters of Fivemile River.	Lake
CT3400-00-2-L11_01	Quaddick Reservoir Thompson	466.8	Southeast corner of Thompson; impoundment of the Fivemile River.	Lake
CT3404-01-1-L1_01	Killingly Pond Killingly	137.5	Northeast corner of Killingly on RI border; a little over half of the lake is within CT.	Lake
CT3502-07-1-L1_01	Moosup Pond Plainfield	97.2	Northeast section of Plainfield.	Lake
CT3600-00-1-L1_01	Beach Pond Voluntown	394.3	Eastern border of Voluntown with RI.	Lake
CT3600-00-3-L1_01	Glasgo Pond Griswold	184.2	Impoundment of Pachaug River, at border of Griswold and Voluntown. Includes lake section also known as Doaneville Pond.	Lake
CT3600-00-3-L3_01	Beachdale Pond Voluntown	46.0	Impoundment of Pachaug River, Voluntown; US of Glasgo and DS of Beach Ponds.	Lake
CT3600-00-3-L7_01	Pachaug Pond Griswold	830.9	Impoundment of Pachaug River, eastern Griswold.	Lake
CT3600-00-3-L8_01	Hopeville Pond Griswold	149.4	Impoundment of Pachaug River, Griswold; ds of Pachaug Pond.	Lake
CT3605-00-1-L1_01	Billings Lake North Stonington	105.1	North central North Stonington.	Lake
CT3605-01-1-L1_01	Anderson's Pond North Stonington	54.3	North central North Stonington	Lake
CT3700-00-2+-L1_01	West Thompson Lake Thompson	195.0	Impoundment of Quinebaug River in Thompson.	Lake
CT3700-00-5+-L3_01	Wauregan Pond Killingly	68.0	Southwestern corner of Killingly.	Lake
CT3700-00-5+-L4_01	Aspinook Pond Canterbury, Griswold, Lisbon	333.3	Impoundment of Quinebaug River, parts in Canterbury, Griswold, & Lisbon (DS of Segment 02 in Quinebaug River)	Lake
CT3700-23-1-L1_01	Alexander Lake	190.4	Dayville section of Killingly.	Lake
CT3705-00-1-L1_01	Griggs Pond Woodstock	43.0	Northwest corner of Woodstock.	Lake
CT3708-00-1-L1_01	Roseland Lake Woodstock	88.0	Southeast section of Woodstock.	Lake
CT3800-00-6+L3_01	Spaulding Pond	14.3	Mohegan Park, Norwich (Mohegan Park Rd)	Lake
CT3805-00-3-L6_01	Papermill Pond	77.2	Impoundment of Little River, Sprague.	Lake
CT3805-00-3-L7_01	Versailles Pond	57.2	Impoundment of Little River, southeast corner of Sprague.	Lake
CT3900-00_01pd & trib_01	Yantic pond & tributary - Norwich Landfill	0.6	From mouth at Yantic River (approximately 100 m US of Rte I-395 crossing of Yantic River, Norwich) Us to US boundary of Landfill Influence.	Lake
CT3900-00-4-L1_01	Fitchville Pond Bozrah	71.1	Split by Rte 2 in Bozrah, impoundment of Yantic River.	Lake
CT3900-01-1-L1_01	Red Cedar Lake Lebanon	141.0	South corner of Lebanon.	Lake
CT3906-00-1-L1_01	Gardner Lake Salem, Montville, Bozrah	486.8	At junction of Salem, Montville and Bozrah.	Lake
CT4000-40-1-L1_01	Great Hill Pond Portland	77.5	Great Hill Pond Road, Portland, 0.75 miles due north of Rt. 66, near East Hampton border.	Lake
CT4009-00-2-L4_01	Angus Park Pond	9.4	Impoundment of Roaring Brook, east of Rte 83 Glastonbury.	Lake
CT4010-00-1-L1_01	1860 Reservoir (Griswold Pond) Wethersfield	35.0	Highland St, Wethersfield, near Rocky Hill border; head of Goff Brook.	Lake
CT4013-05-1-L1_01	Crystal Lake Middletown	35.5	South of Randolph Road, Middletown.	Lake
CT4013-08-1-L1_01	Dooley's Pond Middletown	28.0	East of Rt 17, Middletown, 1.5 miles South of Randolph Rd.	Lake
CT4014-03-2-L1_01	Higganum Reservoir Haddam	32.0	West of Rt 81 just south of Higganum center.	Lake
CT4017-03-1-L3_01	Pattaconk Reservoir Chester	55.5	1.25 miles north of Rt 148, Cockaponset State Forest, Chester.	Lake
CT4017-03-1-L4_01	Cedar Lake Chester	68.0	North of Rt. 148, Chester.	Lake
CT4019-00-1-L3_01	Messerschmidt's Pond	70.0	Rt 145 Westbrook; straddles Westbrook/Deep River border.	Lake
CT4019-00-1-L4_01	Wright's Pond Deep River, Essex, Westbrook	37.0	Meeting point of Westbrook, Deep River and Essex.	Lake
CT4020-06-1-L1_01	Rogers Lake Lyme, Old Lyme	264.9	Lyme - Old Lyme border.	Lake
CT4300-00-1+-L1_01	Colebrook River Reservoir Colebrook	736.0	Northeast corner of Colbrook, extends slightly into MA and Hartland.	Lake
CT4300-00-5+-L5_01	Rainbow Reservoir Windsor	235.0	Northwest corner of Windsor. Impoundment of the Farmington River.	Lake
CT4300-05-1-L2_01	Howell's Pond Hartland	17.3	Northwest corner of Hartland, Dish Mill Road.	Lake
CT4302-16-1-L1_01	Highland Lake Winchester	444.0	Southeast corner of Winchester.	Lake
CT4303-02-1-L1_01	Burr Pond Torrington	85.0	South of Burr Mountain Rd, Northeast corner of Torrington.	Lake
CT4305-00-1-L1_01	West Hill Pond New Hartford	238.0	Northwest corner of New Hartford.	Lake
CT4308-00-1-L2_01	Compensating Reservoir (McDonough) Barkhamsted New Hartford	387.0	Southeast Barkhamsted - northeast New Hartford.	Lake
CT4315-05-1-L1_01	Birge Pond	10.8	West of Rt 69 and Pond Street, Bristol	Lake
CT4315-10-1-L1_01	Pine Lake (Malone's Pond)	12.0	East Bristol, south of Pine Street	Lake
CT4318-03-1-L1_01	Stratton Brook Park Pond	2.4	Small impoundment of Stratton Brook, Simsbury; south of Rte 309.	Lake
CT4321-00-1-L2_01	Barber Pond, Bloomfield	9.4	NE corner of Bloomfield, near Windsor border, N of Newberry Road.	Lake
CT4401-00-1-L1_01	Batterson Park Pond Farmington New Britain	162.7	Southeast Farmington - northeastern border of New Britain.	Lake
CT4402-04-2-L1_01	Mill Pond - Newington	2.8	Municipal park in Newington; S of Rt 175 near intersection of Rts 175 and 176	Lake

Waterbody Segment Locations

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT4500-00-1-L1_01	SHENIPSIT LAKE	522.8	At meeting point of Ellington, Vernon and Tolland. CT Water Company watershed.	Lake
CT4500-00-3-L3_01	Union Pond	50.0	Impoundment of Hockanum River in Manchester at Union Street.	Lake
CT4500-14-1-L1_01	Center Spring Park Pond	6.1	Center of Manchester, impoundment of Bigalow Brook.	Lake
CT4601-00-1-L2_01	Silver Lake Berlin Meriden	151.0	Southeast corner of Berlin, extending slightly into northeast Meriden.	Lake
CT4607-10-1-L1_01	Beseck Lake Middlefield	119.6	East central Middlefield.	Lake
CT4607-13-0-L1_01	Wadsworth Falls Park Pond	1.4	Small pond within Wadsworth Falls State Park, between mouths of Laurel Brook and Wadsworth Brook, Middlefield.	Lake
CT4700-02-1-L1_01	Day Pond	7.4	Impoundment and headwaters of Day Pond Brook. Day Pond Road, Colchester (east of Rte. 149).	Lake
CT4704-00-1-L3_01	Babcock Pond Colchester	146.7	South of Rt 16, southeastern Colchester. Within Babcock Pond Wildlife Management Area.	Lake
CT4705-00-1-L1_01	Holbrook Pond Hebron	72.5	Northeast corner of Hebron; northeast of Rt 85.	Lake
CT4707-00-2-L2_01	Gay City Pond	5.1	Gay City State Park. Impoundment of Black Ledge River. NW corner of Hebron.	Lake
CT4708-00-1-L1_01	Terramuggus, Lake Marlborough	83.0	Intersection of Routes 2 & 66, northwest corner of Marlborough.	Lake
CT4709-04-1-L1_01	Pocotopaug, Lake East Hampton	511.7	North of Rt 66, East Hampton.	Lake
CT4710-00-1-L1_01	Bashan Lake East Haddam	276.3	North Central East Haddam, drains to Moodus Reservoir.	Lake
CT4710-00-1-L2_01	Moodus Reservoir East Haddam	451.0	Northeast East Haddam.	Lake
CT4710-06-1-L1_01	Pickerel Lake Colchester	88.6	Southeast corner of Colchester, extending slightly into E. Haddam. Drains to Moodus Reservoir	Lake
CT4800-04-1-L1_01	Lake Hayward East Haddam	198.9	Northeast corner of East Haddam.	Lake
CT4800-10-1-L1_01	Norwich Pond Lyme	27.5	Southeast corner of Lyme, located within Nehantic State Forest. Drains to Uncas Lake.	Lake
CT4800-16-1-L2_01	Uncas Lake Lyme	69.0	Southeast Lyme, located within Nehantic State Forest.	Lake
CT5105-00-2-L1_01	Schreeder Pond	4.0	Chatfield Hollow State Park. Impoundment of Chatfield Hollow Brook, US of Rte 80 crossing, Killingworth.	Lake
CT5105-00-2-L2_00	FORSTER POND	28.6	South of Rt. 80, across from Chatfield Hollow State Park, Killingworth.	Lake
CT5110-04-1-L1_01	Quonnipaug Lake Guilford	111.6	Guilford just east of Rt 77, 2 miles north of Rt 80.	Lake
CT5111-09-1-L1_01	Cedar Pond North Branford	21.8	South of Lake Gaillard, North Branford, just upstream of Linsley Pond along Pisgah Brook (trib to Branford River).	Lake
CT5111-09-1-L2_01	Linsley Pond North Branford	23.3	South of Lake Gaillard, North Branford, just downstream of Cedar Pond along Pisgah Brook (trib to Branford River). Linsley Pond straddles Branford-North Branford town line.	Lake
CT5111-09-2-L3_01	Branford Supply Pond - West(Pisgah & Pine Gutter Brook)	9.5	West Branford Supply Pond receives water from Pisgah Brook & Pine Gutter Brooks, and discharges to East Branford Supply Pond. (east of Lake Saltonstall, north of I95).	Lake
CT5111-09-2-L3_02	Branford Supply Pond - East	17.2	West Branford Supply Pond receives water from Pisgah Brook and Pine Gutter Brook, and discharges to East Branford Supply Pond. (east of Lake Saltonstall, north of I95)	Lake
CT5200-00-4-L2_01	Hanover Pond Meriden	73.0	Southwest corner of Meriden, impoundment along Quinnipiac River below Gorge.	Lake
CT5206-01-1-L2_01	Black Pond Meriden Middlefield	75.6	On Meriden-Middlefield line near Rt 66.	Lake
CT5207-00-1-L1_01	North Farms Reservoir Wallingford	62.5	0.5 miles west of Rt. 91, north side of Rt. 68, Wallingford. Headwaters of Wharton Brook.	Lake
CT5207-02-1-L1_01	Allen Brook Pond	4.8	Wharton Brook State Park. Impoundment off Allen Brook, near mouth and confluence with Wharton Brook; Wallingford/North Haven boundary.	Lake
CT5302-00-4-L3_01	Lake Whitney	178.0	Impoundment of Mill River, Hamden. East of Rt. 10.	Lake
CT5305-00-3-L1_01	Edgewood Park Pond	2.7	Along eastern bank of West River, just US of Chapel St, New Haven.	Lake
CT6000-00-5+-L1_01	Lillinonah, Lake Southbury, Bridgewater	1900.0	Impoundment of Houatonic River; Southbury, Bridgewater along east bank, Brookfield along west bank.	Lake
CT6000-00-5+-L2_01	Zoar, Lake Monroe, Newtown, Oxford, Southbury	650.0	From Stevenson Dam US to Riverside.	Lake
CT6000-00-5+-L2_02	Zoar, Lake Monroe, Newtown, Oxford, Southbury	325.0	From Riverside US about 5 miles to Shepaug dam.	Lake
CT6000-00-5+-L4_01	Housatonic, Lake Shelton	328.2	First major impoundment of Housatonic River at Derby Dam.	Lake
CT6000-88-1-L1_01	Brewsters Pond	4.0	Stratford, east of Main Street (Rte 113).	Lake
CT6002-00-1-L1_01	East Twin Lake (Washing Lake) Salisbury	562.2	Northeastern Salisbury	Lake
CT6005-00-1-L1_01	Wononscopomuc, Lake (Lakeville L.) Salisbury	352.6	South central Salisbury.	Lake

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT6005-04-1-L1_01	Riga Lake Salisbury	169.5	Northwestern Salisbury near NY border.	Lake
CT6008-00-1-L1_01	Cream Hill Pond Cornwall	72.0	Northeastern Cornwall.	Lake
CT6016-00-1-L2_01	Leonard Pond Kent	15.0	Central Kent, headwaters of Womenshenuck Brook.	Lake
CT6016-00-1-L3_01	Hatch Pond Kent	61.0	South central Kent, DS of Leonard Pond along Womenshenuck Brook.	Lake
CT6018-00-1-L1_01	Taunton Pond Newtown	126.0	Central Newtown.	Lake
CT6023-00-1-L1_01	Quassapaug, Lake Middlebury	271.0	Northwestern Middlebury; headwaters of Eightmile Brook.	Lake
CT6100-04-1-L1_01	Wood Creek Pond Norfolk	151.0	North-central Norfolk, near MA border; headwaters of Wood Creek.	Lake
CT6301-00-2-L1_01	Wononpakook, Lake (Long Pond) Salisbury	164.0	Southwestern Salisbury.	Lake
CT6301-00-2-L2_01	Mudge Pond Sharon	201.0	Northwest Sharon.	Lake
CT6400-00-1-L5_01	Candlewood, Lake Danbury New Milford	5420.0	Parts of Brookfield, Danbury, New Milford, New Fairfield, & Sherman.	Lake
CT6400-03-L1_01	Squantz Pond New Fairfield	288.0	Northeast corner of New Fairfield; a large cove of Candlewood Lake.	Lake
CT6402-00-1-L1_01	Bail Pond New Fairfield	89.9	New Fairfield	Lake
CT6500-00-1-L1_01	South Spectacle Pond Kent	93.0	East central Kent at headwaters of the West Aspetuck River.	Lake
CT6502-00-1-L2_01	Waramaug, Lake Kent, Warren, Washington	680.2	Southwest corner of Warren, Northwest corner of Washington; headwaters of East Aspetuck River.	Lake
CT6600-01-1-L3_01	Kenosia, Lake Danbury	56.0	Impoundment of Still River, Danbury.	Lake
CT6700-03-1-L2_01	Mohawk Pond Goshen	15.2	Goshen - Cornwall boundary within Mohawk State Forest.	Lake
CT6701-00-1-L1_01	Tyler Lake Goshen	182.0	West central Goshen; headwaters of Marshepaug River.	Lake
CT6701-01-1-L1_01	West Side Pond Goshen	42.4	West central Goshen; drains to West Side Pond Brook to Tyler Lake	Lake
CT6703-00-2-L1_01	Dog Pond Goshen	71.3	South central Goshen; along West Branch of Bantam River	Lake
CT6705-00-3-L3_01	Bantam Lake Litchfield Morris	916.0	Litchfield, Morris	Lake
CT6705-14-1-L1_01	Mount Tom Pond Litchfield, Morris	61.5	Northwest corner of Morris, southwest corner of Litchfield, within Mount Tom State Park.	Lake
CT6804-02-1-L1_01	Long Meadow Pond Bethlehem	110.5	North central Bethlehem, borders Morris.	Lake
CT6904-00-3-L1_00	Stillwater Pond Torrington	95.0	Impoundment of West Branch of the Naugatuck River, Torrington; east of Rte 272.	Lake
CT6905-00-1-L3_01	Winchester Lake Winchester	229.0		Lake
CT6905-00-1-L4_01	Park Pond Winchester	76.7	Southwest corner of Winchester; drains to East Branch of Naugatuck River	Lake
CT6909-00-2-L1_01	Northfield Brook Lake	5.3	Impoundment of Northfield Brook, northeast corner of Thomaston.	Lake
CT6910 -14--1-L3_01	Black Rock Lake	9.5	Impoundment of Purgatory Brook (trib to Branch Brook), Thomaston; west of Rte 6.	Lake
CT6912-05-1-L2_01	Winnemaug, Lake Watertown	120.0	Southwest Watertown.	Lake
CT6914-06-1-L2_01	Hitchcock Lake Wolcott	118.4	Southeast corner of Wolcott, near Cheshire border.	Lake
CT6916-00-3-L4_01	Hop Brook Lake	25.8	Impoundment of Hop Brook, Middlebury.	Lake
ct7103-00-2-L3_01	Success Lake	16.0	US of Stillman Pond, Pembroke Lakes & Yellowmill Channel, Bridgeport.	Lake
CT7103-00-2-L4_01	Stillman Pond	5.0	Upstream of Yellow Mill Channel, Bridgeport. Downstream of Success Lake.	Lake
CT7103-00-2-L5_01	Pembroke Lakes	2.0	Just upstream of Yellow Mill Channel, Bridgeport. Downstream of Stillman Pond.	Lake
CT7105-10-1-L2_01	Lake Forest	66.6	Headwaters of Island Brook, a tributary to the Pequonnock River, Bpt.	Lake
CT7108-00-3-L3_01	Lake Mohegan	15.0	Impoundment of Mill River, Fairfield; upstream of Samp Mortar Reservoir	Lake
CT7409-00-1-L3_01	Putnam Lake	105.0	Impoundment of Horseneck Brook, just south of Rt. 15, Greenwich.	Lake
CT8104-00-1-L5_01	Mamanasco Lake Ridgefield	95.0	Northwest Ridgefield.	Lake
CT1000-E_01	PAWCATUCK RIVER ESTUARY	0.1	Upper part of estuary from Stanton Weir Point US to head of tide.	Estuary
CT1000-E_02	PAWCATUCK RIVER ESTUARY	0.3	CT portion of Pawcatuck River estuary from Stanton Weir Point to Pawcatuck Point.	Estuary
CT2001-E_01	STONINGTON HARBOR	1.6	SB waters of harbor south of Amtrak. Portion of SA waters offshore, which are open for direct shellfishing.	Estuary
CT2001-E_02	STONINGTON HARBOR	0.8	0.4 sq mi of SB/SA waters north of Amtrak line, closed to direct harvest; 0.4 sq mi of SA water offshore.	Estuary
CT2002-E_01	Offshore from West Cove	0.8	Waters extending offshore from West and Palmer Covers (offshore from a line between Groton Long Point and Morgan Point, Noank). All SA.	Estuary
CT2002-E_02	West and Palmer Coves	0.6	West and Palmer Coves, as enclosed by a line drawn between Groton Long Point to Morgan Point, Noank. West Cove, SB/SA. Palmer Cove & offshore from SA.	Estuary
CT2003-E_01	MUMFORD COVE	2.0	Mumford Cove and offshore waters	Estuary
CT2004-E_01	ALEWIFE COVE	0.1	Alewife Cove, Waterford.	Estuary

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT2005-E_01	GOSHEN COVE	0.0	West of Goshen Point, Waterford, adjacent to Harkness Memorial State Park.	Estuary
CT2006-E_01	LONG ISLAND SOUND EAST - OFFSHORE_01	21.6	Offshore portion of Long Island Sound in Southeast Coastal, Thames River and Connecticut River Major Basins out to 50 ft contour.	Estuary
CT2006-E_02	LONG ISLAND SOUND EAST - OFFSHORE_02	35.0	Offshore portion of Long Island Sound in Southeast Coastal, Thames River and Connecticut River Major Basins, from 50 ft contour to state line.	Estuary
CT2006-E_03	Long Island Sound East - Old Lyme shore_03	0.2	Nearshore Old Lyme, Soundview Beach to Old Lyme Shores Beach.	Estuary
CT2101-E_01	WEQUETEQUOCK COVE	2.0	Wequetequock Cove, Stonington Point and offshore area. INCLUDES AREAS OF LITTLE NARRAGANSETT BAY.	Estuary
CT2102-E_01	Outer Quiimbaug Cove	3.4	Nearshore waters from tip of Masons Island (Enders Island) east to Wamphassuc Point Stonington, excluding coves and inlets.	Estuary
CT2102-E_02	Inner Quaimbaug Cove	0.6	Quiimbaug Cove (SB/SA) north of Amtrak, mouth of Quaimbaug Cove, and coves and inlets from Mason's Island east to Wamphassuc Point(SA).	Estuary
CT2106-E_01	MYSTIC RIVER ESTUARY	3.4	Offshore area from a line drawn between Morgan Point, Noank and the tip of Mason's Island.	Estuary
CT2106-E_02	MYSTIC RIVER ESTUARY	0.6	All of Mystic River Estuary north of a line drawn between Morgan Point, Noank and Mason's Island.	Estuary
CT2107-E_01	Poquonuck River Estuary/Baker Cove	1.1	Poquonock River estuary, Baker Cove and Pine Island Bay plus offshore area from Bushy Point Beach and Bluff Point..	Estuary
CT2107-E_02	Offshore of Eastern, Avery & Bushy Points	0.9	Waters offshore from Eastern Point east to Bushy Point Beach, excludes Pine Island Bay.	Estuary
CT2201-E_01	JORDAN COVE	1.1	Cove and offshores waters Between Millstone and Seaside Points, Waterford.	Estuary
CT2204-E_01	Niantic Bay - SW corner	0.2	Small area adjacent to Pond Point and McCook Point, Niantic, north to RR tracks, excluding area immediately adjacent to Crescent Beach.	Estuary
CT2204-E_02	Niantic Bay - upper bay & river	0.3	Niantic River, Gold Spur area.	Estuary
CT2204-E_03	Niantic Bay and offshore	4.0	Niantic River, Niantic Bay and offshore, excluding 0.2 sq mi near shore between Pond Point north to RR tracks, Niantic.	Estuary
CT2206-E_01	Bride Brook Estuary	0.0	Bride Brook estuary portion; from Rte 156 to mouth.	Estuary
CT2206-E_02	Pattagansett/Fourmile River & coast	2.3	Pattagansett River and Fournmile River estuaries; nearshore and offshore area from Hatchett Point east to Black Point.	Estuary
CT3000-E_01	THAMES RIVER ESTUARY	8.6	Most of Thames River and offshore, excluding upper reach from Norwich harbor ds to Poquetanuck Cove, Poquetanuck Cove, Trading Cove, Horton Cove, areas adjacent to sub base and lower section of river.	Estuary
CT3000-E_02	THAMES RIVER ESTUARY	2.3	Areas adjacent to Navy sub base in Groton, Horton Cove in Montville, and lower section of river, Gold Star bridge to mouth.	Estuary
CT3000-E_03	THAMES RIVER ESTUARY	1.5	Norwich Harbor ds to Poquetanuck Cove, Poquetanuck Cove and Trading Cove.	Estuary
CT4000-E_01	CONNECTICUT RIVER ESTUARY	2.8	From mouth of Ct. River US to and including South Cove; then across river and US along east bank just beyond mouth of Lieutenant River. (Blackhall & Lieutenant Rivers, Old Lyme assessed separately this cycle).	Estuary
CT4000-E_02	CONNECTICUT RIVER ESTUARY	9.3	From South Cove, Old Saybrook(west bank) and mouth of Lieutenant River (east bank) US to outlet of Chapmans Pond, East Haddam.	Estuary
CT4020-E_01	Lieutenant River (Estuary)_01	0.0	From mouth at head of Great Island on the CT River US to Rte 156, Old Lyme.	Estuary
CT4020-E_02	Lieutenant River (Estuary)_02	0.1	From Rte 156 US to Saunders Hollow Road (fall line), Old Lyme.	Estuary
CT4021-E_01	Black Hall River (estuary)_01	0.1	From mouth at confluence with Back River US to Shore Road, Old Lyme.	Estuary
CT4021-E_02	Black Hall River (estuary)_02	0.0	From Shore Road US to Sawmill Brook, Old Lyme.	Estuary
CT5001-E_01	MADISON BEACHES_01	3.3	Nearshore & offshore from Circle Beach and Hogs Head Pt, near Guilford, east to Tuxis Island & Gull Rock, Madison (excluding restricted relay and conditional shellfish areas adjacent to shore-segment 02 & 03).	Estuary
CT5001-E_02	MADISON BEACHES_02	1.6	Nearshore from Chipman Pt east to Gull Rock/Tuxis Isl. (excluding areas immediately adjacent to shore east of Chipman Pt and east of Madison Surf Club). Near and offshore from Gull Rock east to Webster Pt. (excluding area near mouth of Fence Crk).	Estuary

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT5001-E_03	MADISON BEACHES_03	1.6	Near & offshore from Webster Point to Hammonasset Point (plus small areas of restricted relay near mouth of Fence Crk, plus areas immediately adjacent to shore at Circle Beach & east of Chipman Pt. & Madison Surf Club).	Estuary
CT5002-E_01	ISLAND BAY/JOSHUA COVE-nearshore	0.4	Island Bay, Island Creek and Joshua Bay, Guilford.	Estuary
CT5002-E_02	ISLAND BAY/JOSHUA COVE-offshore	1.8	Offshore area from Clark Point on Leetes Island, Branford, to Sachem Head, Guilford.	Estuary
CT5003-E_01	THIMBLE ISLANDS	1.1	Jupiter Point, Pleasant Point sections of Stony Creek, and all tidal creeks/rivers leading to Stony Creek.	Estuary
CT5003-E_02	THIMBLE ISLANDS	1.1	Very eastern nearshore area of Stony Creek (just west of Leetes Island).	Estuary
CT5003-E_03	THIMBLE ISLANDS-offshore	2.6	Near & offshore from Indian Neck to Brown Point, Branford; then offshore of Stony Creek.	Estuary
CT5004-E_01	LONG ISLAND SOUND CENTRAL - OFFSHORE_01	65.0	Includes waters off New Haven, East Haven, and then eastern Madison Clinton, Westbrook & Old Saybrook (excludes Branford, Guilford and western Madison) off shore to 50 foot contour.	Estuary
CT5004-E_02	LONG ISLAND SOUND CENTRAL - OFFSHORE_02	50.0	Western offshore portion of Central Long Island Sound segment (Milford, West Haven, New Haven), beyond 50 foot contour.	Estuary
CT5004-E_03	LONG ISLAND SOUND CENTRAL - OFFSHORE_03	75.2	Water offshore waters from Branford, Guilford, western Madison, to 50 foot contour. Also includes open shellfish beds offshore of Milford out to 50 foot depth contour.	Estuary
CT5004-E_04	LONG ISLAND SOUND CENTRAL - OFFSHORE_04	65.0	Offshore of Branford, Guilford, Madison, Clinton, Westbrook & Old Saybrook, from 50 foot depth contour to state line (includes old segment 06).	Estuary
CT5101-E_01	PLUM BANK/INDIAN HARBOR	1.0	Old Kelsey Point, Westbrook, east to Cornfield Point, Old Saybrook (includes Indiantown Harbor & Plum Bank Beach)	Estuary
CT5102-E_01	PATCHOGUE RIVER/MENUNKETESUCK RIVER	3.5	Tidal portions of Patchogue & Menunketesuck Rivers, Westbrook Offshore area from Kelsey Point, Clinton, east to Old Kelsey Point, Westbrook.	Estuary
CT5106-E_01	Upper Hammonasset, Indian and Hammock Rivers.	0.1	Tidal portion of Hammonasset River & Indian River above Rte 1. Hammock River above Hammock Rd. Cedar Island Marina area in Clinton Harbor..	Estuary
CT5106-E_02	HAMMONASSETT RIVER/Hayden Creek	0.0	Hayden Creek, tributary to Hammonasset River, near mouth. Originates near Rte 1 & Grove Street, Clinton.	Estuary
CT5106-E_03	Lower Hammonasset River/Inner Clinton Harbor	0.3	Inner Clinton Harbor; Hammonasset and Indian Rivers up to Rte 1; Hammock River up to Hammock Rd. Exclude Cedar Island Marina area.	Estuary
CT5106-E_04	CLINTON HARBOR-offshore	1.8	Offshore from Cedar Island east to Kelsey Point.	Estuary
CT5110-E_01	GUILFORD HARBOR	0.3	Inner harbors and estuaries from Sachem's Head east to Hogshead Point, including Guilford Harbor.	Estuary
CT5110-E_02	GUILFORD HARBOR	2.8	Nearshore Guilford waters from Sachems Head east to Hogshead Point, excluding restricted and prohibited areas (segment 01).	Estuary
CT5111-E_01	BRANFORD HARBOR	0.3	Inner Branford Harbor and tidal portions of the Branford River and Farm River.	Estuary
CT5111-E_02	BRANFORD HARBOR	4.6	From Mansfield Point, East Haven east to Branford Point and Indian Neck, & offshore waters (excludes inner Branford Harbor Segment 01).	Estuary
CT5200-E_01	New Haven - Inner Harbor/Mill, Q & West Rivers	4.2	Inner New Haven Harbor (bounded by Morse Park, W. Haven, and Black Rock, E. Haven) and tidal portions of the Quinnipiac, Mill & West Rivers.	Estuary
CT5200-E_02	New Haven Harbor - West Haven shore/Cove & Oyster Rivers	0.6	From mouth of Oyster River along West Haven shore to Morse Park/Sandy Point, West Haven, and tidal portions of Cove & Oyster Rivers.	Estuary
CT5200-E_03	New Haven Harbor - Outer Harbor / Morris Cove	6.7	Oyster River Point, West Haven, east across harbor to Black Rock, E. Haven, then out to Morgan Pt and outer NH breakwater (includes Morris Cove).	Estuary
CT5200-E_04	New HavenHarbor Offshore_04	7.0	Merwin Point, Milford, east to Mansfield Point, East Haven and a band of water comprising 7 sq. miles south of outer New Haven breakwater.	Estuary
CT5200-E_05	New Haven harbor Offshore_05	6.6	From Pond Point, Milford, due east to a point 2 miles south of Mansfield Point, East Haven and inshore to meet segment 04.	Estuary
CT5306-E_01	MILFORD HARBOR/GULF POND	0.4	Milford Harbor, Gulf Pond and tidal portions of the Wepawaug and Indian Rivers.	Estuary
CT5306-E_02	MILFORD - THE GULF_02	0.5	The Gulf bounded by Charles Island and Welches Point, Milford (excluding a central parcel of SB/SA - segment 03).	Estuary
CT5306-E_03	Milford - The Gulf_03	0.5	This parcel of water in the Gulf is classified as SB/SAand is surrounded on three sides by segment 02.	Estuary

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT6000-E_01	Housatonic River Estuary - Upper	0.5	Upper tidal portion of Housatonic River; from Rte 15 crossing US to end of saltwater at northern tip of Wooster Island.	Estuary
CT6000-E_02	Housatonic River Estuary - lower	2.2	Lower tidal portion of Housatonic River, from Rte 15 crossing DS to mouth; segment excludes 0.44 sq mi comprising eastern section of mouth (see segment 04), and a small (0.1 sq mi) area along western shore from Ferry Crk DS to Crimbo Pt.	Estuary
CT6000-E_03	Housatonic River Estuary - Ferry Creek & shore	0.1	Near coastal areas of lower Housatonic River estuary on western shore, from and including Ferry Creek DS to Crimbo Pt. and Marine Basin at head of Short Beach.	Estuary
CT6000-E_04	Housatonic River Estuary - mouth	0.4	Eastern portion of River mouth, from Milford Point to Wildermere Beach.	Estuary
CT6000-E_05	Housatonic River Estuary - offshore Lordship	2.6	From Point No Point east to Lordship Point (Lordship Beach area) along coast, extending about 2 miles offshore (triangular segment).	Estuary
CT7001-E_01	INNER BRIDGEPORT HARBOR/LEWIS GUT	1.4	Inner Bridgeport Harbor out to harbor entrance buoys. Includes Yellow Mill Channel (7103), Lewis Gut (7101) & estuaries of Johnson Creek (7102), Bruce Brook (7102), Island Brook (7105), & the Pequonnock River(7105).	Estuary
CT7002-E_01	OUTER BRIDGEPORT HARBOR_01	8.8	From Pine Creek Point, Fairfield, east to Point No Point, Stratford, along coast and extending about 0.5 miles offshore.	Estuary
CT7002-E_02	OUTER BRIDGEPORT HARBOR_02	8.8	0.5 miles offshore from Pine Creek Point, Fairfield, east to 0.5 miles offshore of Point No Point, Stratford and south to 1.5 miles offshore of Point No Point (Outer Waters of Bridgeport).	Estuary
CT7003-E_01	BLACKROCK HARBOR	0.4	Black Rock Harbor, Burr Creek & Cedar Creek, bounded by Grove Hill & Fayerweather Island.	Estuary
CT7004-E_01	SHERWOOD MILLPOND/COMPO COVE- pond	0.5	Sherwood Millpond and upper Compo Cove, west of Sherwood Island State Park, Westport.	Estuary
CT7004-E_02	SHERWOOD MILLPOND/COMPO COVE-cove	0.6	Outer Compo Cove & west to Cedar Point (includes Compo Beach), Westport.	Estuary
CT7005-E_01	SCOTT COVE	0.9	Scott Cove & offshore to a transect from Long Neck Point to the Fish Islands, Darien.	Estuary
CT7006-E_01	WESTCOTT COVE- Cove	0.5	Westcott Cove out to Greenway Island, Stamford.	Estuary
CT7006-E_02	WESTCOTT COVE- Offshore	0.3	Offshore from Westcott Cove from the end of Shippan Ave on Shippan Point east to a point one mile due south of Greenway Island, Stamford.	Estuary
CT7007-E_01	GREENWICH COVE_01	0.1	Inner Greenwich Cove and cove areas adjacent to Greenwich Point.	Estuary
CT7007-E_02	GREENWICH COVE_02	0.9	Body of Greenwich Cove (excluding segment 01), bounded by a transect from Todd Point to Greenwich Point.	Estuary
CT7008-E_01	Byram Harbor_01	1.0	Byram Harbor, Greenwich, Byram Point east to Field Point inside Calf Islands (does not include Byram River Estuary - see CT7411-E)	Estuary
CT7009-E_01	CAPTAIN HARBOR	3.4	From Byram Point to Great Captain Island to Greenwich Point, excluding Byram Harbor (CT7008-E), Cos Cob Harbor(CT7407-E) & Greenwich Harbor (CT7409-E) and Greenwich Cove (CT7007-E).	Estuary
CT7010-E_01	Long Island Sound West_01	6.0	Offshore areas of Bridgeport & Stratford to 50 ft isobath.	Estuary
CT7010-E_02	Long Island Sound West_02	30.0	Offshore areas of Bridgeport & Stratford from 50 ft isobath to state line.	Estuary
CT7010-E_03	Long Island Sound West_03	55.5	Offshore area of western Connecticut from NY border to the mouth of the Housatonic River (excluding Restricted Relay waters off Bridgeport & Stratford - segment 01) out to 50 foot depth contour.	Estuary
CT7010-E_04	Long Island Sound West_04	53.0	Offshore area of western Connecticut from NY border to the mouth of the Housatonic River from 50-foot depth contour to mid-Sound state line (excluding segment 02).	Estuary
CT7106-E_01	ASH CREEK	0.2	From mouth of Rooster River, Rte 95 crossing, DS to mouth of Ash Creek. Ash Creek forms border of Bridgeport & Fairfield.	Estuary
CT7106-E_02	Ash Creek near Tourney Rd.	0.0	Small arm of Ash Creek located on the western side near the mouth receiving water from a small unnamed tributary along Tourney Road (called Tourney Creek in 1998 303d).	Estuary
CT7108-E_01	Southport- Upper Mill Pond	0.0	Tidal portion of Mill River, from US of Rte 95 US to dam on Perry Mill Pond.	Estuary
CT7108-E_02	Southport- Lower Mill Pond	0.0	Tidal portion of Mill River, from tide gates at head of Southport Harbor US to Rte 95.	Estuary
CT7108-E_03	Southport - Sasco Brook Estuary	0.0	Tidal portion of Sasco Brook, from Long Island Sound US to Rte 1.	Estuary
CT7108-E_04	Southport Harbor & Offshore	2.1	Southport Harbor and offshore waters, from Sherwood Point, Westport, to a point about 0.5 mi. south of Pine Creek Point, Fairfield.	Estuary

Waterbody Segment Locations

Appendix A

WBIDSEGID	Segment Name	Segment Size	Location Description	Waterbody Type
CT7200-E_01	SAUGATUCK RIVER ESTUARY	0.4	From dam on Lee Pond (0.7 miles ds of Merritt Pkwy crossing) DS to Stony Point, near Burrit Cove at mouth of Saugatuck River, Westport. Also includes Yacht Basin and adj waters, Grays Creek & adjacent waters.	Estuary
CT7200-E_02	SAUGATUCK RIVER ESTUARY	0.6	Saugatuck River Estuary, From Stony Point, near Burrit Cove, at mouth of river to a transect connecting Bluff Point & inside of Seymour Point (excluding prohibited areas of Yacht Basin, Grays Creek & adjacent shore area).	Estuary
CT7300-E_01	Norwalk Hbr - Norwalk River Estuary/Mill Pond	0.4	Mouth of Norwalk River near Fitch Point US to Rte 1, including Mill Pond. Also includes cove between Calf Pasture and Gregory Points & nearshore waters on west side of Norwalk Harbor inside Long Beach Island.	Estuary
CT7300-E_02	NORWALK HARBOR (INNER)	0.6	Norwalk Harbor from mouth of Norwalk River near Fitch Point to Calf Pasture Point (excluding prohibited shellfish areas inside Long Beach Island and cove inside Calf Pasture Island).	Estuary
CT7300-E_03	NORWALK HARBOR- Adjacent Waters	1.6	Coves & nearshore waters east & west of Norwalk Harbor (Wilson Cove, Village Creek, Keyser Point, Shorehaven).	Estuary
CT7300-E_04	NORWALK HARBOR- Offshore Waters	5.3	Offshore areas of Norwalk, inside Norwalk Islands (Sheffield Island east to Cockenoe Island).	Estuary
CT7401-E_01	FIVEMILE RIVER ESTUARY	0.2	Estuary portion of Fivemile River, Darien & Norwalk, from a line drawn between Butler's Island and Roton, then US to Tokeneke Road crossing, Darien.	Estuary
CT7401-E_02	FIVEMILE RIVER ESTUARY- offshore	0.9	Offshore of Fivemile River Estuary, from a line drawn from Butler's Island to Roton Poind, and then out to a line drawn between the Fish Islands to Sheffield Island.	Estuary
CT7402-E_01	DARIEN COVE	0.4	Darien Cove, inside a line between Noroton Neck (Pratt Island Two) & Long Neck, at mouth of Goodwives River.	Estuary
CT7403-E_01	HOLLY POND/COVE HARBOR - pond	0.5	Holly Pond & Upper Cove Harbor.	Estuary
CT7403-E_02	HOLLY POND/COVE HARBOR - cove	0.3	Cove Harbor, excluding small upper section.	Estuary
CT7403-E_03	HOLLY POND/COVE HARBOR-offshore	0.4	Offshore from Cove Harbor.	Estuary
CT7405-E_01	STAMFORD HARBOR (E & W Branches)	0.3	East & West Branches of Inner Harbor.	Estuary
CT7405-E_02	STAMFORD HARBOR (Inner)	0.4	Inner Harbor, from Cemetary Point out to Davenport Point (west) & Shippan Point (east).	Estuary
CT7405-E_03	STAMFORD HARBOR (Outer)	0.5	Outer harbor from a transect between Davenport Point & Shippan Point out to Harbor entrance buoys & west to Greenwich townline.	Estuary
CT7405-E_04	STAMFORD HARBOR (East Greenwich shore)	1.1	Nearshore & offshore waters from Greenwich Point to Greenwich/Stamford townline, & offshore east to Shippan point (beyond harbor entrance buoys).	Estuary
CT7407-E_01	COS COB HARBOR	0.9	From Mianus Pond outlet at Rte 1 out to a transect from Tweed Island to Todd Point.	Estuary
CT7409-E_01	GREENWICH HARBOR	0.1	Greenwich Harbor, from mouth of Horseneck Brook (Rte 95) out to Round Island.	Estuary
CT7409-E_02	GREENWICH HARBOR - INDIAN COVE	0.3	Smith Cove, Indian Harbor, then offshore to a transect from Field Point to Tweed Island (excluding Greenwich Harbor proper).	Estuary
CT7411-E_01	BYRAM RIVER ESTUARY	0.1	Byram River Estuary: US of Rte 1 (Upland Street) to Byram Point, Greenwich.	Estuary

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT1000-00_01	01090005	PAWCATUCK RIVER	5.3	2004	M	120,231,321,420	F20,F21,T1,T42	1700,1750	4000,9000
CT1001-00_01	01090005	Wyassup Brook	5.3	2002	M	120,230,321,420	F1,F20,F21,F42		
CT1002-00_01	01090005	Green Fall River_01	1.5	2002	M	120,190,830	F21,T1,T20,T42	1200,1700,1750	1000
CT1002-00_02	01090005	Green Fall River_02	5.1	2004	M	120,230,321,420	F1,F20,F21,F42		
CT1002-00_03	01090005	Green Fall River_03	1.9	2002	E		F21,X1,X20,X42		
CT1004-00_01	01090005	Shunock River_01	4.3	2004	M	120,242,321,331,340,375,420	F1,F20,F21,F42		
CT1004-00_02	01090005	Shunock River_02	4	2002	E		F21,X1,X20,X42		
CT1100-00_01	01090005	Wood River	5	2002	M	120,230,321,420	F21,F42,T1,T20	200,1200,1500	1000,7000,7350,7400
CT2000-30_01	01100003	Fenger Brook	3	2002	M	120,230,321,420	F21,P1,P20,P42	0,1200,1700,1750	4000,9000
CT2102-00_01	01100003	Copps Brook_01	0.8	2002	M	120,230,321,420	F21,F42,N1,N20	0,500,530,1500	7000,7350,7400
CT2102-00_02	01100003	Copps Brook_02	4.2	2002	E	120	F20,F21,F50,X1,X42		
CT2103-00_01	01100003	Seth Williams Brook_01	0.4	2002	E		F21,X1,X20,X42		
CT2103-00_02	01100003	Seth Williams Brook_02	0.6	2002	M	120,230,322,331,340,420,840	F21,T1,T20,T42	0,1700,1750	1000,9000
CT2103-00_03	01100003	Seth Williams Brook_03	1	2004	M	120,230,322,331,340,420,840	F1,F20,F21,F42		
CT2104-00_01	01100003	Whitford Brook_01	1.6	2004	M	120,230,321,420	F1,F20,F21,F42		
CT2104-00_02	01100003	Whitford Brook_02	0.7	2002	M	120,230,321,420	F21,F42,P1,P20	1500	7000,7350,7400
CT2104-00_03	01100003	Whitford Brook_03	0.7	2002	E	120,190,230,321,420	F1,F20,F21,F42		
CT2104-00_04	01100003	Whitford Brook_04	1.3	2002	E		F21,X1,X20,X42		
CT2202-00_01	01100003	Latimer Brook_01	4.2	2002	E		F21,X1,X20,X42		
CT2202-00_02	01100003	Latimer Brook_02	3.4	2004	M	120,230,321,331,340,375,420	F1,F20,F21,F42		
CT2202-00_03	01100003	Latimer Brook_03	1.3	2002	E	120,190,860	F1,F20,F21,F42,F50		
CT2205-00_01	01100003	Patagansett River_01	1.2	2002	M	120,230,321,420	F21,F42,P1,P20	0	9000
CT2205-00_02	01100003	Patagansett River_02	1.9	2002	M	120,230,321,420	F21,P1,P20,T42	0,1700,1750	9000
CT2205-00_03	01100003	Patagansett River_03	1	2002	E	120	F21,T20,X1,X42	0,1500	7000,7350,7400,9000
CT2206-00_01	01100003	Bride Brook_01	0.7	2002	M	120,230,321,420	F21,N1,N42,P20	0,1500,1700,1750	7000,7400,8650,8920,9000
CT2206-00_02	01100003	Bride Brook_02	2	2002	E	120,222,860	F21,T20,X1,X42	500,550	8500
CT3000-08_01	01100005	Flat Brook, Ledyard_01	1.1	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT3001-00_01	01100003	Trading Cove Brook	7.2	2002	M	120,230,321,420	F1,F20,F21,F42		
CT3003-00_01	01100003	Poquetanuck Brook/Hewitt Brook	1.6	2002	M	120,230,321,420	F1,F20,F21,F42		
CT3004-00_01	01100003	Oxoboxo Brook_01	2.6	2002	M	120,230,321,420	F21,F42,T1,T20	0,1200,1500	7000,7400,8500,8520,9000
CT3004-00_02	01100003	Oxoboxo Brook_02	2.9	2002	M	120,230,321,420	F1,F20,F21,F42		
CT3100-00_01	01100002	WILLIMANTIC RIVER_01	2.7	2001	E		F21,X1,X20,X42		
CT3100-00_02	01100002	WILLIMANTIC RIVER_02	6.4	2001	M	125,230,321	F1,F20,F21,F42		
CT3100-00_03	01100002	WILLIMANTIC RIVER_03	9.5	2004	M	125,230,321,375,420	F21,T1,T20,T42	0,1700,1750	200,4000,4400,9000
CT3100-00_04	01100002	WILLIMANTIC RIVER_04	3.1	2004	E	125	F21,T20,X1,X42	0,1700,1750	200,4000,9000
CT3100-00_05	01100002	WILLIMANTIC RIVER_05	1.6	2004	M	230,321,375	F21,T1,T20,T42	500,550	200,4000
CT3100-00_06	01100002	WILLIMANTIC RIVER_06	0.5	2004	M	230,321,375	F21,T1,T20,T42	500,530,550,1700,1750	4000,9000

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT3100-19_01	01100002	Eagleville Brook_01	0.7	2004	M	120,322,331	F21,P1,P20,X42	0	9000
CT3100-19_02	01100002	Eagleville Brook_02	1.7	2004	M	120,322,331	F21,N1,N20,X42	0,500,530,1100	3000,3200,4000,6000,6300,7550,7700
CT3102-00_01	01100002	MIDDLE RIVER_01	0.2	2004	M	175,230,321,375,420	F21,F42,T1,T20	500,530,550	4000,4400,9000
CT3102-00_02	01100002	MIDDLE RIVER_02	3.7	2004	M	230,321,375,420	F1,F21,F42,T20	500,530,550	9000
CT3102-00_03	01100002	MIDDLE RIVER_03	2.5	2001	E	125	F21,X1,X20,X42		
CT3102-03_01	01100002	Still Brook	0.3	2004	M	242,322,331,340,420	F1,F20,F21,F42		
CT3103-00_01	01100002	Furnace Brook_01	0.2	2004	M	175,230,420	A1,A20,F21,P42	1600,1700,1750	7000,7100,9000
CT3103-00_02	01100002	Furnace Brook_02	4.6	2004	M	125,230,321,375,420	F1,F20,F21,T42		
CT3104-00_01	01100002	Roaring Brook_01	7.25	2004	M	125,230,321,375,420	F1,F20,F21,F42		
CT3104-00_02	01100002	Roaring Brook_02	3	2001	M	125,230,321,375,860	F1,F20,F21,F42,F50		
CT3104-00-2-L8 outlet_01	01100002	Ruby Lake outlet stream_01	0.1	2004	M	130,140,175,242,321	N1,N20,X21,X42	300,750	8200
CT3104-00-2-L8 outlet_02	01100002	Ruby Lake outlet stream_02	0.2	2004	E	242,322	F20,F21,X1,X42		
CT3104-01_01	01100002	Stckney Hill Brook	2.4	2004	M	242,321,331,340,420	F1,F20,F21,F42		
CT3106-00_01	01100002	SKUNKAMAUG RIVER_01	15.6	2004	M	125,230,321,331,340,375,420	F1,F20,F21,F42		
CT3108-00_01	01100002	HOP RIVER_01	14.5	2004	M	125,242,321,331,375,420	F1,F20,F21,F42		
CT3110-00_01	01100002	Tenmile River - Willimantic_01	7.6	2001	M	125,231,321,375,420	F1,F20,F21,F42		
CT3200-00_01	01100002	NATCHAUG RIVER_01	3.3	2004	M	125,150,152,420,860	F20,F21,P42,T1	1700,1750	9000
CT3200-00_02	01100002	NATCHAUG RIVER_02	11.7	2004	M	125,231,321,375,420	F1,F21,F50,P20,P42	1700,1750	1000,9000
CT3201-00_01	01100002	Bungee Brook_01	5.5	2001	M	230,321,375,420	F20,F21,F50,P1,P42	1700,1750	9000
CT3201-00_02	01100002	Bungee Brook_02	1.9	2001	E		F21,F50,X1,X20,X42		
CT3202-00_01	01100002	STILL RIVER_01	2.5	2001	M	125,230,321,375,420	F20,F21,F50,P1,P42	1700,1750	9000
CT3202-00_02	01100002	STILL RIVER_02	3.9	2001	E	125,130,170	F20,F21,F50,X1,X42		
CT3203-00_01	01100002	BIGELOW BROOK_01	5.2	2001	M	125,230,321,375,420	F1,F20,F21,F42,F50		
CT3203-00_02	01100002	BIGELOW BROOK_02	4.6	2001	E	125,130,170	F20,F21,F50,X1,X42		
CT3203-00_03	01100002	BIGELOW BROOK_03	1.7	2001	E	125	F21,F50,X1,X20,X42		
CT3206-00_01	01100002	MOUNT HOPE RIVER_01	5.3	2001	M	125,230,321,375,420	F1,F20,F21,F42,F50		
CT3206-00_02	01100002	MOUNT HOPE RIVER_02	9.6	2001	E	130,170	F20,F21,F50,X1,X42		
CT3207-00_01	01100002	FENTON RIVER_01	5.8	2001	M	125,230,321,375,420	F21,F42,F50,T1,T20	1500	7000,7400,8920
CT3207-00_02	01100002	FENTON RIVER_02	10.3	2001	E	125,130,150,170	F20,F21,F50,X1,X42		
CT3208-00_02	01100002	Sawmill Brook (Mansfield)	4.2	2004	M	242,322,340,375,420	F1,F20,F21,F42		
CT3300-00_01	01100001	FRENCH RIVER_01	4.6	2004	M	125,231,260,321,375,420	F21,N1,N42,P20	0,900,1700,1750,2210	9000

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT3300-00_02	01100001	FRENCH RIVER	1.1	2004	E	150,152,153,260,322,331	F21,X1,X20,X42		
CT3400-00_01	01100001	FIVEMILE RIVER_01	1	2001	E	125	F21,X1,X20,X42		
CT3400-00_02	01100001	FIVEMILE RIVER_02	4.2	2001	M	125,230,250,321,331,375,420	F1,F20,F21,F42		
CT3400-00_03	01100001	FIVEMILE RIVER_03	9.7	2001	E	125,150,321,331	F20,F21,X1,X42		
CT3400-00_04	01100001	FIVEMILE RIVER_04	4.5	2001	E		F21,X1,X20,X42		
CT3401-00_02	01100001	Rocky Brook_02	0.2	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT3404-00_01	01100001	Whetstone Brook_01	4.3	2001	M	230,321,375,420	F1,F20,F21,F42		
CT3500-00_01	01100001	MOOSUP RIVER_01	1.5	2001	E	125,150,322,331	F1,F20,F21,F42		
CT3500-00_02	01100001	MOOSUP RIVER_02	4.1	2001	M	125,230,321,420	F1,F20,F21,F42		
CT3500-00_03	01100001	MOOSUP RIVER_03	6.4	2004	M	242,322,331,340,375,420	F1,F20,F21,F42		
CT3501-00_01	01100001	Quanduck Brook_01	3.9	2001	M	230,321,331,375,420	F1,F20,F21,F42		
CT3503-00_01	01100001	Ekonk Brook	4.5	2004	M	242,321,322,340,375,420	F1,F20,F21,F42		
CT3600-00_01	01100001	PACHAUG RIVER_01	0.7	2001	E	175,230,321,375,420	F1,F20,F21,F42		
CT3600-00_02	01100001	PACHAUG RIVER_02	0.7	2001	E		F21,X1,X20,X42		
CT3600-00_03	01100001	PACHAUG RIVER_03	1.9	2001	E		F21,X1,X20,X42		
CT3600-00_04	01100001	PACHAUG RIVER_04	1.2	2001	E	125,150,322,331,375	F20,F21,X1,X42		
CT3600-00_05	01100001	PACHAUG RIVER_05	2.6	2001	E	150,322,331,375	F21,X1,X20,X42		
CT3600-05_01	01090005	Crooked Brook	1.9	2004	M	242,322,331,340,420	F21,F42,T1,T20	500,550	9000
CT3601-00_01	01100001	Great Meadow Brook	1.1	2002	E	130,175	F21,X1,X20,X42		
CT3604-00_01	01100001	Myron Kinney Brook_01	4.2	2001	M	230,321,331,375,420	F1,F20,F21,F42		
CT3700-00_01	01100001	QUINEBAUG RIVER_01	7.6	2004	M	231,321,340,375,420,840	F21,N1,N20,N42	0,900,1200,1500,1700,1750,2210	200,400,1000,4000,7000,7400,9000
CT3700-00_02	01100001	QUINEBAUG RIVER_02	3	2001	E	125,130	F21,T20,X1,X42	0,900,1500,1700,1750,2400	200,1000,6000,6300,7000,7400,8910
CT3700-00_03	01100001	QUINEBAUG RIVER_03	6.4	2001	E	125	F21,X1,X20,X42		
CT3700-00_04	01100001	QUINEBAUG RIVER_04	17.5	2004	M	125,231,420,840	F21,P1,P20,P42	0,900,1200,1500,1700,1750,2210	200,1000,7000,7400,9000
CT3700-00_05	01100001	QUINEBAUG RIVER_05	3.3	2004	M	125,231,321,420	F21,N1,N42,T20	900,1200,1500,1700,1750	200,1000,7000,7400,9000
CT3700-00_06	01100001	QUINEBAUG RIVER_06	0.3	2001	E	125	F21,X1,X20,X42		
CT3700-00_07	01100001	QUINEBAUG RIVER_07	6.3	2004	M	125,231,321,375,420	F20,F21,N1,N42	900,1700,1750,2500	200,1000,7000,7400,9000
CT3708-00_01	01100001	LITTLE RIVER (PUTNAM)_01	2.5	2001	M	125,230,321,375,420,860	F20,F21,N1,N42	1700,1750	9000
CT3708-00_02	01100001	LITTLE RIVER (PUTNAM)_02	1.7	2001	E	125,130	F21,F50,X1,X20,X42	0,900,1700	1000,1600
CT3708-01_01	01100001	Muddy Brook - Woodstock_01	5.2	2001	E		F21,X1,X20,X42,X50		
CT3708-01_02	01100001	Muddy Brook_02	2	2001	M	230,321,375,420	F21,F50,P1,P20,T42	0,1700,1750	1000,9000
CT3708-01_03	01100001	Muddy Brook_03	1.8	2001	E		F21,X1,X20,X42,X50		

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT3708-10_01	01100001	North Running Brook_01	0.3	2004	M	175,242,322,331,340,375,420	F21,F42,N1,N20	0,900,1200,1210	1000,1050
CT3708-10_02	01100001	North Running Brook_02	2.7	2004	M	175,242,322,331,340,375,420	F1,F20,F21,F42		
CT3709-00_01	01100001	Wappaquoia Brook	3.2	2004	M	322,331,340,420	F20,F21,T1,T42	1700,1750	9000
CT3710-00_01	01100001	MASHAMOQUET BROOK_01	3	2004	M	125,230,321,331,375,420	F20,F21,T1,T42	1700,1750	9000
CT3710-00_02	01100001	MASHAMOQUET BROOK_02	4.4	2004	M	125,420,810,820	F20,F21,N1,N42	1700,1750	1000,9000
CT3711-00_01	01100001	BLACKWELL BROOK	12.1	2001	M	230,321,375,420	F1,F20,F21,F42		
CT3712-02_01	01100001	Horse Brook	2.2	2002	E		F21,X1,X20,X42		
CT3713-00_01	01100001	Mill Brook - Plainfield_01	1.9	2001	M	125,230,322,375,420,840	F1,F20,F21,F42		
CT3713-00_02	01100001	Mill Brook - Plainfield_02	2.2	2001	M	125,230,321,375,420	F1,F20,F21,F42		
CT3800-00_01	01100002	SHETUCKET RIVER_01	1.6	2001	E	230,340	F21,N1,N42,X20	1500,1700,1750,2210	200,400,7000,7400
CT3800-00_02	01100002	SHETUCKET RIVER_02	6	2002	E		F21,X1,X20,X42		
CT3800-00_03	01100002	SHETUCKET RIVER_03	5	2001	E	125,190	F21,T20,X1,X42	1500,2210	7000,7400
CT3800-00_04	01100002	SHETUCKET RIVER_04	2.3	2002	E		F21,X1,X20,X42		
CT3800-00_05	01100002	SHETUCKET RIVER_05	5	2004	M	231,321,375,420	F20,F21,P1,P42	1700,1750	9000
CT3803-00_01	01100002	Merrick Brook_01	11.8	2001	M	125,230,321,375,420	F1,F20,F21,F42		
CT3805-00_01	01100002	LITTLE RIVER (SPRAGUE)_01	0.5	2001	E	150,250,260,331	F21,X1,X20,X42	410	100
CT3805-00_02	01100002	LITTLE RIVER (SPRAGUE)_02	1	2001	M	175,230,250,260,321,375,420,710	F42,N1,N20,N21	0,410,500,560,2400	100,6000,6300,8500,9000
CT3805-00_03	01100002	LITTLE RIVER (SPRAGUE)_03	17.3	2001	M	230,321,331,375,420	F1,F20,F21,F42,F62		
CT3900-00_01	01100003	YANTIC RIVER	6.3	2002	E	120,230,321,420	F1,F20,F21,F42		
CT3900-00_02	01100003	YANTIC RIVER	5.8	2002	E	120,230,321,420	F1,F20,F21,F42		
CT3900-07_01	01100003	Kahn Brook_01	0.6	2002	M	120,230,321,420	F21,P1,P20,P42	0,900,910,930,1700,1750	1000,1600,9000
CT3900-07_02	01100003	Kahn Brook_02	2.3	2002	E	120,320	F20,F21,X1,X42		
CT3900-09_01	01100003	Bentley Brook	2.1	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT3903-00_01	01100003	Sherman Brook	1	2002	M	230,321,420	F1,F20,F21,F42		
CT3905-00_01	01100003	Pease Brook	9.2	2002	M	321,331,375	F20,F21,X1,X42		
CT3906-00_01	01100003	Gardner Brook	4.76	2002	M	230,321,420	F1,F20,F21,F42		
CT3907-00_01	01100003	Susquetonscut Brook	12.7	2002	M	230,321,420	F20,F21,T1,T42	1700,1750	9000
CT4000-00_01	01080205	CONNECTICUT RIVER_01	9	2004	M	120,231,260,420,510	F20,F42,P1,P21	410	9000,9050
CT4000-00_02	01080205	CONNECTICUT RIVER_02	11.1	2004	M	120,231,260,420,510	F20,P1,P21,P42	410,1700	400,9000,9050
CT4000-00_03	01080205	CONNECTICUT RIVER_03	34.5	2004	M	120,231,260,420,510	F20,P1,P21,P42	410,1700,1750	200,220,400,9000,9050
CT4000-54_02	01080205	Clark Creek	0.5	2004	M	242,322,331,340,375,420	F1,F20,F21,F42		
CT4003-00_04	01080207	Freshwater Brook_01	0.3	2004	M	242,322,331,340,375,420	F21,T42,X1,X20	1700,1750	9000
CT4006-00_01	01080205	Salmon Brook Glastonbury	2.9	2000	M	120,230,321,420	F1,F20,F21,F42		
CT4006-00_02	01080205	Salmon Brook Glastonbury	4.1	2000	M	120,230,321,420	F1,F20,F21,F42		
CT4007-00_01	01080205	Hubbard Brook	5.1	2000	M	242,420,530,540,840	F21,F42,T1,T20	580	4000,4200
CT4009-00_01	01080205	ROARING BROOK	6.4	2000	M	153,230,321,420	F1,F20,F21,F42		
CT4009-00_02	01080205	ROARING BROOK	2.8	2000	E	120,152,153,170,322,331	F1,F20,F21,F42		

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT4009-00_03	01080205	ROARING BROOK	2.4	2000	E	152,153,170,322,331,860	F1,F20,F21,F42,F50		
CT4013-00_01	01080205	Sumner Brook	0.8	2002	E	175	F21,N1,N42,X20	1700	500
CT4013-08_01	01080205	Long Hill Brook	0.4	2002	E	175	F21,N1,N42,X20	1700	500
CT4015-02_01	01080205	Beaver Meadow Brook	2.6	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT4017-03_01	01080205	Pattaconk Brook_01	4	2000	M	125,230,321,375,420	F1,F20,F21,F42		
CT4017-03_02	01080205	Pattaconk Brook_02	1.4	2000	E	125,152,153,375	F20,F21,X1,X42		
CT4018-00trib_01	01080205	Un-named Trib to the Deep River	0.4	2001	M	150,151,152,230,322	F21,T20,X1,X42	500	6000,6300
CT4019-00_01	01080205	Fall River	9.3	2000	M	120,153,230,420,820	F1,F20,F21,F42		
CT4020-06_01	01080205	Mill Brook - Old Lyme_01	1.2	2000	E	120,860	F20,F21,T1,T42	1700,1750	8650,9000
CT4020-06_02	01080205	Mill Brook - Old Lyme_02	0.7	2000	E	120,860	F20,F21,T1,T42	1700,1750	8650,9000
CT4021-00_01	01080205	Black Hall River	2.6	2000	E	860	F20,F21,T1,T42	1700,1750	8650,9000
CT4100-00_01	01080205	Stony Brook	3.4	2000	E	125,152,153	F21,X1,X20,X42		
CT4100-00_02	01080205	Stony Brook	3.9	2000	E	125,152,153,322,331,375	F21,X1,X20,X42		
CT4100-00_03	01080205	Stony Brook	3.6	2000	M	230,321,331,375,420	F21,F42,P1,P20	0,1200,1220	1000,9000
CT4101-00_01	01080205	Muddy Brook_01	2.2	2000	M	230,321,331,375,420	F21,P1,P20,P42	0,1700,1750	9000
CT4101-00_02	01080205	Muddy Brook_02	7.4	2004	E		F21,X1,X20,X42		
CT4200-00_01	01080205	SCANTIC RIVER_01	8.5	2000	M	153,230,321,331,375,420	F21,F42,P1,P20	0	9000
CT4200-00_02	01080205	SCANTIC RIVER_02	10.9	2000	E	120,125,150,153,240,331,375	F20,F21,X1,X42		
CT4200-00_03	01080205	SCANTIC RIVER_03	5.9	2000	E	120,125,152,153,322,331,375	F20,F21,X1,X42		
CT4206-00_01	01080205	Broad Brook_01	0.8	2004	M	120,230,250,321,331,375,420	F21,N1,N42,P20	0,900,1200,1700,1750	1000,9000
CT4206-00_02	01080205	Broad Brook_02	8.9	2000	E	120,150,152,153,230,322,331,375,420	F21,P1,P20,P42	0,900,1100,1200,1700	1000,1350,1600,9000
CT4300-00_01	01080207	FARMINGTON RIVER -01	8.5	2000	E	120,190,191	F20,F21,X1,X42		
CT4300-00_02	01080207	Farmington River -02	19.6	2004	M	120,231,321,375,420,600,700	F20,F21,P1,P42	1700,1750	9000
CT4300-00_03	01080207	Farmington River - 03	8.4	2004	M	231,321,331,375,420	F1,F20,F21,F42		
CT4300-00_04	01080207	Farmington River - 04	14.9	2004	M	242,322,331,340,375,420	F1,F20,F21,F42		
CT4300-00_05	01080207	Farmington River - 05	2.3	2000	E	120,130,175	F21,T20,X1,X42	1500	7000,7350,7400
CT4300-48_01	01080207	Perkins Brook	0.73	2002	E	860	P1,P20,X21,X42	1800	100,8500
CT4300-50_01	01080207	Rainbow Brook	1.7	2000	M	120,230,321,375,420	F21,F42,N1,N20,N62	400,1200	4000,4300
CT4300-51_01	01080207	Seymour Hollow Brook	1.3	2000	M	120,230,322,375,420	F21,N1,N20,N62,T42	400,1700,1750	4000,4300,9000
CT4302-00_01	01080207	MAD RIVER (WINCHESTER)	2.3	2000	M	120,230,321,375,420	F1,F20,F21,F42		
CT4302-00_02a	01080207	MAD RIVER (WINCHESTER)	1.7	2000	E	120,125,130,170	F20,F21,X1,X42		
CT4302-00_02b	01080208	MAD RIVER (WINCHESTER)	0.5	2001	E	120,125,130,171	P20,F21,P1,X42	1500	7000, 7400
CT4302-00_03	01080207	MAD RIVER (WINCHESTER)	4.6	2000	E	130,152,153,170,322,331,370,860	F20,F21,F50,X1,X42		
CT4302-09_01	01080207	Indian Meadow Brook_01	0.5	2004	M	242,321,331,340,420	F1,F20,F21,F42		
CT4303-00_01	01080207	STILL RIVER_01	1.3	2000	M	120,153,230,321,375,420	F1,F20,F21,F42		

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT4303-00_02	01080207	STILL RIVER_02	2.5	2004	M	120,230,321,375,420,600	F21,T1,T20,T42		
CT4303-00_03	01080207	STILL RIVER_03	1.7	2000	M	120,153,321,375,420	F1,F20,F21,F42		
CT4303-00_04	01080207	STILL RIVER_04	7.4	2000	E		F21,X1,X20,X42		
CT4304-00_01	01080207	SANDY BROOK	8.6	2004	M	120,125,153,230,321,331,340	F1,F20,F21,F42		
CT4308-00_01	01080207	FARMINGTON RIVER, EAST BRANCH	1	2000	E	120,175	F21,N1,N20,N42	1500	7000,7350,7400
CT4310-00_01	01080207	NEPAUG RIVER_01	0.9	2000	E	120,175	F21,N1,N20,N42	1500	7000,7350,7400
CT4310-00_02	01080207	NEPAUG RIVER_02	5.6	2000	M	120,125,153,230,321,331,375,420	F1,F20,F21,F42,F50		
CT4311-00_01	01080207	Burlington Brook	4.6	2004	M	120,125,153,231,321,375,420	F21,F42,T1,T20	2500	9000
CT4314-00_01	01080207	Coppermine Brook_01	2.4	2000	M	230,331,375,420,810	F21,N1,N20,N42	0,1700,1750	500,9000
CT4314-00_02	01080207	Coppermine Brook_02	2.6	2000	E	125,130,153,170,331	F20,F21,F50,X1,X42		
CT4314-04trib_01	01080207	Wildcat Brook tributary	0.3	2000	E		F21,X1,X20,X42		
CT4315-00_01	01080207	PEQUABUCK RIVER_01	5.1	2004	M	120,230,321,330,375,420,600	F21,N1,N42,P20	0,1700,1750,2500	200,4000
CT4315-00_02	01080207	PEQUABUCK RIVER_02	3.5	2000	M	120,230,242,321,420,510,600	F21,N1,N20,N42,N62	0,600,1700,1750,2500	100,200,4000
CT4315-00_03	01080207	PEQUABUCK RIVER_03	1.3	2000	M	120,230,242,330,375,420,600	F21,F42,P1,P20	0,500,580	100,200,4000,9000
CT4315-00_04	01080207	PEQUABUCK RIVER_04	0.3	2000	E	130,175	A1,A20,A42,F21	1600	7000,7100
CT4315-00_05	01080207	PEQUABUCK RIVER_05	2.6	2000	M	120,230,331,420,600	F21,T1,T20,T42	0,1700,1750	100,200,4000,5000,5100,6000,6300
CT4315-00_06	01080207	PEQUABUCK RIVER_06	5.2	2000	M	120,230,331,375,420	F21,F42,T1,T20	0	9000
CT4317-00_01	01080207	Nod Brook	1	2004	M	322,820	F20,F21,X1,X42		
CT4318-00_01	01080207	Hop Brook	6.7	2004	M	321,820	F20,F21,T1,T42	1700,1750	9000
CT4318-03_01	01080207	Stratton Brook	1	2004	M	322,820	F20,F21,X1,X42		
CT4319-00_01	01080207	SALMON BROOK, WEST BRANCH	10	2000	M	120,230,321,375,420	F1,F20,F21,F42		
CT4319-07_01	01080207	Beach Brook_01	2.4	2004	M	242,322,331,340,375,420	F1,F20,F21,F42		
CT4320-00_01	01080207	SALMON BROOK	13.3	2004	M	120,230,331,340,375,420	F21,T1,T20,T42	900,1100,1700,2500	1000,3000,3200,4000,4600
CT4320-05_01	01080207	Beldon Brook	4.1	2004	M	322,820	F20,F21,X1,X42		
CT4320-08_01	01080207	Mountain Brook	2.5	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT4320-09_01	01080207	Dismal Brook	3.5	2004	M	322,820	F20,F21,X1,X42		
CT4400-00_01	01080205	PARK RIVER	2.2	2000	E	120,175,230	A1,A20,F21,N42	1600,1700,1750	100,400,7000,7100
CT4400-01_01	01080205	South Branch of Park River_01	0.2	2000	E	120,175	A1,A20,F21,N42	1600,1700	100,400,4000,7000,7100
CT4400-01_02	01080205	South Branch of Park River_02	2.7	2000	E	120,153,190,191	F21,N1,N42,P20	0,1600,1700	100,400,4000,7550,7600
CT4402-00_01	01080205	Piper Brook_01	0.1	2000	E	175	A1,A20,A42,F21	1600	7000,7100
CT4402-00_02	01080205	Piper Brook_02	4.8	2000	M	230,331,420	F21,N1,N42,P20	0,500,530,1200,1220,1700,1750	400,500,4000,9000
CT4403-00_01	01080205	Trout Brook_01	1.1	2000	M	120,230,321,331,420,810,820,830	F21,N1,N42,P20	0,1600,1700	400,4000,7550,7600

River Segments: Use Support, Causes and Sources of Impairment

Appendix B

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT4403-00_02	01080205	Trout Brook_02	0.9	2000	E	120,175	F21,N1,N20,N42	0,1600,1700	400,4000,7000,7100,7550,7600
CT4403-00_03	01080205	Trout Brook_03	5.9	2000	E	120,175,810,820,830	F21,N1,N42,P20	0,1600,1700	400,4000,7550,7600
CT4404-00_01	01080205	PARK RIVER, NORTH BRANCH	0.5	2000	E	120,175	A1,A20,A42,F21	1600,1700	400,4000,7000,7100
CT4404-00_02	01080205	PARK RIVER, NORTH BRANCH	4.3	2000	M	120,230,420,810,820,830	F21,P1,P20,P42	0,1700,1750	400,4000
CT4500-00_01	01080205	HOCKANUM RIVER_01	4.1	2000	E	120,190,191,250,260,30,550	F21,P1,P20,X42	0	4000,9000
CT4500-00_02	01080205	HOCKANUM RIVER_02	3.6	2004	M	120,230,250,260,321,420,550	F21,N1,N42,P20	0,1700,1750,2500	200,4000,6000,6300
CT4500-00_03	01080205	HOCKANUM RIVER_03	3.4	2000	M	120,125,230,250,321,420	F21,P1,P20,X42	0,1200,2210	4000,6000,6300,9000
CT4500-00_04	01080205	HOCKANUM RIVER_04	3.2	2004	M	120,125,230,321,330,340,375,420	F21,P1,P20,T42	0	200,4000,9000
CT4500-00_05	01080205	HOCKANUM RIVER_05	2.3	2004	M	120,230,321,330,375,420	F21,P1,P20,P42	0,1700,1750	200,4000,9000
CT4500-00_06	01080205	HOCKANUM RIVER_06	3.8	2004	M	120,125,231,321,330,420	F21,N1,N42,P20	0,500,530,550,1200,1600,1700,1750,2500	1000,4000,7000,7100,7550
CT4500-00_07	01080205	HOCKANUM RIVER_07	0.7	2004	M	120,175	A1,A20,A42,F21	1600	7000,7100
CT4500-00_08	01080205	HOCKANUM RIVER_08	0.7	2004	M	130,170	F21,P1,P20,X42	0,1500	7000,7350,7400,9000
CT4501-00_01	01080205	Charters Brook	6.1	2004	M	242,322,420	F1,F20,F21,F42		7000,7350,7400,9000
CT4503-00_01	01080205	Tankerhoosen River_01	1.5	2004	M	230,321,375,420,830	F21,F42,P1,P20	0,1500	
CT4503-00_02	01080205	Tankerhoosen River_02	4.1	2004	M	230,321,375,420,830	F1,F20,F21,F42		
CT4503-01_01	01080205	Gages Brook	2	2004	M	321,820	F20,F21,X1,X42		
CT4600-00_01	01080205	MATTABASSET RIVER_01	3.3	2004	E	120,170	F21,P62,X1,X20,X42	2100,2500	4000
CT4600-00_02	01080205	MATTABASSET RIVER_02	3.8	2004	M	120,230,231,321,375,420,810,820,830	F21,N1,N42,P20,P62	0,1100,1700,1750,2500	500,4000
CT4600-00_03	01080205	MATTABASSET RIVER_03	3.8	2000	M	120,810,820,830	F21,N1,N42,P20,P62	0,900,1100,1700,1750,2500	500,1000,4000,6000,6300
CT4600-00_04	01080205	MATTABASSET RIVER_04	1.8	2004	M	120,322,331,375,420,810,820,830	F21,P1,P20,P42,P62	0,900,1100,1700,1750,2500	1000,4000,8650
CT4600-00_05	01080205	MATTABASSET RIVER_05	1	2000	E	175	F21,P1,P20,P62,T42	0,900,1100,1700,1750,2210,2500	4000,8650
CT4600-00_06	01080205	MATTABASSET RIVER_06	1.3	2004	M	120,230,330,420,810,820,830,860	F21,P1,P20,P42,T62	0,900,1100,1700,1750,2500	3000,3200,8650,8700,8710,9000
CT4600-00_07	01080205	MATTABASSET RIVER_07	1.6	2000	M	120,810,820,830,860	F21,F50,T42,T62,X1,X20	900,1700,1750	8650
CT4600-01_01	01080205	John Hall Brook_01	2.3	2002	E		F21,X1,X20,X42		
CT4600-01_02	01080205	John Hall Brook_02	1	2004	E	420,830	F21,F50,P1,P42,X20	1700,1750	1000,4000,9000
CT4600-07_01	01080205	Little Brook (Rocky Hill)	1.9	2004	E	420,830	F21,N1,N42,X20	1700,1750	500,4000,9000
CT4600-13_01	01080205	Spruce Brook (Berlin)	5.1	2004	E	420,830	F21,P1,P42,X20	1700,1750	500,4000,9000
CT4600-23_01	01080205	Coles Brook	3.5	2004	E	420,830	F21,N1,N42,X20	1700,1750	500,4000,9000
CT4600-26_01	01080205	Miner Brook	2.9	2004	E	420,830	F21,P1,P42,X20	1700,1750	4000,9000

River Segments: Use Support, Causes and Sources of Impairment

Appendix B

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT4600-27_01	01080205	Willow Brook (Cromwell)	1.4	2004	E	420,830	F21,N1,N42,X20	1700,1750	500,4000,9000
CT4601-00_01	01080205	Belcher Brook	3.6	2004	E	420,830	F21,N1,N42,X20	1700,1750	500,4000,9000
CT4601-01_01	01080205	Crooked Brook_01	1.1	2002	E		F21,X1,X20,X42		
CT4601-01_02	01080205	Crooked Brook_02	0.3	2002	E	175,800	F21,P1,P20,X42	1500	7000,7400,8920
CT4601-01_03	01080205	Crooked Brook_03	1.4	2002	E		F21,X1,X20,X42		
CT4602-00_01	01080205	Willow Brook_01	3.6	2004	M	321,331,420	F21,N1,N20,N42	0,1700,1750,2400	500,4000,9000
CT4602-00_02	01080205	Willow Brook_02	2.5	2002	E		F21,X1,X20,X42		
CT4603-00_01	01080205	Webster Brook	3.4	2004	E	420,830	F21,P1,P42,X20	1700,1750	500,4000,9000
CT4604-00_01	01080205	Sawmill Brook (Middletown)	3	2004	E	420,830	F21,P1,P42,X20	1700,1750	500,4000,9000
CT4607-00_01	01080205	COGINCHAUG_01	1.9	2000	E	120,190,191	F21,T42,X1,X20	1700,1750	9000
CT4607-00_02	01080205	COGINCHAUG_02	0.3	2004	M	120,153,190,230,331,420,810,830	F20,F21,N1,N42	1700,1750	9000
CT4607-00_03	01080205	COGINCHAUG_03	0.9	2000	M	120,153,230,321,331,375,420,830	F1,F20,F21,F42		
CT4607-00_04	01080205	COGINCHAUG_04	4.2	2004	M	120,152,153,230,322,331,375,420,830	F20,F21,N1,N42	1700,1750	8650
CT4607-00_05	01080205	COGINCHAUG_05	4.7	2000	M	120,152,153,230,322,331,375,420,830	F21,N1,N42,P62,T20	900,910,1700,1750,2210	1000,1050,1600,8600,8650
CT4607-00_06	01080205	COGINCHAUG_06	3.1	2004	M	230,420,830	F21,N1,N42,X20	900,910,1700,1750	1000,1600
CT4700-00_01	01080205	Salmon River	10.3	2004	M	120,231,321,375,420,242,322,331,340,375,420	F1,F20,F21,F42		9000,9070
CT4703-01_01	01080205	Cabin Brook	1.5	2004	M	20	F21,F42,X1,X20		
CT4705-00_01	01080205	JEREMY RIVER_01	1.2	2000	M	120,230,321,375,420	F1,F20,F21,F42		
CT4705-00_02	01080205	JEREMY RIVER_02	7.3	2000	E	120,152,375,810,820,830	F1,F20,F21,F42		
CT4707-00_01	01080205	BLACKLEDGE RIVER	10.2	2000	M	120,125,230,331	F1,F20,F21,F42		
CT4707-06_01	01080205	Flat Brook, Marlborough	2	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT4707-12_01	01080205	Lyman Brook	3.7	2000	M	230,322,375,420	F1,F20,F21,F42		
CT4709-00_01	01080205	Pine Brook_01	2.9	2000	M	120,125	F1,F20,F21,F42		
CT4709-00_02	01080205	Pine Brook_02	4.5	2000	M	120,125,150,152,153,322,331	F20,F21,X1,X42		
CT4709-04_01	01080205	Pocotopaug Creek_01	2	2000	E	120,150,321	F20,F21,X1,X42		
CT4709-04_02	01080205	Pocotopaug Creek_02	2.1	2000	M	120,222	F21,F42,P1,P20	0,500,530,2210	100,120,4000,9000
CT4800-00_01	01080205	EIGHTMILE RIVER - Lyme	8.1	2004	M	120,230,242,321,331,340,375,420	F1,F20,F21,F42		
CT4802-00_01	01080205	Eightmile River, E. Branch - Salem	8.1	2000	M	120,153,230,321,331,375,420	F1,F20,F21,F42		
CT5000-55_01	01100004	Oyster River trib_01 - Milford	1.3	2000	M	250,260,330	P1,P20,T21,X42	0,500,560	4000,4500,8500
CT5000-55_02	01100004	Oyster River trib_02 - Milford	0.4	2000	M	250,260,330	F21,P1,P20,X42	0,500,560	100,4000,4500,8400,8500
CT5103-00_01	01100004	MENUNKETESUCK RIVER_01	2	2000	E	190,230,321,331,375,420	F21,T1,T20,T42	1500	7000,7350,7400
CT5103-00_02	01100004	MENUNKETESUCK RIVER_02	2	2002	M	120,230,321,331,375,420	F21,P1,P20,T42	1500	7000,7350,7400
CT5103-00_03	01100004	MENUNKETESUCK RIVER_03	5.7	2000	M	322,375	F20,F21,F50,X1,X42		
CT5104-00_01	01100004	Indian River - Clinton	5.7	2000	E	120	F21,X1,X20,X42		

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT5105-01_01	01100005	Pond Meadow Brook	0.7	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT5106-00_01	01100004	HAMMONASSET RIVER	7.8	2000	M	120,230,321,331,420	F21,F42,T1,T20	1500	7000,7350,7400
CT5106-00_02	01100004	HAMMONASSET RIVER	2.6	2000	M	120,210	F1,F20,F21,F42,F50		
CT5106-00_03	01100004	HAMMONASSET RIVER	3.3	2000	E	120,130,190,191	F1,F20,F21,F42,F50		
CT5107-00_01	01100004	Neck River	9	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT5108-00_01	01100004	East River - Guilford	3	2000	E	120	F21,X1,X20,X42		
CT5110-00_01	01100004	WEST RIVER (GUILFORD)	2.1	2000	E	120,130,150,170,190,331	F20,F21,X1,X42		
CT5110-00_02	01100004	WEST RIVER (GUILFORD)	5.2	2000	E	230,321,375,420	F1,F20,F21,F42		
CT5111-00_01	01100004	BRANFORD RIVER	2.8	2000	E	120	F21,X1,X20,X42		
CT5111-00_02	01100004	BRANFORD RIVER	3	2000	M	230,321,331,375,420	F20,F21,T1,T42	1700,1750	9000
CT5112-00_01	01100004	FARM (EAST HAVEN) RIVER	6	2004	M	242,331,340,375,420	F21,T1,T42,X20	1700,1750	9000
CT5112-00_02	01100004	FARM (EAST HAVEN) RIVER	1.1	2000	M	230,321,331,375,420,860	F21,N1,N42,P20,P50	0,900,1700,1750	1000,1350,1600
CT5112-00_03	01100004	FARM (EAST HAVEN) RIVER	8.3	2004	E	150,322,331,375,860	F20,F21,T50,X1,X42	900	1000,1350,3000,3200,4000
CT5112-10_01	01100004	Burrs Brook	1.6	2000	E	210,860	F21,P1,P20,P62,T50,X42	900,1300,2500	5000,5100
CT5200-00_01	01100004	QUINNIPIAC RIVER_01	5	2004	M	231,321,330,420,510,520,530,540,840,850	F21,N1,N42,P20	0,400,900,920,1100,1200,1700,1750	100,200,3000,3200,4000,6000,6300,9000
CT5200-00_02	01100004	QUINNIPIAC RIVER_02	8.3	2004	M	231,250,260,321,330,375,420,550	F21,N1,N42,P20	0,400,900,920,1100,1200,1700,1750	100,200,3000,3200,4000,6000,6300,9000
CT5200-00_03	01100004	QUINNIPIAC RIVER_03	1.5	2004	M	231,260,321,331,375,420,550	N1,N42,P20,P21	0,410,900,1100,1200,1500,1700,1750	200,3000,3200,4000,6000,6300,7000,7400,8200,8920,9000
CT5200-00_04	01100004	QUINNIPIAC RIVER_04	4.6	2000	M	231,321,331,375,420	N1,N21,N42,P20	0,410,900,1100,1200,1500,1700,1750	3000,3200,4000,6000,6300,7000,7400,8200,8920,9000
CT5200-00_05	01100004	QUINNIPIAC RIVER_05	7.7	2000	M	230,260,321,331,375,810,830	F42,N1,N21,P20	0,410,900,1100,1200,1500	200,3000,3200,6000,6300,7000,7400,8200,8920,9000
CT5200-00_06	01100004	QUINNIPIAC RIVER_06	2.9	2000	M	260,550,820	N1,N20,N21,T42	0,410,900,1100,1200,1500,1700,1750	200,3000,3200,4000,6000,6300,7000,7400,8200,8920,9000
CT5200-00_07	01100004	QUINNIPIAC RIVER_07	3.6	2000	M	820	F21,N1,N20,X42	0,1600	4000,5000,5100,7000,7100,9000
CT5200-02_01	01100004	Patton Brook	2.6	2002	E	130,175	F21,T20,X1,X42	1500	7000,7400,8920
CT5200-07_01	01100004	Honeypot Brook	4.1	2000	M	321,331,810,820,830	F21,T1,T20,T42	0,1500	7000,7400,8920,9000
CT5200-23_01	01100004	Hemingway Creek	0.8	2004	M	322,820	F21,P20,X1,X42	0	9000

River Segments: Use Support, Causes and Sources of Impairment

Appendix B

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT5201-00_01	01100004	EIGHTMILE RIVER - Southington	3.3	2004	M	230,260,321,331,375,420	F20,N1,N21,T42	410,1700,1750	8200,9000
CT5201-00_02	01100004	EIGHTMILE RIVER - Southington	2.4	2000	M	230,260,321,370,420	F1,F20,F21,F42		
CT5201-04_01	01100004	Dayton Brook	1.7	2000	M	120,820	F20,F21,X1,X42		
CT5201-08_01	01100004	Roaring Brook	2.1	2002	E	120,130,175	F21,T20,X1,X42	1500	7000,7350,7400
CT5202-00_01	01100004	Tenmile River - Southington_01	3.6	2000	M	230,321	F21,F42,P1,P20	0,1100	4000,6000,6300,9000
CT5202-00_02	01100004	Tenmile River - Southington_01	1.7	2000	M	230,321,331,375,420	F1,F20,F21,F42		
CT5203-00_01	01100004	Misery Brook_01	4.2	2000	M	120,331,810,820,830	F21,P1,P20,T42	0,1500	1000,1050,1200,7000,7400,8920
CT5203-00_02	01100004	Misery Brook_02	0.8	2002	E		F21,X1,X20,X42		
CT5205-00_01	01100004	Sodom Brook	3.8	2002	M	331,420,810,820,830	F21,N1,N20,N42	0,1100,1500,1700,1750	4000,7000,7350,7400,8920,9000
CT5206-00_01	01100004	Harbor Brook_01	2.1	2002	M	230,331,370,420,810,820,830	F21,P1,P20,T42	0,1100,1500,1700,1750	4000,7000,7350,7400,8920,9000
CT5206-00_02	01100004	Harbor Brook_02	0.4	2000	E	175	A1,A20,A42,F21	1600	7000,7100
CT5206-00_03	01100004	Harbor Brook_03	1.5	2002	M	150,331,370,820	F21,P1,P20,X42	0,1100,1500	4000,7000,7350,7400,8920,9000
CT5207-00_01	01100004	Wharton Brook_01	3.8	2000	E	120,810,820,830	F21,P1,P20,T42	0,1100,1700,1750	3000,3200,4000,4600,8700,8710,9000
CT5207-00_02	01100004	Wharton Brook_02	2.8	2000	M	820	F20,F21,X1,X42		
CT5207-02_01	01100004	Allen Brook_01	0.1	2004	M	420	F21,T1,T42,X20	1700,1750	8600
CT5207-02_02	01100004	Allen Brook_02	1.8		M	420	F21,N1,N42,X20	1700,1750	8600
CT5208-00_01	01100004	Muddy Brook_01	0.8	2000	E	120	F21,X1,X20,X42		
CT5208-00_02a	01100004	Muddy Brook_02a	8.7	2002	M	120,230,321,331,375,420,810,820,830	F21,T1,T20,T42	1500,1700,1750	1000,1050,1200,7000,7350,7400,9000
CT5208-00_02b	01100005	Muddy Brook_02b	1.2	2004	M	120,230,321,331,375,420,810,820,831	F21,P1,P20,T42	1400,1500,1700,1750	1000,7000,7350,7400,9000
CT5208-00_03	01100004	Muddy Brook_03	2	2000	M	230,321,331,375,420,810,820,830,860	F21,T1,T20,T42,T50	1200,1500,1700,1750	1000,7000,7350,7400,9000
CT5208-00_04	01100004	Muddy Brook_04	0.9	2000	M	810,820,830	F21,T20,T50,X1,X42	0	
CT5302-00_01	01100004	Mill River - New Haven_01	1.7	2000	E	120,175,230,420,820	F21,N1,N42,P20	0,900,1200,1700,1750	400,4000
CT5302-00_02	01100004	Mill River - Hamden/Cheshire_02	8.8	2004	M	120,230,321,331,340,375,420,860	F21,T1,T20,T42,T50	900,1100,1200,1500,1700,1750	3000,3100,3200,4000,4500,6000,6350,7000,7400,8920
CT5302-00_03	01100004	Mill River - Cheshire_03	3	2000	E	120	F21,X1,X20,X42		
CT5303-00_01	01100004	Sargent River	3.9	2000	E	150,820,860	F20,F21,F50,X1,X42		
CT5305-00_01	01100004	WEST RIVER (WEST HAVEN)	3.3	2000	M	120,230,321,331,375,420,810,820	F21,N1,N20,N42	0,1100,1500,1700,1750	400,4000,7000,7350,7400
CT5305-00_02	01100004	WEST RIVER (WEST HAVEN)	3.2	2000	M	810,820,830	F21,F42,F50,T1,T20	1500	7000,7350,7400
CT5306-00_01	01100004	Indian River - Milford	4.9	2000	E	120	F21,X1,X20,X42		
CT5307-00_01	01100004	WEPAWAUG RIVER	0.8	2000	M	230,420	F20,F21,N1,N42	1700,1750	8650
CT5307-00_02	01100004	WEPAWAUG RIVER	4.2	2000	M	230,321,331,375,420	F20,F21,P1,P42	1700,1750	8650,9000

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT5307-00_03	01100004	WEPAWAUG RIVER	2.3	2000	E	130,190,191	F1,F20,F21,F42		
CT5307-00_04	01100004	WEPAWAUG RIVER	3.1	2000	M	130,190,191	F1,F20,F21,F42,F50		
CT5307-00_05	01100004	WEPAWAUG RIVER	1	2000	M	230,420,820	F20,F21,X1,X42		
CT6000-00_01	01100005	HOUSATONIC RIVER_01	2.8	2002	E	170,191,510	F20,F21,P1,P42	1700,1750	200,4000
CT6000-00_02	01100005	HOUSATONIC RIVER_02	1.5	2002	M	170,191,231,331,420	F20,F21,P1,P42	1700,1750	200,4000
CT6000-00_03	01100005	HOUSATONIC RIVER_03	5.1	2004	M	231,250,260,321,375,420,510	F20,F42,P1,P21	410	100,8500,9050
CT6000-00_04	01100005	HOUSATONIC RIVER_04	8	2004	M	120,231,250,260,321,375,420,510	F42,P1,P20,P21	410,1500	100,7000,7400,7450,8500,9050
CT6000-00_05	01100005	HOUSATONIC RIVER_05	6.6	2002	M	231,250,260,321,375,420,510	F20,F42,P1,P21	410	100,8500,9050
CT6000-00_06	01100005	HOUSATONIC RIVER_06	18.3	2004	M	231,250,260,321,340,375,420,510	F42,P1,P20,P21	410,1500	100,7000,7400,7450,8500,9050
CT6000-00_07	01100005	HOUSATONIC RIVER_07	7.3	2004	M	231,250,260,321,375,420,510	F20,P1,P21,T42	410,1700,1750	100,8500,9000,9050
CT6000-62_01	01100005	Fivemile Brook	2.2	2004	M	242,322,331,340,375	F1,F20,F21,F42		
CT6001-00_01	01100005	Sages Ravine Brook_01	0.7	2004	E		F21,X1,X20,X42		
CT6001-00_02	01100005	Sages Ravine Brook_02	0.7	2004	M	242,321,331,340,420	F1,F20,F21,F42		
CT6004-00_01	01100005	Konkapot River	2	2002	M	130,150,260,330	P1,P21,T20,X42	500,560,900	1000,9000
CT6005-00_01	01100005	FACTORY BROOK	1.7	2002	M	120,240,322,331,375,510,820	F21,P1,P20,T42	0,500,530,550,580,600	200
CT6005-00_02	01100005	FACTORY BROOK	1.1	2002	M	120,231,240,510,820	F1,F20,F21,F42		
CT6006-00_01	01100005	SPRUCE SWAMP CREEK	2.7	2002	E	150,331,820	F20,F21,X1,X42		
CT6006-01_01	01100005	Moore Brook	1.7	2002	E	130,190,191	F20,F21,X1,X42		
CT6007-00_01	01100005	SALMON CREEK	5.8	2002	M	120,242,321,820	F1,F20,F21,F42		
CT6008-00_01	01100005	Mill Brook - Cornwall_01	1.6	2002	E		F21,X1,X20,X42		
CT6008-00_02	01100005	Mill Brook - Cornwall_02	2.2	2002	E	230,321,331,420	F21,P1,P20,T42	0,900,910,1700,1750	1000,1350,9000
CT6010-00_01	01100005	FURNACE BROOK	3.6	2002	M	120,331,820	F1,F20,F21,F42		
CT6013-00_01	01100005	COBBLE BROOK	3.3	2002	M	331,820	F1,F20,F21,F42		
CT6016-03_02	01100005	Bull Mountain Brook	3	2004	M	242,321,331,340,420	F1,F20,F21,F42		
CT6019-00_01	01100005	DEEP BROOK	5.3	2002	M	120,150,331	F20,F21,X1,X42		
CT6020-00_01	01100005	POOTATUCK RIVER_01	2.3	2002	M	120,150,240,321,331,510,700	F21,T1,T20,T42	0	200
CT6020-00_02	01100005	POOTATUCK RIVER_02	7.7	2002	M	120,150,240,321,331,510,700	F20,F21,T1,T42	1700,1750	9000
CT6023-00_01	01100005	EIGHTMILE BROOK	11.4	2002	M	120,240,321,820	F1,F20,F21,F42		
CT6025-00_01	01100005	FARMILL RIVER	0.6	2002	E	120,190,191	F21,T20,X1,X42		
CT6025-00_02	01100005	FARMILL RIVER_02	3.9	2002	M	120,220,321,420	F20,F21,P1,P42		
CT6025-00_03	01100005	FARMILL RIVER_03	3	2002	E		F21,X1,X20,X42		
CT6025-00_04	01100005	FARMILL RIVER_04	3.6	2002	E	130,150,152,153,322,331,860	F1,F20,F21,F42,F50		
CT6026-00_01	01100005	Pumpkin Ground Brook	2.9	2004	M	242,322,331,340,375,420	F21,T42,X1,X20	1700,1750	9000
CT6100-00_01	01100005	BLACKBERRY RIVER_01	0.8	2004	M	120,150,180,190,240,321,331,510	F42,P1,P20,P21	100,410,600	5000,5100,8200,9050
CT6100-00_02a	01100005	BLACKBERRY RIVER_02a	2.5	2004	M	120,240,260,321,331	F42,P1,P20,P21	100,410,600	5000,5100,8200,9050
CT6100-00_02b	01100005	BLACKBERRY RIVER_02b	1.3	2004	M	120,240,260,321,331	F20,F42,P1,P21	410	8200,9050

River Segments: Use Support, Causes and Sources of Impairment

Appendix B

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT6100-00_03	01100005	BLACKBERRY RIVER_03	3.6	2004	E	120,190,240,260,321,331,420	F20,F21,T1,T42	1700,1750	1000,1050
CT6100-00_04	01100005	BLACKBERRY RIVER_04	1	2002	M	120,150,180,190,240,331,510,700	F21,T1,T20,T42	600,700	200,220
CT6100-00_05	01100005	BLACKBERRY RIVER_05	1	2002	E		F21,X1,X20,X42		
CT6200-00_01	01100005	HOLLENBECK RIVER	12.9	2004	M	120,240,321,331,340	F1,F20,F21,F42		
CT6300-00_01	01100005	Tenmile River - Sherman_01	0.6	2002	M	120,150,231,322	F1,F20,F21,F42		
CT6301-00_01	01100005	Mudge Pond Brook_01	1.2	2002	M	120,230,322,510,840	F1,F20,F21,F42		
CT6301-00_02	01100005	Mudge Pond Brook_02	1.3	2002	M	120,230,321	F1,F20,F21,F42		
CT6401-00_01	01100005	Sawmill Brook (Sherman)	2.4	2004	M	242,321,331,340,375,420	F1,F20,F21,F42		
CT6500-00_01	01100005	ASPETUCK RIVER	12.9	2002	M	120,240,321	F20,F21,X1,X42,X50		
CT6502-00_01	01100005	EAST ASPETUCK RIVER	1.4	2002	M	120,240,321,820	F1,F20,F21,F42		
CT6502-00_02	01100005	EAST ASPETUCK RIVER	4.6	2002	M	120,240,321	F21,T1,T20,T42	0,1100	1000,1350,1410,4000,4500
CT6502-00_03	01100005	EAST ASPETUCK RIVER	3.3	2002	E	120,190	F1,F20,F21,F42		
CT6502-01_01	01100005	Lake Waramaug Brook	5	2004	M	130,150,152,242,321,331,340,375,420	F20,F21,T1,T42	1700,1750	1000,1350,1400,200,4000,8700,8710
CT6600-00_01	01100005	STILL RIVER_01	6.8	2002	E	120,190,191,610,700	F21,P1,P20,P42	0,1100,1700,1750	
CT6600-00_02	01100005	STILL RIVER_02	5.7	2004	M	120,230,260,321,331,350,420,510,540,700	F21,N1,N42,P20	0,1100,1700,1750	200,4000,8700,8710
CT6600-00_03	01100005	STILL RIVER_03	2.2	2002	M	120,230,260,321,331,350,375,420	F21,F42,P1,P20	0,1100	4000,8700,8710
CT6600-00_04	01100005	STILL RIVER_04	1.5	2002	M	120,230,321,331,350,375,420	F21,F42,P1,P20	0	4000,9000
CT6600-00_05	01100005	STILL RIVER_05	3.3	2002	M	120,230,260,321,331,350,375,420	F21,F42,P1,P20	0	4000,9000
CT6600-00_06	01100005	STILL RIVER_05	0.9	2002	E		F21,X1,X20,X42		
CT6603-00_01	01100005	PADANARAM BROOK	3.7	2002	M	120,175,230,420,820	F21,P1,P20,T42	0,1100,1600,1700,1750,900,910,1200,1700,1750	4000,7000,7100,7350,7550,7600
CT6604-00_01	01100005	SYMPAUG BROOK_01	0.6	2002	M	120,240,321,700	F21,P1,P20,T42		4000,9000
CT6604-00_02	01100005	SYMPAUG BROOK_02	2.9	2002	E	240,331,420	F20,F21,T1,T42	1700,1750	9000
CT6606-00_01	01100005	LIMEKILN BROOK_01	0.3	2004	M	120,240,260,331,420,510,700	F21,P1,P20,T42	500,530,580,600,700,1700,1750	200,210,6000,6300
CT6606-00_02	01100005	LIMEKILN BROOK_02	1.1	2002	M	120,240,260,331,510,700	F1,F20,F21,F42		
CT6606-00_03	01100005	LIMEKILN BROOK_03	5.3	2004	M	120,242,260,321,331,340,375,420,510,700	F1,F20,F21,F42		
CT6700-00_01	01100005	SHEPAUG RIVER	17.7	2004	M	120,230,321,331,350	F20,F21,P1,P42,X50	1700,1750	9000
CT6700-00_02	01100005	SHEPAUG RIVER	3.5	2002	M	120,230,321,331,350	F21,F50,P1,P20,P44,P62,T42	1400,1500	7000,7350,7400
CT6705-00_01	01100005	BANTAM RIVER_01	4.4	2002	M	120,240,321,331	F1,F20,F21,F42		
CT6705-00_02	01100005	BANTAM RIVER_02	2	2002	E	120,331,510,840	F21,T20,X1,X42	700,1500	200,220,7000,7450

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT6705-00_03	01100005	BANTAM RIVER_03	1.5	2002	E		F21,F82,X1,X20,X42		
CT6705-00_04	01100005	BANTAM RIVER_04	10.8	2004	M	242,322,331,340,375,420	F1,F20,F21,F42		
CT6705-12_01	01100005	Hill Brook	2.5	2002	E		F21,X1,X20,X42		
CT6800-00_01	01100005	POMPERAUG RIVER_01	2.6	2004	E	130,190	F20,F21,X1,X42		
CT6800-00_02	01100005	POMPERAUG RIVER_02	2	2002	M	120,240,321	F20,F21,X1,X42		
CT6800-00_03	01100005	POMPERAUG RIVER_03	1.3	2002	E	120,240,260,322,331	F21,T1,T20,T42	1700,1750	200,220
CT6800-00_04	01100005	POMPERAUG RIVER_04	7.2	2004	M	120,242,260,321,331,340,375,420	F1,F20,F21,F42		
CT6802-00_01	01100005	NONEWAUG RIVER_01	4	2002	M	120,240,321,331	F1,F20,F21,F42		
CT6802-00_02	01100005	NONEWAUG RIVER_02	4.4	2002	E	130,190,191	F21,F42,T1,T20	1500	7000,7400,8920
CT6802-00_03	01100005	NONEWAUG RIVER_03	1.1	2002	E		F21,X1,X20,X42		
CT6802-05_01	01100005	Harvey Brook	2.1	2002	E		F21,X1,X20,X42		
CT6804-00_01	01100005	WEEKEEPPEEMEE RIVER	9	2002	E	120,130,170,322,331	F20,F21,X1,X42		
CT6804-04_01	01100005	Wood Creek	3.3	2004	M	242,322,331,340,375,420	F1,F20,F21,F42		
CT6806-00_01	01100005	TRANSYLVANIA BROOK_01	1.1	2002	M	230,321,331,420,510	F21,P1,P20,T42	500,530,580,600,700,900,910,1100,1700,1750	200,220,7550,7700
CT6806-00_02	01100005	TRANSYLVANIA BROOK_02	0.4	2002	M	230,321,331,420	F20,F21,P1,P42	1700,1750	9000
CT6806-00_03	01100005	TRANSYLVANIA BROOK_03	3.8	2002	M	150,152,322,331	F20,F21,X1,X42		
CT6900-00_01	01100005	NAUGATUCK RIVER_01	6	2004	M	120,231,260,321,331,350,420,510,610	F21,N1,N42,P20	0,1700,1750	100,200,500,4000
CT6900-00_02	01100005	NAUGATUCK RIVER_02	11	2004	M	120,175,231,260,321,331,350,420,510,610,700	F21,N1,N42,P20	0,1700,1750	100,200,500,4000,5000,5400
CT6900-00_03	01100005	NAUGATUCK RIVER_03	3.9	2004	M	230,260,321,331,340,350,375,420,510,610,700	F21,N1,N42,P20	0,500,530,1700,1750	100,200,500,4000
CT6900-00_04	01100005	NAUGATUCK RIVER_04	1.5	2002	M	120,130,175,230,260,321,331,350,510,610,700	F21,N1,N42,P20	0,1700,1750	100,200,500,4000
CT6900-00_05	01100005	NAUGATUCK RIVER_05	4.7	2004	M	231,260,321,331,340,350,375,420,510,520,610	F21,P1,P20,P42	0,500,1200,1600,1700,1750,2400	100,200,4000,5000,5400
CT6900-00_06	01100005	NAUGATUCK RIVER_06	8.9	2004	M	120,230,260,321,331,350,420,510,520,610	F21,T1,T20,T42	0,1700,1750,2400	100,9000
CT6900-00_07	01100005	NAUGATUCK RIVER_07	2.6	2002	M	120,125,230,260,321,331,350,510,610	F21,P1,P20,X42	0,1500,1600	100,200,4000,7000,7400
CT6900-00_08	01100005	NAUGATUCK RIVER_08	1.5	2002	M	120,125,230,260,321,331,350	F21,T20,X1,X42	0,1600	100,4000,7000,7100
CT6900-22_01	01100005	Great Brook	2	2004	E	230,420	A1,A20,F21,N42	1600,1700,1750	500,7000,7100,9000
CT6900-27_01	01100005	SPRUCE BROOK	2.5	2002	M	120,240,321,331	F1,F20,F21,F42		
CT6900-28_01	01100005	HOCKANUM BROOK	3	2002	M	120,240,321,331,420	F1,F20,F21,F42		
CT6902-00_01	01100005	Hart Brook	0.5	2002	E	120	F21,P1,P20,X42	1500	7000,7350,7400
CT6903-00_01	01100005	Nickel Mine Brook	0.3	2002	E	120	F21,P1,P20,X42	1500	7000,7350,7400
CT6903-02_01	01100005	Lovers Lane Brook	2.9	2002	E		F21,X1,X20,X42		

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT6904-00_01	01100005	NAUGATUCK RIVER, WEST BRANCH	1	2002	E	120,130,175	F21,P1,P20,X42	0,1600	4000,7000,7100,7550,7600
CT6904-00_02	01100005	NAUGATUCK RIVER, WEST BRANCH_02	0.6	2002	E		F21,X1,X20,X42		
CT6904-00_03	01100005	NAUGATUCK RIVER, WEST BRANCH_03	2	2002	M	120,240,321,331,420	F1,F20,F21,F42		
CT6904-00_04	01100005	NAUGATUCK RIVER, WEST BRANCH_04	1.1	2002	E	130,150,190	F20,F21,X1,X42		
CT6905-00_01	01100005	Naugatuck River, East Branch_01	0.8	2002	M	120,240,321,331,420	F21,T1,T20,T42	0,1600,1700,1750	7550,7600,9000
CT6905-00_02	01100005	Naugatuck River, East Branch_01	6.6	2002	M	120,321,331	F20,F21,X1,X42		
CT6910-00_01	01100005	Branch Brook_01	2	2002	E	120	F21,T1,T20,X42	1500	7000,7350,7400
CT6910-00_02	01100005	Branch Brook_2	1.9	2002	E	120	F21,P1,P20,X42	1500	7000,7350,7400
CT6912-00_01	01100005	STEELE BROOK_01	1	2004	M	120,230,321,331,420,540,820	F21,N1,N20,N42	500,530,1100,1700,1750	100,4000,8910,9000
CT6912-00_02	01100005	STEELE BROOK_02	3.7	2004	M	120,240,321,331,420,510,540,820	F21,P1,P20,P42	0,500,530,1100,1700,1750	4000,6000,6300,7000,7100,9000
CT6912-00_03	01100005	STEELE BROOK_03	3.6	2004	M	120,240,321,331,420,510,540,820	F1,F21,F42,T20	500,530,550	
CT6914-00_01	01100005	MAD RIVER (WATERBURY)_01	1.7	2004	M	120,240,260,321,420,540	F21,N1,N20,P42	0,500,530,1100,1600,1700,1750,2400	100,4000,6000,6100,7000,7100,9000
CT6914-00_02	01100005	MAD RIVER (WATERBURY)_02	0.8	2002	E	120,130,190,191	F21,P1,P20,P42	0,1100,1600,1700,1750,2400	100,500,4000,7000,7100,9000
CT6914-00_03	01100005	MAD RIVER (WATERBURY)_03	3.9	2002	E	120,130,150,322,331	F21,P20,X1,X42	0,1100,1600	100,4000,7000,7100,9000
CT6914-00_04	01100005	MAD RIVER (WATERBURY)_04	3.9	2002	E		F21,X1,X20,X42		
CT6919-00_01	01100005	BLADENS RIVER_01	0.6	2002	M	120,240,321,331,420,540	F21,P1,P20,P42		
CT6919-00_02	01100005	BLADENS RIVER_02	3.8	2004	M	120,240,321,331,420,540,820	F1,F20,F21,F42		
CT6919-04_01	01100005	Bladdens River Trib	0.3	2004	E	140	F21,P1,P20,X42	1900	8400
CT6920-00_01	01100005	LITTLE RIVER (SEYMOUR)_01	1.1	2002	M	120,240,322,331,420,540	F21,T42,X1,X20	0,1600,1700,1750	7000,7350,7550,7600,9000
CT6920-00_02	01100005	LITTLE RIVER (SEYMOUR)_02	2.8	2002	M	120,240,321,331,540	F20,F21,X1,X42		
CT6920-00_03	01100005	LITTLE RIVER (SEYMOUR)_02	4.4	2002	M	120,190,191	F1,F20,F21,F42		
CT7000-22_01	01100006	Indian River_01	0.6	2004	E	200,420,810,830	F21,N1,N42,T20	1600,1700,1750	6000,6500
CT7000-22_02	01100006	Indian River_02	0.2	2004	E	200,420,810,830	F21,T1,T20,T42	1600,1700,1750	9000
CT7105-00_01	01100006	Pequonnock River - lower section	1.4	2000	E	120	F21,X1,X20,X42		
CT7105-00_02	01100006	Pequonnock River	2.1	2000	M	230,321,375,420	F21,P1,P20,T42	0,1200,1700,1750	9000
CT7105-00_03	01100006	PEQUONNOCK RIVER	3.8	2000	E	130,150,170,190,331,375	F21,P1,P20,X42		
CT7105-00_04	01100006	PEQUONNOCK RIVER	1.5	2004	M	230,321,420	F20,F21,T1,T42	1700,1750	9000
CT7105-00_05	01100006	Pequonnock River	2.5	2000	E	120	F21,X1,X20,X42		
CT7106-00_01	01100006	Rooster River	5.4	2004	M	175,860	F21,N42,X1,X20	1700,1750	400,500,4000,9000
CT7108-00_01	01100006	MILL RIVER - Fairfield_01	2.8	2004	M	150,152,153,210,331,420,860	F20,F21,T1,T42	1700,1750	9000
CT7108-00_02	01100006	MILL RIVER - Fairfield/Easton_02	4	2004	M	120,125,140,230,321,375,420,820,860	F21,N1,N42,P20	700,1500,1700,1750	1000,4000,7000,7350,7400,8400,9000
CT7108-00_03	01100006	MILL RIVER - Easton/Monroe_03	3.3	2000	E	130,150,322,375	F21,T20,T50,X1,X42	0	

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT7109-00_01	01100006	Sasco Brook	1.3	2004	M	210,231,321,420	F20,F21,N1,N42	1700,1750	4000,6000,6500,9000
CT7109-00_02	01100006	Sasco Brook	4.8	2004	M	150,210,231,321,331,420,860	F20,F21,N1,N42	1700,1750	1000,1350,4000,6000,6500,9000
CT7200-00_01	01100006	SAUGATUCK RIVER	0.8	2004	M	120	F21,F42,X1,X20		
CT7200-00_02	01100006	SAUGATUCK RIVER	5.9	2004	M	120,230,321,331,375,420	F20,F21,T1,T42	1700,1750	9000
CT7200-00_03	01100006	Saugatuck River	3.6	2004	M	231,321,331,375,420,860	F1,F20,F21,F42,F50		
CT7200-00_04	01100006	SAUGATUCK RIVER	5	2000	E	321,331	F20,F21,X1,X42		
CT7202-00_01	01100006	Aspetuck River	5.1	2004	M	230,321,331,375,420,830,860	F20,F21,P1,P42	1700,1750	9000
CT7202-00_02	01100006	Aspetuck River	8.6	2000	E	150,860	F21,T20,T50,X1,X42	900,1100	1000,3000,3200,6000,6300,8600,8700,8710
CT7203-00_01	01100006	West Branch Saugatuck River_01	6.1	2004	M	420	F21,F42,X1,X20		
CT7203-00_02	01100006	West Branch Saugatuck River_02	3.2	2004	M	242,322,331,375,420	F1,F20,F21,F42		
CT7300-00_01	01100006	NORWALK RIVER	5.6	2004	M	230,231,321,331,375,420,830	F21,N1,N42,P20	0,1700,1750	4000,9000
CT7300-00_02	01100006	NORWALK RIVER	5.6	2004	M	230,321,331,420,830	F21,P1,P42,T20	500,530,1700,1750	9000
CT7300-00_03	01100006	NORWALK RIVER	0.7	2004	M	230,321,375,510,520,830	F21,P1,P20,P42	0,1700,1750	4000,6000,6100,9000
CT7300-00_04	01100006	NORWALK RIVER	0.7	2004	M	230,321,331,375,420,830	F20,F21,P1,P42	1700,1750	9000
CT7300-00_05	01100006	NORWALK RIVER	4.4	2004	M	230,321,331,375,420,705,830	F20,F21,P1,P42	1700,1750	9000
CT7300-02_01	01100006	Ridgefield Brook_01	1	2000	M	230,321,331,375,420,705,830	F20,F21,P1,P42	1700,1750	9000
CT7300-02_02	01100006	Ridgefield Brook_02	3.6	2004	M	150,240,340,705,810,830	F21,N1,N42,P20	0,900,910,920,1200,1220,1700,1750	200,4000,6000,6300,8600,8650
CT7300-07_01	01100006	Cooper Pond Brook - DS of Candeos	0.4	2000	M	230,321,375,420	F21,T1,T20,T42	1700,1750	9000
CT7300-07_02	01100006	Cooper Pond Brook - US of Candeos	1.8	2000	E	130,150,190,322,331,375	F20,F21,X1,X42		
CT7302-00_01	01100006	Silvermine River_01	1.1	2004	E	120,420,830	F21,P1,P42,X20	1700,1750	9000
CT7302-00_02	01100006	Silvermine River_02	4.8	2004	M	120,230,321,331,375,420,830	F20,F21,T1,T42	1700,1750	9000
CT7302-13-trib_01	01100006	Tributary to Belden Hill Brook	1.5	2000	E	130,175,840	F21,T1,T20,T42	1700,1750	200,222
CT7401-00_01	01100006	Fivemile River	5	2000	E		F21,X1,X20,X42		
CT7401-00_02	01100006	Fivemile River	0.2	2004	M	230,275,321,322,331,340,375,420	F21,F42,N1,N20	0,500,580,900	200,4000,6000,6300,9000
CT7401-00_03	01100006	Fivemile River	1.4	2000	M	230,321,331,375,420	F21,P1,P20,T42	0,1700,1750	4000,9000
CT7401-00_04	01100006	Fivemile River	1.7	2000	E		F21,X1,X20,X42		
CT7403-00_01	01100006	Noroton River	2.7	2002	E	190	F21,P1,P20,X42	0	9000
CT7403-00_02	01100006	Noroton River	2.4	2000	M	230,321,331,375,420	F21,P1,P20,T42	0,1700,1750	9000
CT7403-00_03	01100006	Noroton River	3.6	2000	E		F21,X1,X20,X42		
CT7405-00_01	01100006	RIPPOWAM RIVER_01	5.3	2000	M	120,210,321,331,370,420	F21,P1,P20,T42	0,1700,1750	9000
CT7405-00_02	01100006	RIPPOWAM RIVER_02	2	2000	M	150,321,375	F21,T20,X1,X42	900,1100,1500	4000,7000,7350,7400

wbidsegid	CU	Segment Name	Miles	Cycle	Category	Assessment Methods	Uses Support	Causes	Sources
CT7405-00_03	01100006	RIPPOWAM RIVER_03	4.3	2000	E	120,860	F21,T50,X1,X20,X42	900,1100	4000,4500,4600,8650
CT7407-00_01	01100006	MIANUS RIVER_01	1.9	2000	E	120	F21,X1,X20,X42		
CT7407-00_02	01100006	MIANUS RIVER_02	5.8	2000	M	153,230,321,331,375,420	F21,F42,F50,T1,T20	1500	7000,7400
CT7409-00_01	01100006	Horseneck Brook	5.2	2000	E	150,152,153,860	F21,T20,X1,X42	700,900,1500	4000,4300,7000,7350,7400
CT7410-00_01	01100006	East Branch of Byram River_01	2.8	2000	E	150,210,331,420	F1,F20,F21,F42		
CT7410-00_02	01100006	East Branch of Byram River_02	2.7	2004	M	242,321,331,340,420	F21,F42,T1,T20	500,530,1500	7000,7400
CT7411-00_01	01100006	BYRAM RIVER_01	0.5	2000	M	230,321,331,375,420,860	F21,P1,P20,T42	0,1700,1750	400,4000,4500,8650,9000,9050
CT7411-00_02	01100006	BYRAM RIVER_02	6.9	2000	E	120,150,210,321,331,375,420,860	F1,F20,F21,F42		
CT8101-00_01	02030101	Quaker Brook	4.7	2004	M	230,321,420	F1,F20,F21,F42		
CT8104-00_01	02030101	Titicus River	3	2004	M	230,321,331,340,375,420	F1,F20,F21,F42		

Lakes: Use Support, Causes and Sources of Impairment

Appendix C

WBIDSEGUID	CU	Segment Name	Acres	Cycle	Trophic Category	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT1001-00-1-L1_01	01090005	Wyassup Lake North Stonington	92.4	2002	Mesotrophic	E	150,210,250,260,340	F20,P1,P21,P42,P44,P62	500,560,2200,2600	8100,9000
CT1002-00-1-L1_01	01100001	Green Falls Reservoir Voluntown	46.9	2004	Mesotrophic	M	150,210,340,420	F1,F20,F21,F42,F44,F62		
CT1100-00-1-L1_01	01090005	Porter Pond	10.4	2002	Unknown	M	240,250,260,330,420	F20,F21,T1,T42	1700,1750	1000,9000
CT2104-00-1-L1_01	01100003	Lantern Hill Pond Ledyard, North Stonington	15.1	2002	Hypereutrophic	E	210,340	F20,F21,F42,T1,T44,T62	2200,2600	9000
CT2104-00-1-L2_01	01100003	Long Pond Ledyard, North Stonington	98.6	2002	Mesotrophic	M	210,340,420	F1,F20,F21,F42,F44,T62		
CT2205-00-1-L1_01	01100003	Powers Lake East Lyme	152.6	2002	Mesotrophic	E	210,250,260,340	F1,F20,F21,F42,F44,F62		
CT2205-00-1-L2_01	01100003	Pataganset Lake East Lyme	123	2002	Mesotrophic	M	110,120,210,250,260,340,420	F20,F21,F42,T1,T44,T62	2200,2600	9000
CT2205-00-1-L3_01	01100003	Gorton Pond East Lyme	53	2002	Mesotrophic	M	110,210,340,420	F1,F20,F21,F44,T42,T62	2200,2600	9000
CT2205-02-1-L1_01	01100003	Dodge Pond East Lyme	33	2002	Mesotrophic	E	120,210,250,260,330,340	F42,F44,F62,P1,P21,T20	500,560	8400,8500
CT3002-02-1-L2_01	01100003	Amos Lake Preston	105.1	2002	Eutrophic	E	120,210,250,260,340	F21,F44,P62,T1,T20,T42	900,1200,2210	6000,6500,8650,9000
CT3002-04-1-L1_01	01100003	Avery Pond Preston	50.6	2002	Eutrophic	E	210,340	F1,F20,F21,F42,F44,F62		
CT3002-06-1-L1_01	01100003	Lake Of Isles North Stonington	87.1	2002	Hypereutrophic	E	210,250,260,340	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT3100-00-3-L1_01	01100002	Eagleville Lake Mansfield	80	2002	Hypereutrophic	E	150,151,190,210,250,340	F21,T1,T20,T42,T44,T62	1700,1750,2200	9000
CT3101-03-1-L1_01	01100002	Crystal Lake Ellington Stafford	201	2004	Mesotrophic	M	150,151,210,250,260,340,420	F20,F21,T1,T42,T44,T62	1700,1750,2200,2210,2600	3000,3200,4000,6000,6500,8650
CT3105-00-1-L1_01	01100002	Waumgumbaug Lake Coventry	378	2004	Mesotrophic	M	150,151,210,250,260,340,420	F21,T1,T20,T42,T62	1100,1600,1700,1750	4000,6000,6500,7000,7400
CT3106-00-2-L2_01	01100002	Crandau Pond	2.5	2004	Unknown	M	420,860	F21,F42,X1,X20,X44,X62		
CT3108-02-1-L2_01	01100002	Bolton Lake, Middle Vernon	114.9	2002	Mesotrophic	M	210,340,420	F20,F21,T1,T42,T44,T62	900,1700,1750,2200,2600	6000,6500,9000
CT3108-02-1-L3_01	01100002	Bolton Lake, Lower Bolton - Vernon	178.4	2004	Mesotrophic	M	150,151,210,250,260,340,420	F20,F21,F44,T1,T42,T62	1700	6000,6500,8650
CT3108-13-1-L1_01	01100002	Columbia Lake Columbia	277.2	2004	Mesotrophic	M	150,151,210,340,420	F1,F20,F21,F42,F44,F62		
CT3109-01-1-L1_01	01100002	Mono Pond Columbia	94.8	2002	Hypereutrophic	E	150,151,210,340	F1,F20,F21,F42,F62,T44	2200	8540
CT3200-01-1-L1_01	01100002	Halls Pond Eastford Ashford	82.3	2002	Mesotrophic	M	150,210,340,420	F1,F20,F21,F42,F44,F62		
CT3201-01-1-L1_01	01100002	Black Pond Woodstock	73.4	2002	Mesotrophic	E	150,210,340	F1,F20,F21,F42,F44,F62		
CT3203-00-1-L1_01	01100002	Mashapaug Lake Union	297.1	2004	Oligotrophic	E	150,151,210,250,260,340	F1,F20,F21,F42,F44,F62		
CT3203-00-1-L2_01	01100002	Bigelow Pond Union	18.5	2002	Mesotrophic	E	150,151,210,340	F1,F20,F21,F42,F44,F62		
CT3206-00-1-L1_01	01100002	Morey Pond Ashford, Union	40	2002	Mesotrophic	E	150,151,210,340	F1,F20,F21,F42,T44,T62	1100,2200,2600	8300,9000
CT3300-00-3+L3_01	01100001	North Grosvenordale Impoundment	59	2002	Hypereutrophic	E	150,250,340	F21,F44,T20,T62,X1,X42	500,900,1200	100,200,8500,8530
CT3400-00-1-L1_01	01100001	Little (schoolhouse) Pond Thompson	65.4	2004	Mesotrophic	E	110,150,151,210,340,860	F21,T1,T20,T42,T44,T62	1100,2200,2210	4000,4500,4600,6000,6500
CT3400-00-2-L11_01	01100001	Quaddick Reservoir Thompson	466.8	2004	Mesotrophic	M	110,210,250,260,340,420,860	F20,F21,T1,T42,T44,T62	900,1700,1750,2200,2600	4000,4500,6000,6500,8650

Lakes: Use Support, Causes and Sources of Impairment

Appendix C

WBIDSEGUID	CU	Segment Name	Acres	Cycle	Trophic Category	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT3404-01-1-L1_01	01100001	Killingly Pond Killingly	137.5	2002	Mesotrophic	E	110,150,151,210,340	F1,F20,F21,F42,F44,F62		
CT3502-07-1-L1_01	01100001	Moosup Pond Plainfield	97.2	2004	Eutrophic	M	130,150,151,210,340,420,860	F20,F21,F44,T1,T42,T62	900,1700,1750	4000
CT3600-00-1-L1_01	01100001	Beach Pond Voluntown	394.3	2004	Oligotrophic	M	120,210,250,260,340,420	F21,F42,F44,F62,T1,T20	1100,1200,1600,2210,2600	3000,4000,4600,7550,7700
CT3600-00-3-L1_01	01100001	Glasgo Pond Griswold	184.2	2002	Mesotrophic	E	210,250,260,340	F1,F20,F21,F42,F62,T44	2200	8600
CT3600-00-3-L3_01	01100001	Beachdale Pond Voluntown	46	2002	Hypereutrophic	E	210,340	F1,F20,F21,F42,F62,T44	2200	8600
CT3600-00-3-L7_01	01100001	Pachaug Pond Griswold	830.9	2002	Mesotrophic	E	210,250,260,340	F1,F20,F21,F42,F62,T44	2200,2600	9000
CT3600-00-3-L8_01	01100001	Hopeville Pond Griswold	149.4	2004	Hypereutrophic	M	210,340,420	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT3605-00-1-L1_01	01100001	Billings Lake North Stonington	105.1	2002	Oligotrophic	E	210,250,260,340	F20,F21,F62,T1,T42,T44	2200,2600	9000
CT3605-01-1-L1_01	01100001	Anderson's Pond North Stonington	54.3	2000	Mesotrophic	E	210,340	F20,F21,F62,T1,T42,T44	2200,2600	9000
CT3700-00-2+-L1_01	01100001	West Thompson Lake Thompson	195	2004	Eutrophic	M	230,250,260,340	F21,P1,P20,P42,P44,P62	900,910,1200,1700,1750,2210	200,1000,8530,9000,9050
CT3700-00-5+-L3_01	01100001	Wauregan Pond Killingly	68	2002	Mesotrophic	E	210,250,260,340	F1,F20,F21,F42,F44,F62		
CT3700-00-5+-L4_01	01100001	Aspinook Pond Canterbury, Griswold, Lisbon	333.3	2002	Eutrophic	E	210,250,260,340	F21,F44,P1,P42,T20,T62	900,2210	9000
CT3700-23-1-L1_01	01100001	Alexander Lake	190.4	2004	Mesotrophic	E	210,340	F20,F21,F44,T62,X1,X42	900,1700,2210	3000,3200,8650,8920
CT3705-00-1-L1_01	01100001	Griggs Pond Woodstock	43	2002	Hypereutrophic	M	250,340	F1,F20,F21,F42,F62		
CT3708-00-1-L1_01	01100001	Roseland Lake Woodstock	88	2004	Hypereutrophic	E	150,210,340	F20,F21,P1,P42,P44,T62	900,2200,2600	1000,9000
CT3800-00-6+L3_01	01100003	Spaulding Pond	14.3	2004	Unknown	M	420,860	F21,P1,P42,X20,X44,X62	1700,1750	8650
CT3805-00-3-L6_01	01100001	Papermill Pond	77.15	2002	Unknown	M	260	P1,P21,X20,X42,X44	410,500,560	100,8500
CT3805-00-3-L7_01	01100002	Versailles Pond	57.2	2002	Unknown	M	240,250,260,860	P1,P20,P21,X42,X44,X62	410,500,560,1200	100,8500
CT3900-00_01pd & trib_01	01100003	Yantic pond & tributary - Norwich Landfill	0.6	2002	Unknown	M	240,250,420	F21,N1,N20,N62,T42	100,500,520,530,550,600,1200	6000,6100,6300
CT3900-00-4-L1_01	01100003	Fitchville Pond Bozrah	71.1	2002	Mesotrophic	E	210,250,340	F20,F21,T1,T42,T44,T62	1100	3000,3100,4000,4500
CT3900-01-1-L1_01	01100003	Red Cedar Lake Lebanon	141	2002	Eutrophic	E	210,340	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT3906-00-1-L1_01	01100003	Gardner Lake Salem, Montville, Bozrah	486.8	2004	Mesotrophic	M	120,210,250,260,340,420	F1,F20,F21,F42,F62,T44	2200,2600	9000
CT4000-40-1-L1_01	01080205	Great Hill Pond Portland	77.5	2004	Mesotrophic	E	120,210,340,420	F20,F21,F62,T1,T42,T44	1700,1750,2200,2600	9000,9070
CT4009-00-2-L4_01	01080205	Angus Park Pond	9.35	2004	Unknown	M	420	P1,P42,X20,X21,X44,X62	1700,1750	8650
CT4010-00-1-L1_01	01080205	1860 Reservoir (Griswold Pond) Wethersfield	35	2000	Eutrophic	M	110,210,340	F20,F21,F44,F62,X1,X42		
CT4013-05-1-L1_01	01080205	Crystal Lake Middletown	35.5	2004	Eutrophic	M	150,210,250,260,340,420,860	F20,F21,P1,P42,T44,T62	900,1700,1750,2200,2600	4000,6000,6500,8650,9000,9070
CT4013-08-1-L1_01	01080205	Dooley's Pond Middletown	28	2002	Hypereutrophic	E	150,210,340	F20,F21,T44,T62,X1,X42	900,2210	8600,9000
CT4014-03-2-L1_01	01080205	Higganum Reservoir Haddam	32	2000	Mesotrophic	M	150,210,340,420	F21,X1,X20,X42,X62		

Lakes: Use Support, Causes and Sources of Impairment

Appendix C

WBIDSEGUID	CU	Segment Name	Acres	Cycle	Trophic Category	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT4017-03-1-L3_01	01080205	Pattaconk Reservoir Chester	55.5	2000	Mesotrophic	E	150,210,340	F20,F21,F44,F62,T1,T42	1700,1750	8650
CT4017-03-1-L4_01	01080205	Cedar Lake Chester	68	2004	Mesotrophic	M	150,210,340,420	F1,F20,F21,F42,F44,F62		
CT4019-00-1-L3_01	01080205	Messerschmidt's Pond	70	2000	Hypereutrophic	E	150,210,340	F20,F21,T1,T42,T44,T62	2200,2600	8600,9000
CT4019-00-1-L4_01	01080205	Wright's Pond Deep River, Essex, Westbrook	37	2002	Mesotrophic	E	120,150,210,340	F1,F20,F21,F42,F62,T44	2200,2600	9000
CT4020-06-1-L1_01	01080205	Rogers Lake Lyme, Old Lyme	264.9	2004	Mesotrophic	M	150,210,250,260,340,420	F20,F21,F42,F62,T1,T44	2200,2600	9000
CT4300-00-1+-L1_01	01080207	Colebrook River Reservoir Colebrook	736	2002	Oligotrophic	M	120,230,340	F1,F21,F42,F44,F62,T20	1500	7000,7400
CT4300-00-5+-L5_01	01080207	Rainbow Reservoir Windsor	235	2002	Eutrophic	E	120,150,210,250,340	F1,F20,F21,F42,F44,F62		
CT4300-05-1-L2_01	01080207	Howell's Pond Hartland	17.3	2000	Eutrophic	E	120,150,210,340	F1,F20,F21,F42,F44,F62		
CT4302-16-1-L1_01	01080207	Highland Lake Winchester	444	2004	Oligotrophic	M	210,250,260,340,420	F1,F20,F21,F42,T44,T62	2200,2600	9000
CT4303-02-1-L1_01	01080207	Burr Pond Torrington	85	2004	Mesotrophic	M	120,150,210,340,420	F1,F20,F21,F42,F44,F62		
CT4305-00-1-L1_01	01080207	West Hill Pond New Hartford	238	2002	Oligotrophic	E	120,150,210,250,340	F1,F20,F21,F42,F44,F62		
CT4308-00-1-L2_01	01080207	Compensating Reservoir (McDonough) Barkhamsted New Hartford	387	2004	Oligotrophic	M	120,210,250,260,340,420	F20,F42,F44,F50,F62,P1,P21	500,560	8100
CT4315-05-1-L1_01	01080207	Birge Pond	10.8	2004	Eutrophic	E	120,150,151,220,250,340,860	F21,P1,P42,P44,P62,T20	900,1100,2200,2210	4000,4500,4600
CT4315-10-1-L1_01	01080207	Pine Lake (Malone's Pond)	12	2004	Hypereutrophic	E	120,150,175	F21,P1,P44,P62,T20,X42	900,1100,2200,2210	4000,4500,4600,8650
CT4318-03-1-L1_01	01080207	Stratton Brook Park Pond	2.4	2004	Unknown	M	190,420,820	F1,F20,F21,F42		
CT4321-00-1-L2_01	01080207	Barber Pond, Bloomfield	9.4	2002	Unknown	E	250	F21,X1,X20,X42,X62		
CT4401-00-1-L1_01	01080205	Batterson Park Pond Farmington New Britain	162.7	2004	Eutrophic	M	130,150,210,260,310,340,420	F21,F44,P1,P42,P62,T20	900,2210	4000,4500,4600,8650
CT4402-04-2-L1_01	01080205	Mill Pond - Newington	2.8	2002	Eutrophic	E	170	F1,F20,F21,F44,F62		
CT4500-00-1-L1_01	01080205	SHENIPSIT LAKE	522.8	2000	Mesotrophic	E	120,150,210,250,340,550	F21,T20,T50,T62,X1,X42,X44	900,910,920,1200,2000,2210,2500	1000,1350,3000,3200,7900,7910
CT4500-00-3-L3_01	01080205	Union Pond	50	2004	Unknown	M	120,190,191,250,260,330	F44,N1,N21,P20,P62,T42	200,1100,1200,2210	100,200,1000,4000,4600,8500
CT4500-14-1-L1_01	01080205	Center Spring Park Pond	6.1	2004	Unknown	E	120,130,150	F1,F20,F21,F44,T62	2100	4000,4500,4600
CT4601-00-1-L2_01	01080205	Silver Lake Berlin Meriden	151	2004	Hypereutrophic	M	210,250,260,340	F44,P1,P20,P21,T42,T62	500,560,1200,2200,2500,2600	8100,8520,8530
CT4607-10-1-L1_01	01080205	Beseck Lake Middlefield	119.6	2004	Eutrophic	M	110,120,210,340,420	F21,F44,T1,T20,T42,T62	900,910,2200,2210,2600	4000,8530,9000
CT4607-13-0-L1_01	01080205	Wadsworth Falls Park Pond	1.4	2004	Unknown	M	420	P1,P42,X20,X21	1700,1750	8650,9000
CT4700-02-1-L1_01	01080205	Day Pond	7.4	2004	Unknown	M	420	F21,F42,X1,X20		
CT4704-00-1-L3_01	01080205	Babcock Pond Colchester	146.7	2002	Hypereutrophic	E	120,210,250,340	F1,F20,F21,F42,F44,F62		
CT4705-00-1-L1_01	01080205	Holbrook Pond Hebron	72.5	2000	Hypereutrophic	E	150,210,340	F20,F21,F44,F62,X1,X42		
CT4707-00-2-L2_01	01080205	Gay City Pond	5.1	2004	Unknown	M	420	F21,P1,P42,X20	1700,1750	8650
CT4708-00-1-L1_01	01080205	Terramuggus, Lake Marlborough	83	2004	Mesotrophic	M	120,150,151,210,340,420	F21,F42,F44,T1,T20,T62	1100,2210	4000,4600,6000,6500,8530

Lakes: Use Support, Causes and Sources of Impairment

Appendix C

WBIDSEGUID	CU	Segment Name	Acres	Cycle	Trophic Category	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT4709-04-1-L1_01	01080205	Pocotopaug, Lake East Hampton	511.7	2004	Mesotrophic	M	110,120,210,260,340,420,530,540	F21,F42,F44,T1,T20,T62	900,2210	9000
CT4710-00-1-L1_01	01080205	Bashan Lake East Haddam	276.3	2002	Oligotrophic	E	151,210,250,260,340	F1,F20,F21,F42,F62		
CT4710-00-1-L2_01	01080205	Moodus Reservoir East Haddam	451	2004	Mesotrophic	M	120,150,151,210,250,260,340,420	F1,F20,F21,F42,T62	2200,2600	9000
CT4710-06-1-L1_01	01080205	Pickerel Lake Colchester	88.6	2002	Hypereutrophic	E	150,210,340	F20,F21,T44,T62,X1,X42	2200,2600	9000
CT4800-04-1-L1_01	01080205	Lake Hayward East Haddam	198.9	2004	Mesotrophic	M	110,151,210,340,420	F1,F20,F21,F42,F62,T44	2200,2600	9000
CT4800-10-1-L1_01	01080205	Norwich Pond Lyme	27.5	2002	Mesotrophic	E	150,151,210,340	F1,F20,F21,F42,F44,F62		
CT4800-16-1-L2_01	01080205	Uncas Lake Lyme	69	2002	Oligotrophic	E	150,210,340	F1,F20,F21,F42,F44,F62		
CT5105-00-2-L1_01	01100004	Schreeder Pond	4	2004	Unknown	M	125,322,420	F20,F21,T1,T42	1700,1750	8950,9000
CT5105-00-2-L2_00	01100004	FORSTER POND	28.6	2002	Mesotrophic	M	120,222,340	F1,F20,F21,F42,F44		
CT5110-04-1-L1_01	01100004	Quonnapaug Lake Guilford	111.6	2004	Mesotrophic	M	120,210,340,420,860	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT5111-09-1-L1_01	01100004	Cedar Pond North Branford	21.8	2004	Mesotrophic	M	120,210,340,375,860	F21,P1,P20,P42,T62	900,1200,2210,2500	4000,5000
CT5111-09-1-L2_01	01100004	Linsley Pond North Branford	23.3	2004	Eutrophic	M	120,210,340,375,860	F21,P1,P20,P42,T44,T62	900,1200,2210,2500	4000,5000
CT5111-09-2-L3_01	01100004	Branford Supply Pond - West(Pisgah & Pine Gutter Brook)	9.5	2004	Unknown	E	120	F21,P20,T62,X1,X42,X44	1100,2100,2500	4000,4600,7550,7700
CT5111-09-2-L3_02	01100004	Branford Supply Pond - East	17.2	2000	Unknown	E	120	F21,X1,X20,X42,X44,X62		
CT5200-00-4-L2_01	01100004	Hanover Pond Meriden	73	2002	Hypereutrophic	M	151,190,191,250,260,550	N1,N42,P20,P21,T44,T62	410,1100,1200,1700,1750,2200,2600	200,4000,4500,8200,9000,9070
CT5206-01-1-L2_01	01100004	Black Pond Meriden Middlefield	75.6	2002	Mesotrophic	E	120,150,210,250,260,340	F1,F20,F21,F42,F44,F62		
CT5207-00-1-L1_01	01100004	North Farms Reservoir Wallingford	62.5	2002	Hypereutrophic	E	120,150,210,250,260,340,550	F21,T20,T44,T62,X1,X42	1200,2200	4000,8650
CT5207-02-1-L1_01	01100004	Allen Brook Pond	4.8	2004	Unknown	M	125,420	F21,P1,P42,X20	1700,1750	9000
CT5302-00-4-L3_01	01100004	Lake Whitney	178	2000	Eutrophic	M	120,860	F21,T20,T44,T50,X1,X42	900,1100,1200,1700,1900,2000,2100,2210,2500	500,3000,3100,3200,4000,4400,4500,6000,6350,8250,8400,8600,8700,8710
CT5305-00-3-L1_01	01100004	Edgewood Park Pond	2.7	2004	Eutrophic	M	120,190,220,250,310,860	F21,F44,F62,N1,N42,T20	1100,1700,1750	4000,4600,8650
CT6000-00-5+-L1_01	01100005	Lillinonah, Lake Southbury, Bridgewater	1900	2004	Eutrophic	M	120,210,250,260,340,420,700	P1,P21,P42,P44,P62,T20	410,900,1500,2000,2150,2200,2210,2600	100,200,1000,7000,7450,8500,8520,9050
CT6000-00-5+-L2_01	01100005	Zoar, Lake Monroe, Newtown, Oxford, Southbury	650	2004	Eutrophic	M	210,250,260,340,420	F44,P1,P21,P42,T20,T62	410,1200,1700,1750,2200,2600	100,7000,7350,8500,9000,9050
CT6000-00-5+-L2_02	01100005	Zoar, Lake Monroe, Newtown, Oxford, Southbury	325	2004	Eutrophic	M	210,250,260,340,420	P1,P20,P21,T42,T62	410,1200,2200,2210,2600	100,7000,7350,8500,9050
CT6000-00-5+-L4_01	01100005	Housatonic, Lake Shelton	328.2	2004	Eutrophic	M	120,210,250,260,340	F20,P1,P21,P42,T44,T62	410,900,1700,1750,2200,2210,2600	100,8500,9000,9050
CT6000-88-1-L1_01	01100005	Brewsters Pond	4	2004	Unknown	M	260	P1,P21,T20,T44,T62,X42	200,2200,2600	9000

Lakes: Use Support, Causes and Sources of Impairment

Appendix C

WBIDSEGUID	CU	Segment Name	Acres	Cycle	Trophic Category	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT6002-00-1-L1_01	01100005	East Twin Lake (Washing Lake) Salisbury	562.2	2004	Mesotrophic	M	110,120,210,250,340,420	F21,T1,T20,T42,T44,T62	2200,2600	9000
CT6005-00-1-L1_01	01100005	Wononscopomuc, Lake (Lakeville L.) Salisbury	352.6	2004	Mesotrophic	M	110,120,210,250,260,340,420	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT6005-04-1-L1_01	01100005	Riga Lake Salisbury	169.5	2004	Oligotrophic	M	120,210,340,420	F21,F42,F44,F62,T1,T20	1000	9000
CT6008-00-1-L1_01	01100005	Cream Hill Pond Cornwall	72	2004	Mesotrophic	M	120,210,340,420	F1,F20,F21,F42,F44,F62		
CT6016-00-1-L2_01	01100005	Leonard Pond Kent	15	2002	Eutrophic	E	120,210,340	F20,F21,F44,F62,X1,X42		
CT6016-00-1-L3_01	01100005	Hatch Pond Kent	61	2004	Mesotrophic	E	120,210,340	F21,T1,T20,T42,T44,T62	1100,2200,2600	1000,9000
CT6018-00-1-L1_01	01100005	Taunton Pond Newtown	126	2004	Mesotrophic	E	120,170,210,250,260,340	F21,T20,T44,T62,X1,X42	2210	9000
CT6023-00-1-L1_01	01100005	Quassapaug, Lake Middlebury	271	2004	Mesotrophic	M	120,210,250,260,340,420	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT6100-04-1-L1_01	01100005	Wood Creek Pond Norfolk	151	2002	Hypereutrophic	E	120,210,340	F20,F21,F44,T62,X1,X42		
CT6301-00-2-L1_01	01100005	Wononpakook, Lake (Long Pond) Salisbury	164	2002	Eutrophic	E	120,210,250,340	F20,F21,T1,T42,T44,T62	2200,2600	9000
CT6301-00-2-L2_01	01100005	Mudge Pond Sharon	201	2002	Mesotrophic	M	120,210,250,260,340,420,700	F20,F21,F44,F62,T1,T42	900,910,920,2200,2600	1000,1050,9000
CT6400-00-1-L5_01	01100005	Candlewood, Lake Danbury New Milford	5420	2004	Mesotrophic	M	120,210,250,260,340,420	F21,F44,T1,T20,T42,T62	1200,1700,1750,2200,2600	4000
CT6400-03-L1_01	01100005	Squantz Pond New Fairfield	288	2004	Mesotrophic	M	120,210,260,340,420	F1,F20,F21,F44,F62,T42	1700,1750	6000,6500,8650,9000
CT6402-00-1-L1_01	01100005	Ball Pond New Fairfield	89.9	2004	Mesotrophic	M	120,210,250,260,340,420	F20,F21,P1,P44,P62,T42	900,1700,1750,2200,2210,2600	4000,6000,6500,9000
CT6500-00-1-L1_01	01100005	South Spectacle Pond Kent	93	2002	Mesotrophic	E	120,210,340	F1,F20,F21,F42,F44,F62		
CT6502-00-1-L2_01	01100005	Waramaug, Lake Kent, Warren, Washington	680.2	2004	Mesotrophic	M	120,210,250,260,340,420	F1,F21,F42,F44,T20,T62	2210	1000
CT6600-01-1-L3_01	01100005	Kenosia, Lake Danbury	56	2004	Eutrophic	M	120,210,250,260,340,420	F20,F21,F44,F50,P1,P42,P62	900,2200,2210,2600	4000,8600,9000
CT6700-03-1-L2_01	01100005	Mohawk Pond Goshen	15.2	2002	Mesotrophic	E	120,210,340	F1,F20,F21,F42,F44,F62		
CT6701-00-1-L1_01	01100005	Tyler Lake Goshen	182	2004	Mesotrophic	M	120,210,250,260,340,420	F1,F20,F21,F42,F44,T62	2200,2600	9000
CT6701-01-1-L1_01	01100005	West Side Pond Goshen	42.4	2004	Mesotrophic	M	120,210,260,340,420	F1,F20,F21,F42,F44,F62		
CT6703-00-2-L1_01	01100005	Dog Pond Goshen	71.3	2004	Eutrophic	M	120,210,340,420	F1,F20,F21,F42,F44,T62		
CT6705-00-3-L3_01	01100005	Bantam Lake Litchfield Morris	916	2004	Eutrophic	M	120,210,250,260,340,420	F21,F42,F44,T1,T20,T62	2200,2600	9000
CT6705-14-1-L1_01	01100005	Mount Tom Pond Litchfield, Morris	61.5	2004	Mesotrophic	M	120,210,340,420	F1,F20,F21,F42,F44,F62		
CT6804-02-1-L1_01	01100005	Long Meadow Pond Bethlehem	110.5	2004	Eutrophic	M	120,210,340,420	F20,F21,F42,T1,T44,T62	2200,2600	8600
CT6904-00-3-L1_00	01100005	Stillwater Pond Torrington	95	2002	Mesotrophic	M	210,340	F1,F20,F21,F42,F62		
CT6905-00-1-L3_01	01100005	Winchester Lake Winchester	229	2002	Mesotrophic	E	210,250,260,340	F1,F20,F21,F42,F62		
CT6905-00-1-L4_01	01100005	Park Pond Winchester	76.7	2002	Mesotrophic	E	120,210,340	F1,F20,F21,T42,T44,T62	2200,2600	9000
CT6909-00-2-L1_01	01100005	Northfield Brook Lake	5.3	2004	Unknown	M	420,860	F21,F44,N1,N42,T20,T62	900,1700,1750,2210	9000,9070
CT6910-14--1-L3_01	01100005	Black Rock Lake	9.5	2004	Unknown	M	420	F21,F42,X1,X20		

Lakes: Use Support, Causes and Sources of Impairment

Appendix C

WBIDSEGID	CU	Segment Name	Acres	Cycle	Trophic Category	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT6912-05-1-L2_01	01100005	Winnemaug, Lake Watertown	120	2004	Mesotrophic	M	120,210,340,420	F20,F21,T1,T42,T44,T62	2200,2210,2600	1000,8700,8710,9000
CT6914-06-1-L2_01	01100005	Hitchcock Lake Wolcott	118.4	2004	Mesotrophic	M	120,210,340,420	F21,F44,P1,P42,T20,T62	1500,1700,1750,2200,2600	4000,8920,9000
CT6916-00-3-L4_01	01100005	Hop Brook Lake	25.8	2004	Unknown	M	420,860	F21,F44,N1,N42,T62,X20	1700,1750	1000,4000,6000,6500,9000,9070
ct7103-00-2-L3_01	01100006	Success Lake	16	2000	Unknown	E	150,175,250,860	F21,P1,P20,X42,X44,X62	500,550,560	100,8500
CT7103-00-2-L4_01	01100006	Stillman Pond	5	2000	Unknown	E	150,175,250,260,860	N1,N21,T20,X42,X44,X62	500,520,550,560	100,8500
CT7103-00-2-L5_01	01100006	Pembroke Lakes	2	2000	Unknown	E	175,250	F21,P1,P20,X42,X44,X62	300,410,500,550	100,8500
CT7105-10-1-L2_01	01100006	Lake Forest	66.6	2004	Unknown	M	110,120,130,175,250,420	F21,F42,T1,T20,X44,X62	900,1100	4000
CT7108-00-3-L3_01	01100006	Lake Mohegan	15	2004	Unknown	M	420	F21,T42,X1,X20,X44,X62	1700,1750	4000
CT7409-00-1-L3_01	01100006	Putnam Lake	105	2000	Unknown	E	175,330,340,350,850	F21,F50,P1,P20,X42	1600,2000,2200	4000,4500,7550,8520
CT8104-00-1-L5_01	02030101	Mamasasco Lake Ridgefield	95	2000	Mesotrophic	M	150,210,250,260,340,420,860	F20,F21,F44,T1,T42,T62	900,910,2200,2210	3000,3200,4000,6000,6500

Estuaries: Use Support, Causes and Sources of Impairment

Appendix D

WBIDSEGUID	CU	Segment Name	Square Miles	Cycle	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT1000-E_01	01090005	PAWCATUCK RIVER ESTUARY	0.14	2004	M	120,222,410	F21,F90,N23,P1,P20,X42	1200,1700,1750	200,4000,7900,8650
CT1000-E_02	01090005	PAWCATUCK RIVER ESTUARY	0.28	2004	M	120,410	F1,F21,F23,F42,F90,T20	1200	100,4000,7900
CT2001-E_01	01100003	STONINGTON HARBOR	1.58	2004	M	120,410,420	F1,F20,F21,F23,F42,F90		
CT2001-E_02	01100003	STONINGTON HARBOR	0.8	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	200,4000,7900,8650
CT2002-E_01	01100003	Offshore from West Cove	0.83	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT2002-E_02	01100003	West and Palmer Coves	0.6	2004	M	100,120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT2003-E_01	01100003	MUMFORD COVE	2	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,7900,8650
CT2004-E_01	01100003	ALEWIFE COVE	0.06	2004	M	120,130,151,410	F21,F42,F90,N23,P1,P20	900,920,1200,1700,1750	4000,8650
CT2005-E_01	01100003	GOSHEN COVE	0.04	2004	M	120,410	F20,F21,F42,F90,P1,P23	1700,1750	9000
CT2006-E_01	01100003	LONG ISLAND SOUND EAST - OFFSHORE_01	21.62	2004	M	120,210,410	F20,F21,F42,F90,N23,P1	1700,1750	200,400,4000,7900,8650
CT2006-E_02	01100003	LONG ISLAND SOUND EAST - OFFSHORE_02	35	2004	M	120,210	F1,F20,F21,F42,F90		
CT2006-E_03	01100003	Long Island Sound East - Old Lyme shore_03	0.2	2004	M	120,210,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650,9000
CT2101-E_01	01100003	WEQUETEQUOCK COVE	2.01	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700	200,4000,6000,6500,7900,8650
CT2102-E_01	01100003	Outer Quiambaug Cove	3.38	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT2102-E_02	01100003	Inner Quaimbaug Cove	0.6	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT2106-E_01	01100003	MYSTIC RIVER ESTUARY	3.37	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT2106-E_02	01100003	MYSTIC RIVER ESTUARY	0.6	2004	M	120,410,420,840	F20,F21,F42,F90,P1,P23	1700,1750	200,4000,7900,8650
CT2107-E_01	01100003	Poquonuck River Estuary/Baker Cove	1.15	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	200,4000,7900,8650
CT2107-E_02	01100003	Offshore of Eastern, Avery & Bushy Points	0.9	2004	M	120,410,420	F1,F20,F21,F23,F42,F90		
CT2201-E_01	01100003	JORDAN COVE	1.09	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	100,4000,7900,8650
CT2204-E_01	01100003	Niantic Bay - SW corner	0.2	2004	M	120,410,420,860	F1,F21,F23,F42,F90,P20	0	9000
CT2204-E_02	01100003	Niantic Bay - upper bay & river	0.29	2004	M	120,240,340,410,420	F21,F90,N23,P1,P20,P42	0,1200,1700,1750	4000,6000,6500,7900,8650,9000
CT2204-E_03	01100003	Niantic Bay and offshore	3.96	2004	M	120,410,420	F21,F42,F90,N23,P1,P20	0,1700,1750	4000,6000,6500,7900,8650,9000
CT2206-E_01	01100006	Bride Brook Estuary	0.03	2004	M	120,410,420	F20,F21,F90,N23,P1,P42	1700,1750	8650,9000
CT2206-E_02	01100006	Pattagansett/Fourmile River & coast	2.33	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT3000-E_01	01100003	THAMES RIVER ESTUARY	8.64	2004	M	120,180,410,700,860	F1,F20,F21,F23,F90,T42	1700,1750	200,4000,8650,9000
CT3000-E_02	01100003	THAMES RIVER ESTUARY	2.26	2004	M	120,180,230,250,410,700,840,860	F20,F21,F90,N23,P1,P42	1700	100,200,500,400,7900,8650
CT3000-E_03	01100003	THAMES RIVER ESTUARY	1.54	2004	M	120,180,230,410,700	F21,F90,N1,N23,N42,P20	900,920,1200,1700	200,400,1000,400,8650
CT4000-E_01	01080205	CONNECTICUT RIVER ESTUARY	2.77	2004	M	120,260,410,420,840,850	F1,F20,F21,F23,F42,F90		

Estuaries: Use Support, Causes and Sources of Impairment

Appendix D

WBIDSEGUID	CU	Segment Name	Square Miles	Cycle	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT4000-E_02	01080205	CONNECTICUT RIVER ESTUARY	9.28	2004	M	120,191,260,410,840,850	F20,F42,F90,N23,P1,P21	410,1700,1750	200,4000,6000,6500,7900,8650,9000
CT4020-E_01	01080205	Lieutenant River (Estuary)_01	0.04	2004	M	120,860	F20,F21,N23,P1,P42	1700,1750	8650,9000
CT4020-E_02	01080205	Lieutenant River (Estuary)_02	0.1	2004	M	120,860	F20,F21,N23,P1,P42	1700,1750	8650,9000
CT4021-E_01	01080205	Black Hall River (estuary)_01	0.12	2004	M	120,860	F20,F21,F23,T1,T42	1700,1750	9000
CT4021-E_02	01080205	Black Hall River (estuary)_02	0.03	2004	M	120,860	F20,F21,N23,P1,T42	1700,1750	6000,6500,8650,9000
CT5001-E_01	01100004	MADISON BEACHES_01	3.27	2004	M	120,410,420	F1,F20,F21,F23,F42,F90		
CT5001-E_02	01100004	MADISON BEACHES_02	1.64	2004	M	120,410,420	F20,F21,F42,F90,P1,P23	1700,1750	4000,6000,6500,7900,8650
CT5001-E_03	01100004	MADISON BEACHES_03	1.64	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT5002-E_01	01100004	ISLAND BAY/JOSHUA COVE-nearshore	0.45	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT5002-E_02	01100004	ISLAND BAY/JOSHUA COVE-offshore	1.8	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT5003-E_01	01100004	THIMBLE ISLANDS	1.1	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT5003-E_02	01100004	THIMBLE ISLANDS	1.1	2004	M	120,410,420	F20,F21,F42,F90,P1,P23	1700,1750	4000,6000,6500,7900,8650
CT5003-E_03	01100004	THIMBLE ISLANDS-offshore	2.65	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT5004-E_01	01100004	LONG ISLAND SOUND CENTRAL - OFFSHORE_01	65	2004	M	120,130,210,310,330,410,840	F20,F21,F42,F90,N23,P1	1700,1750	200,400,4000,6000,6500,7900,8650
CT5004-E_02	01100004	LONG ISLAND SOUND CENTRAL - OFFSHORE_02	50	2004	M	120,130,210,310,330,840	F21,F42,F90,P1,P20	900,920,1200	100,200,400,4000,8100
CT5004-E_03	01100004	LONG ISLAND SOUND CENTRAL - OFFSHORE_03	75.2	2004	M	120,130,210,310,330,410,840	F1,F20,F21,F23,F42,F90		
CT5004-E_04	01100004	LONG ISLAND SOUND CENTRAL - OFFSHORE_04	65	2004	M	120,130,210,310,330,410,840	F1,F20,F21,F42,F90		
CT5101-E_01	01100004	PLUM BANK/INDIAN HARBOR	1	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700	4000,6000,6500,7900,8650
CT5102-E_01	01100004	PATCHOGUE RIVER/MENUNKETESUCK RIVER	3.52	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT5106-E_01	01100004	Upper Hammonasset, Indian and Hammock Rivers.	0.1	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT5106-E_02	01100004	HAMMONASSETT RIVER/Hayden Creek	0.01	2004	M	120,410,840	F21,F90,P1,P20,T42	500,530,550,580,1900	100,110,4000,6000,6500
CT5106-E_03	01100004	Lower Hammonasset River/Inner Clinton Harbor	0.33	2004	M	120,410,420	F21,F23,F90,P1,P20,T42	900,920,1200,1700,1750	4000,6000,6500,7900,8650
CT5106-E_04	01100004	CLINTON HARBOR-offshore	1.8	2004	M	120,410,420	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650
CT5110-E_01	01100004	GUILFORD HARBOR	0.3	2004	M	120,410,420	F20,F21,F90,N23,P1,T42	1700,1750	4000,6000,6500,7900,8650
CT5110-E_02	01100004	GUILFORD HARBOR	2.79	2004	M	120,410	F20,F21,F42,F90,P1,P23	1700	4000,6000,6500,7900,8650
CT5111-E_01	01100004	BRANFORD HARBOR	0.25	2004	M	120,410,420,840	F20,F21,F42,F90,N23,P1	1700,1750	200,4000,7900,8650
CT5111-E_02	01100004	BRANFORD HARBOR	4.61	2004	M	120,410,420	F1,F20,F21,F23,F42,F90		

Estuaries: Use Support, Causes and Sources of Impairment

Appendix D

WBIDSEGUID	CU	Segment Name	Square Miles	Cycle	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT5200-E_01	01100004	New Haven - Inner Harbor/Mill, Q & West Rivers	4.2	2004	M	120,150,151,410,510,840	F21,F90,N1,N23,N42,P20	100,300,900,920,1200,1500,1700,1750,1900	100,200,400,400,0,4500,6000,6300,7900,8100,8200,8500,8650
CT5200-E_02	01100004	New Haven Harbor - West Haven shore/Cove & Oyster Rivers	0.61	2004	M	120,150,151,410,510,840	F21,F42,F90,N23,P1,P20	300,900,920,1700,1750	100,200,400,400,0,6000,6300,7900,8100,8650
CT5200-E_03	01100004	New Haven Harbor - Outer Harbor / Morris Cove	6.71	2004	M	120,150,151,410,420,840	F21,F23,F42,F90,P1,P20	100,300,900,920,1200,1700,1750,1900	100,200,400,400,0,7900,8100,8500,8650
CT5200-E_04	01100004	New HavenHarbor Offshore_04	7	2004	M	120,210,410,420	F1,F20,F21,F23,F42,F90		
CT5200-E_05	01100004	New Haven harbor Offshore_05	6.6	2004	M	120,210,410,420	F21,F23,F42,F90,P1,P20	900,920,1200	100,200,4000,8100
CT5306-E_01	01100004	MILFORD HARBOR/GULF POND	0.44	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,7900,8650
CT5306-E_02	01100004	MILFORD - THE GULF_02	0.5	2004	M	120,410,420	F1,F20,F21,F23,F90,T42	1700,1750	8650,9000
CT5306-E_03	01100004	Milford - The Gulf_03	0.5	2004	M	120,410,420	F20,F21,F42,F90,P1,P23	1700,1750	8650,9000
CT6000-E_01	01100005	Housatonic River Estuary - Upper	0.5	2004	M	120,150,222	F21,F42,F90,P1,P20	1200,1600	200,4000,5000,5400,6000,6300
CT6000-E_02	01100005	Housatonic River Estuary - lower	2.2	2004	M	120,150,222	F20,F21,F90,P1,P42	1700,1750	4000,6000,6300,9000
CT6000-E_03	01100005	Housatonic River Estuary - Ferry Creek & shore	0.1	2004	M	120,150,222	F21,F90,P1,P20,T42	410,420,500,530,580,1700,1750	100,110,4000,4300,6000,6300,7900
CT6000-E_04	01100005	Housatonic River Estuary - mouth	0.44	2004	M	120,150,222,410,420	F20,F21,F42,F90,N23,P1	1700,1750	200,4000,7900,8650
CT6000-E_05	01100005	Housatonic River Estuary - offshore Lordship	2.6	2004	M	120,222,410,420	F21,F42,F90,N23,P1,P20	900,920,1200,1700,1750	100,200,4000,7900,8100,8650
CT7001-E_01	01100006	INNER BRIDGEPORT HARBOR/LEWIS GUT	1.43	2004	M	120,150,410,610,840	F21,F90,N1,N23,N42,P20	100,300,1200,1700	100,200,400,400,0,4500,6000,6300,7900,8500
CT7002-E_01	01100006	OUTER BRIDGEPORT HARBOR_01	8.75	2004	M	120,150,410,420,600	F20,F21,F90,N23,P1,P42	1700,1750	200,400,4000,6000,6300,7900,8650
CT7002-E_02	01100006	OUTER BRIDGEPORT HARBOR_02	8.75	2004	M	120,150,410,600	F21,F42,F90,N23,P1,P20	900,920,1200,1700,1750	200,400,4000,7900,8100,8650
CT7003-E_01	01100006	BLACKROCK HARBOR	0.44	2004	M	120,150,240,250,410,600,700,710,840	F21,F90,N1,N20,N23,N42	300,400,900,920,1200,1700,1750,1900	100,200,400,400,0,6000,6300,7900,8100,8400,8500,8650
CT7004-E_01	01100006	SHERWOOD MILLPOND/COMPO COVE- pond	0.46	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,7900,8650
CT7004-E_02	01100006	SHERWOOD MILLPOND/COMPO COVE-cove	0.6	2004	M	120,410,420	F20,F21,F42,F90,P1,P23	1700,1750	4000,7900,8650
CT7005-E_01	01100006	SCOTT COVE	0.9	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT7006-E_01	01100006	WESTCOTT COVE- Cove	0.5	2004	M	120,410,420	F20,F21,F90,N23,P1,T42	1700,1750	4000,7900,8650

Estuaries: Use Support, Causes and Sources of Impairment

Appendix D

WBIDSEGID	CU	Segment Name	Square Miles	Cycle	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT7006-E_02	01100006	WESTCOTT COVE- Offshore	0.3	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT7007-E_01	01100006	GREENWICH COVE_01	0.11	2004	M	120,410,420	F20,F21,F90,N23,P1,P42	1700,1750	4000,7900,8650
CT7007-E_02	01100006	GREENWICH COVE_02	0.9	2004	M	120,410	F20,F21,F42,F90,P1,P23	1700,1750	4000,7900,8650
CT7008-E_01	01100006	Byram Harbor_01	0.97	2004	M	120,410,420	F20,F21,F90,N23,N42,P1	1700,1750	400,4000,4500,7900,8650,9050
CT7009-E_01	01100006	CAPTAIN HARBOR	3.41	2004	M	120,410	F20,F21,F90,N23,P1,X42	1700,1750	200,4000,7900,8650
CT7010-E_01	01100006	Long Island Sound West_01	6	2004	M	120,130,210,330,410,610	F21,F42,F90,N23,P1,P20	900,920,1200,1700,1750	200,4000,7900,8650
CT7010-E_02	01100006	Long Island Sound West_02	30	2004	M	120,130,210,330,610	F21,F42,F90,P1,P20	900,920,1200	200,4000,8100
CT7010-E_03	01100006	Long Island Sound West_03	55.5	2004	M	120,130,210,330,410,610	F21,F23,F42,F90,P1,P20	900,920,1200	200,4000,8100
CT7010-E_04	01100006	Long Island Sound West_04	53	2004	M	120,130,210,330,610	F21,F42,F90,P1,P20	900,920,1200	200,4000,8100
CT7106-E_01	01100006	ASH CREEK	0.15	2004	M	120,410	F20,F21,F90,N1,N23,N42	1700,1750	400,4000,7900
CT7106-E_02	01100006	Ash Creek near Tourney Rd.	0.01	2004	M	120,250,410,840	F21,F90,N1,N23,N42,P20	500,1700,1750	100,110,400,4000,7900,8500,8650
CT7108-E_01	01100006	Southport- Upper Mill Pond	0.01	2004	M	120,150,240,250,260,310,410,420,710,860	F90,N1,N23,N42,P20,P21	500,550,1700,1750	100,4000,8500,8650
CT7108-E_02	01100006	Southport- Lower Mill Pond	0.03	2004	M	150,240,250,310,410,420,710,720,860	F90,N1,N23,N42,P20,P21	500,550,1700,1750	100,4000,8500,8650
CT7108-E_03	01100006	Southport - Sasco Brook Estuary	0.04	2004	M	120,231,410,420,860	F20,F21,F90,N23,N42,P1	1700,1750	500,4000,6000,6500,8650,9000
CT7108-E_04	01100006	Southport Harbor & Offshore	2.1	2004	M	120,250,410	F20,F21,F42,F90,P1,P23	500,550,1700,1750	4000,7900,8650
CT7200-E_01	01100006	SAUGATUCK RIVER ESTUARY	0.42	2004	M	120,410,840	F20,F21,F42,F90,N23,P1	1700,1750	200,4000,7900,8650
CT7200-E_02	01100006	SAUGATUCK RIVER ESTUARY	0.55	2004	M	120,410	F1,F20,F21,F23,F42,F90		
CT7300-E_01	01100006	Norwalk Hbr - Norwalk River Estuary/Mill Pond	0.4	2004	M	110,120,130,150,180,250,410,700,810,840	F21,F90,N23,P1,P20,X42	500,550,560,900,920,1200,1700,1750	100,200,400,4000,6000,6300,7900,8100,8500
CT7300-E_02	01100006	NORWALK HARBOR (INNER)	0.56	2004	M	110,120,130,150,180,410,420,700,810,840	F21,F23,F90,P1,P20,P42	900,920,1200,1700,1750	200,400,4000,7900,8100,8650
CT7300-E_03	01100006	NORWALK HARBOR- Adjacent Waters	1.6	2004	M	110,120,130,150,410,420	F21,F90,N23,P1,P20,P42	900,920,1200,1700,1750	100,200,400,4000,7900,8100,8650,9000
CT7300-E_04	01100006	NORWALK HARBOR- Offshore Waters	5.32	2004	M	110,120,130,150,410	F21,F42,F90,P1,P20,P23	400,900,920,1200,1700,1750	200,4000,7900,8100,8400,8650
CT7401-E_01	01100006	FIVEMILE RIVER ESTUARY	0.17	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900,8650

Estuaries: Use Support, Causes and Sources of Impairment

Appendix D

WBIDSEGID	CU	Segment Name	Square Miles	Cycle	Assessment Category	Assessment Methods	Use Support	Causes	Sources
CT7401-E_02	01100006	FIVEMILE RIVER ESTUARY- offshore	0.9	2004	M	120,410	F20,F21,F42,F90,P1,P23	1700,1750	4000,6000,6500,7900,8650
CT7402-E_01	01100006	DARIEN COVE	0.39	2004	M	120,410	F20,F21,F90,N23,P1,T42	1700,1750	4000,6000,6500,7900,8650
CT7403-E_01	01100006	HOLLY POND/COVE HARBOR - pond	0.51	2004	M	120,410	F20,F21,F90,N23,P1,T42	1700,1750	4000,6000,6500,7900,8650
CT7403-E_02	01100006	HOLLY POND/COVE HARBOR - cove	0.3	2004	M	120,410,420	F20,F21,F23,F90,T1,T42	1700,1750	4000,6000,6500,7900,8650
CT7403-E_03	01100006	HOLLY POND/COVE HARBOR-offshore	0.4	2004	M	120,410	F20,F21,F42,F90,P1,P23	1700,1750	4000,7900,8600,8650
CT7405-E_01	01100006	STAMFORD HARBOR (E & W Branches)	0.35	2004	M	120,150,151,200,250,410,600,840	F21,F90,N1,N20,N23,N42	1200,1700,1750	200,4000,7900,8650
CT7405-E_02	01100006	STAMFORD HARBOR (Inner)	0.4	2004	M	120,150,151,200,410,600	F20,F21,F23,F90,T1,T42	1700,1750	200,4000,7900,8650
CT7405-E_03	01100006	STAMFORD HARBOR (Outer)	0.5	2004	M	120,150,151,200,410	F20,F21,F42,F90,N23,P1	1700,1750	200,4000,7900,8650
CT7405-E_04	01100006	STAMFORD HARBOR (East Greenwich shore)	1.1	2004	M	120,410,420	F20,F21,F23,F90,T1,T42	1700,1750	9000
CT7407-E_01	01100006	COS COB HARBOR	0.85	2004	M	120,410	F20,F21,F42,F90,N23,P1	1700,1750	4000,6000,6500,7900
CT7409-E_01	01100006	GREENWICH HARBOR	0.12	2004	M	120,180,250,410,840	F21,F42,F90,N23,P1,P20	900,920,1200,1700,1750	200,4000,7900,8650
CT7409-E_02	01100006	GREENWICH HARBOR - INDIAN COVE	0.33	2004	M	120,180,410,840	F21,F42,F90,N23,P1,P20	900,920,1200,1700,1750	200,4000,7900,8650
CT7411-E_01	01100006	BYRAM RIVER ESTUARY	0.1	2004	M	120,250,410	F21,F90,N23,N42,P1,T20	200,420,1700,1750	400,500,4000,7900,9050

Appendix E. Codes for Terms Used in Use Support Tables (Appendices B, C & D)

WBSEGID - An identification code assigned to each waterbody segment.

Example: River Segment CT1000-00_01, Pawkatuck River segment 01

CT = designates Connecticut

1000 = designates the Connecticut subregional basin code

00 = designates the main stem of the river (other numbers represent tributaries to the main stem)

01 = designates the river segment (01 always starts at the mouth)

CU - A USGS designated drainage basin (Cataloging Unit)

Segment Name - Usually the river, lake or estuary plus a segment number

Cycle – last year for which a water quality assessment was conducted based on the most recent available information

Assessment Category - M = monitored; E = evaluated (see Chapter 4. Assessment Methodology)

The following codes are taken directly from the US EPA-provided Assessment Database, in which all assessment data is tracked.

ASSESSMENT METHODS

Method Code	METHOD NAME
100	QUALITATIVE (EVALUATED) ASSESSMENT - UNSPECIFIED
110	Information from local residents
120	Surveys of fish and game biologists/other professionals
125	Waterbody segment is trout stocked, assumed to support cw fish
130	Land use information and location of sources
140	Incidence of spills and/or fish kills
150	Monitoring data more than 5 years old
151	p/c or trophic data more than 5 years old
152	benthic community data more than 5 years old
153	fish community data more than 5 years old
170	Best professional judgment
175	Occurrence of conditions judged to cause impairment
180	Screening models (desktop models/models not calibrated or verified)
190	Biological/habitat data extrapolated from upstream or downstream waterbody
191	Physical/chemical data extrapolated from upstream or downstream waterbody
200	PHYSICAL/CHEMICAL MONITORING
210	Fixed station physical/chemical monitoring (conventional pollutants only)
220	Non-fixed station physical/chemical monitoring (conventional pollutant only)
222	Non-fixed-station monitoring (conventional during key seasons and flows)
230	Fixed station physical/chemical (conventional plus toxic pollutants)
231	Highest quality fixed-station P/C (conventional plus toxicants)
240	Non-fixed station physical/chemical (conventional + toxicants)
242	Non-fixed station physical/chemical (conv + toxicants during key seasons and flows)
250	Chemical monitoring of sediments
260	Fish tissue analysis
270	PWS chemical monitoring (ambient water)

275	PWS chemical monitoring (finished water)
300	BIOLOGICAL MONITORING
310	Ecological/habitat surveys
315	Regional reference site approach
320	Benthic macroinvertebrate surveys
321	RBP III or equivalent benthos surveys
322	RBP I or II or equivalent benthos surveys
330	Fish surveys
331	RBP V or equivalent fish surveys
340	Primary producer surveys (phytoplankton/periphyton/macrophyton)
350	Fixed station biological monitoring
360	HABITAT ASSESSMENT
365	Visual observation, usually at road crossings; professional not required
370	Visual observation, use of land use maps, ref. conditions, prof. not required
375	Visual observation, may not quantify some parameters; single season; by prof.
380	Quan. measurements of instream parms, channel morphology, floodplain; 1-2 seasons; by prof
400	PATHOGEN MONITORING
410	Shellfish surveys
420	Water column surveys (e.g. fecal coliform)
430	Sediment analysis
440	PWS pathogen monitoring (ambient water)
450	PWS pathogen monitoring (finished water)
500	TOXICITY TESTING
510	Effluent toxicity testing (acute)
520	Effluent toxicity testing (chronic)
530	Ambient toxicity testing (acute)
540	Ambient toxicity testing (chronic)
550	Toxicity testing of sediments
600	MODELING
610	Calibrated models (calibration data are less than 5 years old)
700	INTEGRATED INTENSIVE SURVEY (field work exceeds a 24hr period/multimedia)
705	physical/chemical (conventional & toxicants) only
710	Combined sampling of water column, sediment, biota for chemical analysis
720	Biosurveys of multiple taxonomic groups (e.g. fish/invertebrates/algae)
800	ASSESSMENTS BASED ON DATA FROM OTHER SOURCES
810	(VOL.) Chem./phys. monitoring data by quality-assured volunteer program
820	(VOL.) Benthic macroinvertebrate surveys by quality-assured volunteers
830	(VOL.) Bacteriological water column sampling by quality-assured volunteers
840	(Efl.) Discharger self-monitoring data
850	(Ambt.) Discharger self-monitoring data
860	Other Agencies/Organizations provided monitoring data
870	Drinking water supply closures or advisories (source-water quality based)
900	DISCREPANCY IN AQUATIC LIFE ASSESSMENT RESULTS
910	Physical/Chemical ALUS (Discrepancy among different data types)
920	Biological ALUS (Discrepancy among different data types)
925	Habitat ALUS (Discrepancy among different data types)
930	Toxicity Testing ALUS (Discrepancy among different data types)
940	Evaluated (qualitative) ALUS (Discrepancy among different data types)

Designated Use and Use Support appear as a combined code in the Use Support Appendices. Example: F1 = Full Support (F) for Overall Use (1).

DESIGNATED USES AND USE SUPPORT

Use Code	Use Name	Support Code	Support Description
1	Overall Use Support	A	Not attainable
20	Aquatic Life Support	F	Fully
21	Fish Consumption	N	Not supporting
22	Cold Water Fishery - Trout	P	Partial
23	Shellfishing	T	Threatened
24	Warm Water Fishery	X	Not assessed
25	Anadromous Fish		
42	Primary Contact (Recr)		
44	Secondary Contact (Recr)		
50	Drinking Water Supply		
62	Aesthetics		
72	Agriculture		
74	Cultural/Ceremonial		
75	Industrial Use		
82	Hydropower		
90	Nondegradation		
92	Fish Consumption (organics)		

Causes and Sources: It should be noted that for some causes and sources there may be a major code followed by a more specific code. For example, the specific cause Mercury (560) is always associated with the major cause Metals (500). Similarly, the specific source Landfills (6300) is always associated with the major source Land Disposal (6000).

CAUSES

Cause Code	Cause Name	Cause Code	Cause Name
0	Cause Unknown	990	Other
100	Unknown toxicity	1000	pH
200	Pesticides	1005	Low buffering capacity
250	Atrazine	1100	Siltation
300	Priority organics	1200	Organic enrichment/Low DO
400	Nonpriority organics	1210	Organic Enrichment
410	PCB's	1220	Low DO
420	Dioxins	1300	Salinity/TDS/chlorides
500	Metals	1310	Salinity
510	Arsenic	1320	TDS
520	Cadmium	1330	Chlorides
530	Copper	1335	Sodium
540	Chromium	1400	Thermal modifications
550	Lead	1500	Flow alteration
560	Mercury	1600	Other habitat alterations
570	Selenium	1700	Pathogens
580	Zinc	1750	Indicator bacteria
600	Unionized Ammonia	1800	Radiation
700	Chlorine	1900	Oil and grease
720	Cyanide	2000	Taste and odor
750	Sulfates	2100	Suspended solids
800	Other inorganics	2200	Noxious aquatic plants
810	Sodium	2210	Algal Grwth/Chlorophyll a
900	Nutrients	2400	Total toxics
910	Phosphorus	2500	Turbidity
920	Nitrogen	2600	Exotic species
930	Nitrate		

SOURCES

Source Code	Source Name	Source Code	Source Name
100	Industrial Point Sources	5500	Petroleum Activities
110	Major Industrial Point Source	5600	Mill Tailings
120	Minor Industrial Point Source	5700	Mine Tailings
200	Municipal Point Sources	5800	Acid Mine Drainage
210	Major Municipal Point Source	5900	Abandoned mining
212	Major Municipal Point Sources - dry weather discharges	5950	Inactive mining
214	Major Municipal Point Sources - wet weather discharges	6000	Land Disposal
220	Minor Municipal Point Source	6100	Sludge
222	Minor Municipal Point Sources - dry weather discharges	6200	Wastewater
224	Minor Municipal Point Sources - wet weather discharges	6300	Landfills
230	Package Plants (Small Flows)	6350	Inappropriate Waste Disposal/Wildcat Dumping
400	Combined Sewer Overflow	6400	Industrial Land Treatment
500	Collection System Failure	6500	Onsite Wastewater Systems (Septic Tanks)
900	Domestic Wastewater Lagoon	6600	Hazardous Waste
1000	Agriculture	6700	Septage Disposal
1050	Crop-related Sources	7000	Hydromodification
1100	Nonirrigated Crop Production	7100	Channelization
1200	Irrigated Crop Production	7200	Dredging
1300	Specialty Crop Production	7300	Dam Construction
1350	Grazing related Sources	7350	Upstream Impoundment
1400	Pasture grazing - Riparian and/or Upland	7400	Flow Regulation/Modification
1410	Pasture grazing - Riparian	7450	Hydropower generation
1420	Pasture grazing - Upland	7550	Habitat Modification (other than Hydromodification)
1500	Range grazing - Riparian and/or Upland	7600	Removal of Riparian Vegetation
1510	Range grazing - Riparian	7700	Bank or Shoreline Modification/Destabilization
1520	Range grazing - Upland	7800	Drainage/Filling Of Wetlands
1600	Intensive Animal Feeding Operations	7900	Marinas
1620	Concentrated Animal Feeding Operations (permitted, point source)	7910	In-water releases
1640	Confined Animal Feeding Operations (NPS)	7920	On-land releases
1700	Aquaculture	8050	Erosion from derelict Land
1800	Off-farm Animal Holding/Management Area	8100	Atmospheric Deposition
2000	Silviculture	8200	Waste Storage/Storage Tank Leaks
2100	Harvesting, Restoration, Residue Management	8250	Leaking Underground Storage Tanks
2200	Forest Management (pumped drainage, fertilization, pesticide application)	8300	Highway Maintenance and Runoff
2300	Logging Road Construction/Maintenance	8400	Spills
2400	Silvicultural Point Sources	8500	Contaminated Sediments
3000	Construction	8520	Debris and bottom deposits
3100	Highway/Road/Bridge Construction	8530	Internal nutrient cycling (primarily lakes)
3200	Land Development	8540	Sediment resuspension
4000	Urban Runoff/Storm Sewers	8600	Natural Sources

4100	Non-industrial Permitted	8650	Waterfowl
4200	Industrial Permitted	8700	Recreation and Tourism Activities (other than Boating - see 7900)
4300	Other Urban Runoff	8710	Golf courses
4400	Illicit connections/illegal hook-ups/dry weather flows	8900	Salt Storage Sites
4500	Highway/Road/Bridge Runoff	8910	Groundwater Loadings
4600	Erosion and Sedimentation	8920	Groundwater Withdrawal
5000	Resource Extraction	8950	Other
5100	Surface Mining	9000	Source Unknown
5200	Subsurface Mining	9050	Sources outside State Jurisdiction or Borders
5300	Placer Mining	9070	Unspecified Nonpoint Source

Water Utility	Reservoir/Waterbody	Activity Status	Type	Size (Acres)	Trophic Status
Aquarion Water Company, LAKEVILLE SYSTEM	Lakeville No.3 (Diversion)	Active	Storage	0.9	Oligotrophic
	Lakeville No.2	Active	Distribution and Storage	11.3	Mesotrophic
	Kent Reservoir	Inactive	Distribution	1.0	Eutrophic
Aquarion Water Company, MAIN SYSTEM	Means Brook Reservoir	Active	Storage	19.0	Eutrophic
	West Pequonnock Diversion	Active	Transfer	4.0	Mesotrophic
	Far Mill Reservoir	Active	Storage	59.0	Eutrophic
	Saugatuck Reservoir	Active	Storage	860.0	Mesotrophic
	Easton Lake Reservoir	Active	Distribution	488.0	Mesotrophic
	Trap Falls Reservoir	Active	Distribution	354.0	Mesotrophic
	Aspetuck Reservoir	Active	Storage	60.0	Mesotrophic
	Hemlocks Reservoir	Active	Distribution	437.0	Mesotrophic
Aquarion Water Company, NORFOLK SYSTEM	Lake Wangum	Active	Distribution	178.0	Oligotrophic
Aquarion Water Company, RIDGEFIELD	Round Pond Reservoir	Active	Distribution	39.0	Mesotrophic
Aquarion Water Company, Simsbury System	Tuller Reservoir	Inactive	Distribution	10.0	No Information
Aquarion Water Company, STAMFORD	Mill River Reservoir	Active	Storage	105.0	Mesotrophic
	Trinity Lake	Active	Storage	110.0	Mesotrophic
	Siscowit Reservoir	Active	Storage	45.0	Mesotrophic
	Laurel Reservoir	Active	Distribution	306.0	Mesotrophic
	North Stamford Reservoir	Active	Distribution	123.0	Mesotrophic
	BETHEL WATER DEPT	Eureka Lake	Active	Distribution	34.0
Mountain Pond		Active	Storage	13.0	Mesotrophic
Chestnut Ridge Reservoir		Active	Distribution	24.7	Mesotrophic
BIRMINGHAM UTILITIES, INC.	Beaver Lake	Emergency	Storage	82.5	Mesotrophic
	Middle Reservoir	Emergency	Distribution	3.2	Mesotrophic
	Quillinan Reservoir	Officially abandoned; sold to CT DEP 6/01		(11.5)	-----
BRISTOL WATER DEPT	Bristol Reservoir #1	Active	Distribution	36.0	Mesotrophic
	Bristol Reservoir #2	Active	Storage	19.4	Oligotrophic
	Bristol Reservoir #3	Active	Storage	4.1	Mesotrophic
	Bristol Reservoir #4	Active	Storage	43.9	Mesotrophic
	Bristol Reservoir #5	Active	Storage	39.0	Oligotrophic
	Bristol Reservoir #7	Active	Storage	189.6	Mesotrophic
CONNECTICUT VALLEY HOSPITAL	CVH Reservoir 1	Inactive	Storage	1.3	Mesotrophic*
	CVH Reservoir 2	Active	Storage	13.8	Mesotrophic
	CVH Reservoir 3 & 4	Active	Distribution	20.3	Mesotrophic*
	CVH Reservoir 5	Active	Storage	13.5	Mesotrophic*
	CVH Reservoir 6	Active	Storage	17.3	Mesotrophic*
Aquarion Water Company (Formerly CT-AM WATER CO, GREENWICH DIST)	Bargh Reservoir	Active	Storage	216.0	Mesotrophic
	Converse Lake	Emergency	Storage	103.0	Unknown
	Brush Reservoir	Active	Storage	6.0	Mesotrophic
	Rockwood Lake Reservoir	Active	Transfer	110.4	Mesotrophic
	Mianus Mill Pond	Active	Distribution	6.4	Eutrophic
	Putnam Lake Reservoir	Active	Distribution	105.0	Mesotrophic
Aquarion Water Company (Formerly CT-AM WATER CO, MYSTIC VALLEY DIST)	Dean's Mill Reservoir	Active	Storage	13.0	Mesotrophic
	Palmer Reservoir	Active	Distribution	23.6	Mesotrophic
CTWC, NAUGATUCK REG, CENTRAL SYS	Hopkins Diversion	Active	Transfer	0.0	Unknown
	Mulberry Reservoir	Active	Distribution	11.0	Mesotrophic
	Moody Reservoir	Active	Storage	60.3	Mesotrophic
	Upper Candee Reservoir	Active	Storage	1.9	Unknown
	Long Hill Reservoir	Active	Storage	87.2	Oligotrophic
	Straitsville Reservoir	Active	Distribution	2.0	Unknown
	Lower Candee Reservoir	Active	Distribution	0.4	Unknown
	Twitchell Reservoir	Active	Distribution	0.8	Unknown
	Terryville Reservoir No. 3	Emergency	Distribution	4.4	Unknown
	Terryville Reservoir No. 2	Officially Abandoned		0.0	-----
CTWC, NAUGATUCK REG, THOMASTON SYS	Thomaston Reservoir	Emergency	Distribution	37.0	Unknown
CTWC, NORTHERN REG, STAFFORD SYS	Stafford Reservoir No. 2	Active	Distribution	37.3	Eutrophic
	Stafford Reservoir No. 3	Active	Storage	9.8	Eutrophic
	Stafford Reservoir No.4	Active	Storage	52.0	Oligotrophic
CTWC, NORTHERN REG, WESTERN SYS	Shenipsit Lake	Active	Distribution	522.8	Mesotrophic
CTWC, SHORELINE REG, CHESTER SYSTEM	Turkey Hill Reservoir	Active	Storage	80.2	Mesotrophic
	Upper Chester Reservoir	Active	Storage	5.3	Mesotrophic
	Lower Chester Reservoir	Active	Distribution	47.9	Oligotrophic
	Wilcox Reservoir	Active	Storage	25.0	Mesotrophic
	Deuses Pond	Active	Storage	2.8	Eutrophic
CTWC, SHORELINE REG, GUILFORD SYS	Killingworth Reservoir	Active	Storage	88.3	Mesotrophic
	KelseyTown Reservoir	Active	Distribution	18.0	Eutrophic
DANBURY WATER DEPT	Margerie Reservoir	Active	Distribution	263.0	Mesotrophic
	East Lake Reservoir	Active	Storage	73.0	Mesotrophic
	Padanaram Reservoir	Active	Storage	10.0	Mesotrophic
	Upper Kohanza Reservoir	Active	Storage	31.0	Mesotrophic
	Boggs Pond	Active	Storage	47.0	Mesotrophic
	Lower Kohanza Reservoir	Active	Storage	8.0	Mesotrophic

Water Utility	Reservoir/Waterbody	Activity Status	Type	Size (Acres)	Trophic Status
GROTON UTILITIES	West Lake Reservoir	Active	Distribution	262.0	Mesotrophic
	Lake Kenosia Diversion	Active	Transfer	55.0	Mesotrophic
	Billings Avery Brook Diversion	Active	Transfer	25.0	Oligotrophic
	Morgan Pond Reservoir	Active	Storage	310.0	Oligotrophic
	Ledyard Reservoir	Active	Storage	124.0	Oligotrophic
	Buddington Pond	Abandoned		0.0	-----
	Poquonnock Reservoir	Active	Distribution	188.0	Oligotrophic
JEWETT CITY WATER CO	Poheganut Reservoir	Active	Storage	90.0	Oligotrophic
	Smith Lake	Active	Storage	51.0	Oligotrophic
MERIDEN WATER DEPT	Stone Hill Reservoir	Active	Distribution	28.0	Mesotrophic*
	Kenmere Reservoir	Active	Storage	30.0	Mesotrophic
	Hallmere Reservoir	Active	Storage	17.0	Mesotrophic
	Merimere Reservoir	Active	Distribution	58.0	Mesotrophic
	Bradley Hubbard Reservoir	Active	Distribution	41.0	Mesotrophic
	Elmere Reservoir	Active	Distribution	4.0	No Information
METROPOLITAN DISTRICT COMMISSION	Broad Brook Reservoir	Active	Distribution	312.0	Mesotrophic
	Barkhamsted Reservoir	Active	Distribution and Storage	2276.0	Oligotrophic
	Nepaug Reservoir	Active	Distribution and Storage	851.0	Oligotrophic
	Bloomfield Reservoir #6	Active	Distribution and Storage	141.0	Oligotrophic
	West Hartford Reservoir #2	Active	Distribution and Storage	44.0	Oligotrophic
	West Hartford Reservoir #5	Active	Distribution and Storage	25.0	Oligotrophic
	West Hartford Reservoir #3	Active	Distribution and Storage	28.0	Mesotrophic
MIDDLETOWN WATER DEPT	Lake McDonough	Emergency	Storage	390.0	Oligotrophic
	Adder Reservoir	Active	Storage	34.0	Mesotrophic
	Mount Highby Reservoir #1	Active	Distribution	134.0	Mesotrophic
	Mount Highby Reservoir #2	Active	Transfer	unknown	Eutrophic
	Mount Highby Reservoir #3	Active	Transfer	unknown	Eutrophic
New Britain Water Department	Laurel Brook Reservoir	Emergency	Storage	73.0	Eutrophic
	Whigville Reservoir	Active	Storage and Transfer	10.7	Eutrophic*
	Shuttle Meadow Reservoir	Active	Storage	203.6	Eutrophic*
	Wasel Reservoir	Active	Storage and Transfer	103.0	Eutrophic*
	North Hart Pond	Active	Storage	62.0	Unknown
	Wolcott Reservoir	Active	Storage and Transfer	49.8	Unknown
NEW HARTFORD WATER DEPT	South Hart Pond	Active	Storage	44.4	Unknown
	Steele Road Reservoir	Inactive	Distribution	0.3	No Information
NEW LONDON WATER DIVISION	Fairy Lake Reservoir	Active	Storage	83.0	Mesotrophic
	Bond Reservoir	Emergency	Storage	4.0	Unknown
	Barnes Reservoir	Active	Storage	47.0	Mesotrophic
	Bogue Brook Reservoir	Active	Storage	72.0	Mesotrophic
	Beckwith Pond Diversion	Active	Transfer	3.5	Mesotrophic
	Davis Pond	Emergency	Storage	2.0	Unknown
	Lake Konomoc Reservoir	Active	Distribution and Storage	307.0	Mesotrophic
	Lake Brandegee	Inactive	Storage	70.0	Unknown
	NORWALK, FIRST TAXING DISTRICT	Scotts Reservoir	Active	Storage	11.0
Browns Reservoir		Active	Storage	44.0	Mesotrophic
John D. Milne Reservoir		Active	Distribution and Storage	78.0	Mesotrophic
Grupes Reservoir		Active	Distribution	21.0	Eutrophic
NORWALK, SECOND TAXING DISTRICT	Pope's Pond Reservoir	Active	Storage	85.0	Eutrophic
	City Lake Reservoir	Active	Distribution	142.0	Mesotrophic
	Rock Lake Reservoir	Active	Storage	18.0	Mesotrophic
	New Canaan Reservoir	Active	Storage	21.0	Mesotrophic
NORWICH WATER DEPT	Bog Meadow	Emergency	Storage	45.0	Mesotrophic
	Deep River Reservoir	Active	Distribution	245.0	Oligotrophic
	Fairview Reservoir	Emergency	Distribution	102.0	Oligotrophic
	Stony Brook Reservoir	Active	Distribution	72.0	Oligotrophic
	Taftville Reservoir No.1	Inactive	Distribution	7.0	No Information
	Taftville Reservoir No.2	Inactive	Distribution	7.0	No Information
	Taftville Reservoir No.3	Inactive	Transfer	0.0	No Information
PORTLAND WATER DEPARTMENT	Portland Reservoir	Abandoned, due to connection with MDC system		(33.0)	-----
POWDRELL & ALEXANDER MEMORIAL WTR ASSN	Powdrell and Alexander Reservoir	Inactive	Distribution	0.6	No Information
REGIONAL WATER AUTHORITY	Prospect Reservoir	Inactive	Distribution	7.0	Unknown
	Lake Bethany	Active	Storage	105.0	Mesotrophic
	Lake Chamberlain	Active	Storage	110.0	Mesotrophic
	Lake Watrous	Active	Distribution	110.0	Mesotrophic
	Lake Menunkatuck	Active	Storage	39.5	Mesotrophic
	Lake Hammonasset	Active	Storage	243.4	Mesotrophic
	Lake Glen	Active	Distribution	26.0	Mesotrophic
	Lake Dawson	Active	Distribution	70.3	Mesotrophic
	Lake Gaillard	Active	Distribution	1115.0	Mesotrophic
	Lake Whitney	Inactive	Distribution	178.0	Eutrophic
	Lake Saltonstall	Active	Distribution	390.0	Eutrophic
	Maltby Lakes #2	Inactive	Distribution	23.0	Mesotrophic

Water Utility	Reservoir/Waterbody	Activity Status	Type	Size (Acres)	Trophic Status
	Wepawaug Diversion	Inactive	Storage	11.0	Mesotrophic
	Maltby Lakes #1	Inactive	Distribution	23.0	Mesotrophic
	Maltby Lakes #3	Inactive	Storage	26.0	Mesotrophic
SHARON WATER & SEWER COMMISSION (Aquarion Management Services)	Beardsley Pond Reservoir	Active	Storage	41.3	Mesotrophic
	Calkinstown Reservoir	Active	Distribution	0.4	Mesotrophic
SOUTHINGTON WATER WORKS DEPT	Southington Reservoir #1	Active	Distribution	1.5	Mesotrophic*
	Southington Reservoir #2	Active	Storage	24.9	Oligotrophic*
	Southington Reservoir #3	Active	Distribution and Storage	14.7	Mesotrophic*
SPRAGUE WATER & SEWER AUTHORITY	Baltic Reservoir	Inactive	Distribution	23.1	No Information
TORRINGTON WATER COMPANY	North Pond	Active	Storage	160.0	Oligotrophic
	Reuben Hart Reservoir	Active	Storage	122.0	Oligotrophic
	Wist Pond	Active	Storage	39.0	Oligotrophic
	Allen Dam Reservoir	Active	Transfer	2.0	Mesotrophic
	Crystal Lake	Inactive	Inactive	0.0	Mesotrophic
TOWN OF MANCHESTER WATER DEPT	Risley Reservoir	Active	Storage	17.5	Unknown
	Lydall Reservoir No.1	Active	Storage	2.6	Unknown
	Lydall Reservoir No.2	Active	Storage	3.8	Unknown
	Porter Reservoir	Active	Storage	7.4	Unknown
	Howard Reservoir	Active	Storage	21.5	Unknown
	Globe Hollow Reservoir	Active	Distribution	45.6	Unknown
	Buckingham Reservoir	Active	Storage	36.5	Unknown
UNITED WATER CT - WOODBURY SYSTEM	Woodbury Reservoir #2	Officially Abandoned		(7.3)	-----
	Woodbury Reservoir #1	Officially Abandoned		(1.0)	-----
VALLEY WATER SYSTEMS, INC	Plainville Reservoir	Officially Abandoned; sold to town of Southington		(53.0)	-----
WALLINGFORD WATER DEPT	Ulbrich Reservoir	Active	Storage	159.0	Oligotrophic
	Mackenzie Reservoir	Active	Storage	46.0	Mesotrophic
	Pistapaug Pond	Active	Distribution	145.0	Oligotrophic
	Lane's Pond	Active	Storage	16.0	Oligotrophic
WATERBURY WATER DEPT	Cairns Reservoir	Active	Storage	337.0	Oligotrophic
	Shepaug Reservoir	Active	Storage	97.0	Mesotrophic
	Pitch Reservoir	Active	Distribution and Storage	111.0	Mesotrophic
	Morris Reservoir	Active	Distribution and Storage	152.0	Mesotrophic
	Wigwam Reservoir	Active and Emergency	Distribution and Storage	105.0	Unknown
	East Mountain Reservoir	Inactive	Storage	0.0	No Information
	Prospect #2	Officially Abandoned		0.0	-----
WATERTOWN FIRE DIST WATER DEPT	Bronson E. Lockwood Reservoir	Inactive	Transfer	73.5	Eutrophic
	Bethlehem Reservoir	Inactive	Transfer	9.0	Eutrophic
	Judd Pond Reservoir	Inactive	Transfer	27.5	Mesotrophic
US ARMY CORPS OF ENGINEERS	Mansfield Hollow Lake (Reservoir)	Inactive	Not Used for Water Supply	450.0	Eutrophic
WINDHAM WATER WORKS	Willimantic Reservoir	Active	Distribution	80.0	Mesotrophic
WINSTED WATER WORKS	Rugg Brook Reservoir	Inactive	Storage	45.0	Oligotrophic
	Crystal Lake Reservoir	Active	Distribution	146.0	Oligotrophic
Total Acres				18424.5	
* Trophic status determined by available data and best professional judgement.					

Appendix G: Some Applicable Water Quality Standards and Criteria for Assessed Waters

The information provided in this appendix has been excerpted from the Connecticut Water Quality Standards (2002) to provide reference material for the Consolidated Assessment & Listing Methodology (2004). Refer to the full text of the Connecticut Water Quality Standards (<http://www.dep.state.ct.us/wtr/wq/wqs.pdf>) for further information and policy statements.

Allowable Discharges to Surface Waters:

- (A) Class AA, A and SA surface waters: discharges may be permitted by the Commissioner from public or private drinking water treatment systems, dredging activity and dredge material dewatering operations, including the discharge of dredged or fill material and clean water discharges. In Class AA surface waters such discharges shall be subject to the approval of the Commissioner of Health Services. The Commissioner may authorize other discharges to surface waters with a Classification of SA, A or AA provided the Commissioner finds such discharge will be of short duration and is necessary to remediate surface water or ground water pollution. Any such discharge shall be treated or controlled to a level, which in the judgment of the Commissioner protects aquatic life and public health.
- (B) Class B and SB surface waters: discharges may be permitted for all those allowed in Class AA, A and SA surface waters, cooling water discharges, discharges from municipal and industrial wastewater treatment systems and other discharges subject to the provisions of Section 22a-430 of the Connecticut General Statutes.

INLAND SURFACE WATERS CLASSES AND CRITERIA

CLASS AA

Designated Uses- These surface waters are designated for: existing or proposed drinking water supplies; habitat for fish and other aquatic life and wildlife; recreation; and water supply for industry and agriculture.

<u>Parameter</u>	<u>Criteria</u>
1. Aesthetics	Uniformly excellent.
2. Dissolved oxygen	Not less than 5 mg/l at any time.
3. Sludge deposits-solid refuse- floating solids-oils and grease-scum	None other than of natural origin.
Color	None other than of natural origin.

- | | |
|--|---|
| 5. Suspended and settleable solids | None in concentrations or combinations which would impair designated uses; none aesthetically objectionable; none which would significantly alter the physical or chemical composition of the bottom; none which would adversely impact aquatic organisms living in or on the bottom substrate. |
| 6. Silt or sand deposits | None other than of natural origin except as may result from normal agricultural, road maintenance, construction activity or dredging activity or discharge of dredged or fill materials provided all reasonable controls or Best Management Practices are used in such activities and all designated uses are protected and maintained. |
| 7. Turbidity | Shall not exceed 5 NTU over ambient levels and none exceeding levels necessary to protect and maintain all designated uses. All reasonable controls or Best Management Practices are to be used to control turbidity. |
| 8. Indicator bacteria | See Bacteria Criteria at end of appendix. |
| 9. Taste and odor | None other than of natural origin. |
| 10. pH | As naturally occurs. |
| 11. Allowable temperature increase | There shall be no changes from natural conditions that would impair any existing or designated uses assigned to this Class and, in no case exceed 85 degrees F, or in any case raise the temperature of surface water more than 4 degrees F. |
| 12. Chemical constituents | None in concentrations or combinations which would be harmful to designated uses. Refer to Water Quality Standards (2002) numbers 10, 12, 13, and 19. |
| (a) Phosphorus | None other than of natural origin |
| (b) Sodium | Not to exceed 20 mg/l |
| 13. Benthic invertebrates which inhabit lotic waters | A wide variety of macroinvertebrate taxa should normally be present and all functional feeding groups should normally be well represented. Presence and productivity of aquatic species is not limited except by natural conditions, permitted flow regulation or irreversible cultural impacts. Water quality shall be sufficient to sustain a diverse macroinvertebrate community of indigenous species. Taxa within the Orders Plecoptera (stoneflies), Ephemeroptera (mayflies), Coleoptera |

(beetles) and Trichoptera (caddisflies) should be well represented.

CLASS A

Designated Uses - These surface waters are designated for: habitat for fish and other aquatic life and wildlife; potential drinking water supplies; recreation; and water supply for industry and agriculture.

<u>Parameter</u>	<u>Criteria</u>
1. Aesthetics	Uniformly excellent.
2. Dissolved oxygen	Not less than 5 mg/l at any time.
3. Sludge deposits solid refuse – floating solids –oils and grease-scum.	None other than of natural origin.
4. Color	None other than of natural origin
5. Suspended and settleable solids	None in concentrations or combinations which would impair designated uses; none aesthetically objectionable; none which would significantly alter the physical or chemical composition of the bottom; none which would adversely impact aquatic organisms living in or on the bottom substrate.
6. Silt or sand deposits	None other than of natural origin except as may result from normal agricultural, road maintenance, construction activity, dredging activity or the discharge of dredged or fill materials provided all reasonable controls or best management practices are used in such activities and all designated uses are protected and maintained.
7. Turbidity	Shall not exceed 5 NTU over ambient levels and none exceeding levels necessary to protect and maintain all designated uses. All reasonable controls or Best Management Practices are to be used to control turbidity.
8. Indicator Bacteria	See Bacteria Criteria at end of appendix.
9. Taste and odor	None other than of natural origin.

- | | | |
|-----|---|---|
| 10. | pH | As naturally occurs. |
| 11. | Allowable temperature increase | There shall be no changes from natural conditions that would impair any existing or designated uses assigned to this Class and, in no case exceed 85 degrees F, or in any case raise the temperature of surface water more than 4 degrees F. |
| 12. | Chemical constituents | None in concentrations or combinations which would be harmful to designated uses. Refer to Water Quality Standards (2002) numbers 10, 12, 13, and 19. |
| | (a) Phosphorus | None other than of natural origin. |
| | (b) Sodium | None other than of natural origin. |
| 13. | Benthic invertebrates which inhabit lotic waters. | A wide variety of macroinvertebrate taxa should normally be present and all functional feeding groups should normally be well represented. Presence and productivity of aquatic species is not limited except by natural conditions, permitted flow regulation or irreversible cultural impacts. Water quality shall be sufficient to sustain a diverse macroinvertebrate community of indigenous species. Taxa within the Orders Plecoptera (stoneflies), Ephemeroptera (mayflies), Coleoptera (beetles) and Trichoptera (caddisflies) should be well represented. |

CLASS B

Designated Uses - These surface waters are designated for: habitat for fish and other aquatic life and wildlife; recreation; and industrial and agricultural water supply.

Parameter	Criteria
1. Aesthetics	Good to excellent
2. Dissolved oxygen	Not less than 5 mg/l at any time.
3. Sludge deposits - solid refuse - floating solids - oil and grease – scum	None except for small amounts that may result from the discharge from a permitted waste treatment facility and none exceeding levels necessary to protect and maintain all designated uses.
4. Color	None which causes visible discoloration of the surface water outside of any designated zone of influence.

- | | | |
|-----|--|---|
| 5. | Suspended and settleable solids | None in concentrations or combinations which would impair the most sensitive designated use; none aesthetically objectionable; none which would significantly alter the physical or chemical composition of the bottom; and none which would adversely impact aquatic organisms living in or on the bottom sediments; shall not exceed 10 mg/l over ambient concentrations. |
| 6. | Silt or sand deposits | None other than of natural origin except as may result from normal agricultural, road maintenance, construction activity, dredging activity or discharge of dredged or fill materials provided all reasonable controls or Best Management Practices are used in such activities and all designated uses are protected and maintained. |
| 7. | Turbidity | Shall not exceed 5 NTU over ambient levels and none exceeding levels necessary to protect and maintain all designated uses. All reasonable controls or Best Management Practices are to be used to control turbidity. |
| 8. | Indicator bacteria | See Bacteria Criteria at end of appendix. |
| 9. | Taste and odor | None that would impair any uses specifically assigned to this Class. |
| 10. | pH | 6.5 - 8.0 |
| 11. | Allowable temperature increase | There shall be no changes from natural conditions that would impair any existing or designated uses assigned to this Class and, in no case exceed 85 degrees F, or in any case raise the temperature of the receiving water more than 4 degrees F. |
| 12. | Chemical constituents | None in concentrations or combinations which would be harmful to designated uses. Refer to Water Quality Standards (2002) numbers 10, 11, 12, 13, 17, and 19. |
| 13. | Benthic invertebrates which inhabit lotic waters | Water quality shall be sufficient to sustain a diverse macroinvertebrate community of indigenous species. All functional feeding groups and a wide variety of macroinvertebrate taxa shall be present, however one or more may be disproportionate in abundance. Waters which currently support a high quality aquatic community shall be maintained at that high quality. Presence and productivity of taxa within the Orders Plecoptera (stoneflies), Ephemeroptera (mayflies); and pollution intolerant Coleoptera (beetles) and Trichoptera |

(caddis- flies) may be limited due to cultural activities. Macroinvertebrate communities in waters impaired by cultural activities shall be restored to the extent practical through implementation of the department's procedures for control of pollutant discharges to surface waters and through Best Management Practices for non-point sources of pollution.

LAKE TROPHIC CATEGORIES

Criteria for Total Phosphorus, Total Nitrogen, Chlorophyll-a, and Secchi Disk Transparency appearing in the table below represent acceptable ranges for these parameters within which recreational uses will be fully supported and maintained for lakes in each trophic category. For the purpose of determining consistency with the water quality standards for lakes classified AA, A or B, an assessment of the natural trophic category of the lake, absent significant cultural impacts, must be performed to determine which criteria apply.

OLIGOTROPHIC

May be Class AA, Class A, or Class B water. Low in plant nutrients. Low biological productivity characterized by the absence of macrophyte beds. High potential for water contact recreation.

<u>Parameters</u>	<u>Criteria</u>
1. Total Phosphorus	0-10 ug/l spring and summer
2. Total Nitrogen	0-200 ug/l spring and summer
3. Chlorophyll-a	0-2 ug/l mid-summer
4. Secchi Disk Transparency	6 + meters mid-summer

MESOTROPHIC

May be Class AA, Class A, or Class B water. Moderately enriched with plant nutrients. Moderate biological productivity characterized by intermittent blooms of algae and/or small areas of macrophyte beds. Good potential for water contact recreation.

<u>Parameters</u>	<u>Criteria</u>
1. Total Phosphorus	10-30 ug/l spring and summer
2. Total Nitrogen	200-600 ug/l spring and summer
3. Chlorophyll-a	2-15 ug/l mid-summer
4. Secchi Disk Transparency	2-6 meters mid-summer

EUTROPHIC

May be Class AA, Class A, or Class B water. Highly enriched with plant nutrients. High biological productivity characterized by frequent blooms of algae and/or extensive areas of dense macrophyte beds. Water contact recreation opportunities may be limited.

<u>Parameters</u>	<u>Criteria</u>
1. Total Phosphorus	30-50 ug/l spring and summer
2. Total Nitrogen	600-1000 ug/l spring and summer
3. Chlorophyll-a	15-30- ug/l mid-summer
4. Secchi Disk Transparency	1-2 meters mid-summer

HIGHLY EUTROPHIC

May be Class AA, Class A, or Class B water. Excessive enrichment with plant nutrients. High biological productivity, characterized by severe blooms of algae and/or extensive areas of dense macrophyte beds. Water contact recreation may be extremely limited.

<u>Parameters</u>	<u>Criteria</u>
1. Total Phosphorus	50 + ug/l spring and summer
2. Total Nitrogen	1000 + ug/l spring and summer
3. Chlorophyll-a	0-1 meters mid-summer

COASTAL WATERS, CLASSES & CRITERIA.

CLASS SA -

Designated Uses - These surface waters are designated for: habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption where authorized; recreation; industrial water supply; and navigation.

<u>Parameter</u>	<u>Criteria</u>
1. Aesthetics	Uniformly excellent.
2. Dissolved Oxygen	Not less than 6.0 mg/l at any time in the nearshore waters of Long Island Sound, including harbors, embayments and estuarine tributaries. Not less than 6.0 mg/l at any time in the offshore waters of Long Island Sound, above the seasonal pycnocline and throughout the Sound when no pycnocline is established. Not less than 3.5 mg/l for offshore waters within and below the seasonal pycnocline. Cumulative periods of dissolved oxygen in

the 3.5 - 4.8 mg/l range shall not exceed exposure parameters detailed in the *Dissolved Oxygen (DO) Criteria for Offshore Coastal Waters* at the end of this appendix.

- | | | |
|-----|--|---|
| 3. | Sludge Deposits-
solid-refuse, floating-
solids, oils and grease
scum | None other than of natural origin. |
| 4. | Color | None other than of natural origin. |
| 5. | Suspended and
settleable solids | None, other than of natural origin. |
| 6. | Silt or sand deposits | None other than of natural origin except as may result from normal agricultural. Road maintenance, construction activity, dredging activity or discharge of dredged or fill materials provided all reasonable controls or Best Management Practices are used in such activities and all designated uses are protected and maintained. |
| 7. | Turbidity | None other than of natural origin except as may result from normal agricultural, road maintenance, or construction activity, dredging activity or discharge of dredged or fill materials provided all reasonable controls and Best Management Practices are used to control turbidity and none exceeding levels necessary to protect and maintain all designated uses. |
| 8. | Indicator bacteria | See Bacteria Criteria at end of appendix. |
| 9. | Taste and odor | As naturally occurs. |
| 10. | pH | 6.8 - 8.5 |
| 11. | Allowable
temperature
increase | There shall be no changes from natural conditions that would impair any existing or designated uses assigned to this Class and in no case exceed 83 degrees F, or in any case raise the temperature of the receiving water more than 4 degrees F. During the period including July, August, and September, the temperature of the receiving water shall not be raised more than 1.5 degrees F unless it can be shown that spawning and growth of indigenous organisms will not be significantly affected. |
| 12. | Chemical
constituents | None in concentrations or combinations which would be harmful to designated uses. Refer to Water Quality Standards (2002) numbers 10, 12, 13, and 19. |

CLASS SB

Designated Uses - These waters are designated for: habitat for marine fish, other aquatic life and wildlife; commercial shellfish harvesting where authorized; recreation; industrial water supply; and navigation.

Parameter	Criteria
1. Aesthetics	Good to excellent.
2. Dissolved Oxygen	<p>Not less than 5.0 mg/l at any time in the near shore water of Long Island Sound, including harbors, embayments and estuarine tributaries.</p> <p>Not less than 5.0 mg/l at any time in the offshore waters of Long Island Sound above the seasonal pycnocline and throughout the Sound when no pycnocline is established.</p> <p>Not less than 3.5 mg/l for offshore waters within and below the seasonal pycnocline. Cumulative periods of dissolved oxygen exposure in the 3.5 – 4.8 mg/l range shall not exceed parameters detailed in <i>Dissolved Oxygen (DO) Criteria for Offshore Coastal Waters</i> at the end of this appendix.</p>
3. Sludge deposits solid refuse – floating solids – oils and grease-scum	None except for small amounts that may result from the discharge from a grease waste treatment facility providing appropriate treatment and none exceeding levels necessary to protect and maintain all designated uses.
4. Color	None resulting in obvious discoloration of the surface water outside of any designated zone of influence.
5. Suspended and settleable solids	None in concentrations or combinations which would impair the designated uses; none aesthetically objectionable; none which would significantly alter the physical or chemical composition of bottom sediments; none which would adversely impact organisms living in or on the bottom sediment.
6. Silt or sand deposits	None other than of natural origin except as may result from normal agricultural, road maintenance, construction activity, dredging activity or discharge of dredged or fill materials provided all reasonable controls or Best Management Practices are used in such activities and all designated uses are protected and maintained.

7. Turbidity
None other than of natural origin except as may result from normal agricultural, road maintenance, or construction activity, or discharge from a waste treatment facility providing appropriate treatment, dredging activity or discharge of dredged or fill materials provided all reasonable controls and Best Management Practices are used to control turbidity and none exceeding levels necessary to protect and maintain all designated uses.
8. Indicator bacteria
See Bacteria Criteria at the end of this appendix
9. Taste and odor
As naturally occurs. None that would impair any uses specifically assigned to this Class.
10. pH
6.8 - 8.5
11. Allowable temperature increase
There shall be no changes from natural conditions that would impair any existing or designated uses assigned to this Class and, in no case exceed 83 degrees F, or in any case raise the temperature of the receiving water more than 4 degrees F. During the period including July, August, and September, the temperature of the receiving water shall not be raised more than 1.5 degrees F unless it can be shown that spawning and growth of indigenous organisms will not be significantly affected.
12. Chemical constituents
None in concentrations or combinations which would be harmful to the designated uses. Refer to Water Quality Standards (2002) numbers 10, 12, 13, and 19.

Water Quality Criteria for Bacterial Indicators of Sanitary Quality

SEE ALSO STANDARDS # 23 AND 25

DESIGNATED USE	CLASS	INDICATOR	CRITERIA
Freshwater			
Drinking Water Supply (1)			
Existing / Proposed	AA	Total Coliform	Monthly Moving Average less than 100/100 ml Single Sample Maximum 500/100ml
Potential	A	----	-----
Recreation (2)(3)			
Designated Swimming (4) 126/100ml	AA, A, B	<i>Escherichia coli</i>	Geometric Mean less than Single Sample Maximum 235/100ml
Non-designated Swimming (5) 126/100ml	AA, A, B	<i>Escherichia coli</i>	Geometric Mean less than Single Sample Maximum 406/100ml
All Other Recreational Uses 126/100ml	AA, A, B	<i>Escherichia coli</i>	Geometric Mean less than Single Sample Maximum 576/100ml
Saltwater			
Shellfishing Direct Consumption 14/100ml	SA	Fecal Coliform	Geometric Mean less than 90% of Samples less than 43/100ml
Commercial Harvesting 88/100ml	SB	Fecal Coliform	Geometric Mean less than 90% of Samples less than 260/100ml
Recreation			
Designated Swimming (4) 35/100ml 104/100ml	SA, SB	Enterococci	Geometric Mean less than Single Sample Maximum
All Other Recreational Uses 35/100ml 500/100ml	SA, SB	Enterococci	Geometric Mean less than Single Sample Maximum

- Table Notes:**
- (1) Criteria applies only at the drinking water supply intake structure.
 - (2) Criteria for the protection of recreational uses in Class B waters do not apply when disinfection of sewage treatment plant effluents is not required consistent with Standard 23.
 - (3) See Standard # 25.
 - (4) Procedures for monitoring and closure of bathing areas by State and Local Health Authorities are specified in: Guidelines for Monitoring Bathing Waters and Closure Protocol, adopted jointly by the Department of Environmental Protection and the Department of Public Health, May 1989, revised June 1992.

- (5) Includes areas otherwise suitable for swimming but which have not been designated by State or Local authorities as bathing areas, waters which support tubing, water skiing, or other recreational activities where full body contact is likely.

Guidelines for Use of Indicator Bacteria Criteria

Water Quality Classifications are reviewed approximately every three years at which time all available water quality monitoring data is considered along with other relevant information. Relevant information includes but is not limited to federal guidance concerning the scientific basis for deriving the criteria and the potential health risks associated with excursions above the criteria, recommended implementation procedures, and the results of sanitary surveys or other investigations into sources of indicator bacteria in the watershed. Public input is also solicited and considered in determining the existing water quality conditions and water quality goals. Nevertheless, the Water Quality Classification may not be an accurate representation of current water quality conditions at any particular site. For this reason, the Water Quality Classification should not be considered as a certification of quality by the State or an approval to engage in certain activities such as swimming or shellfish harvest

Dissolved Oxygen (DO) Criteria for Offshore Coastal Waters

Background: Offshore Coastal DO criteria are based on the Environmental Protection Agency's *Ambient Water Quality Criteria for Dissolved Oxygen (Saltwater): Cape Cod to Cape Hatteras*, noticed November 30, 2000 in the Federal Register (65(231):71317-71321).

Area Affected: DO criteria different from the 6.0 mg/l and 5.0 mg/l minimums for Class SA and SB offshore waters apply only in and below the pycnocline of Long Island Sound (LIS) where stratification occurs during warm, summer conditions. Offshore waters are defined as areas of LIS greater than 5m in depth at mean low water. Offshore waters above the pycnocline generally have ample DO from photosynthesis and wave-driven diffusion.

Cumulative DO exposure parameters: DO conditions in the area affected do not readily lend themselves to a single numeric criterion as is often done with toxic contaminants. Aquatic organisms are harmed based on a combination of minimum oxygen concentration and duration of the low DO excursion. A DO concentration of 4.8 mg/l would meet the chronic criteria for growth and protect estuarine organisms resident in LIS regardless of duration. If oxygen fell within a 0.5 mg/l incremental range below 4.8 mg/l (*i.e.*, between 4.3 and 4.8 mg/l), a duration of 21 days or less would meet resource protection goals. Based upon the EPA research and data, similar exposure allowances were used by the Connecticut DEP for each 0.5 mg/l increment (see Table 1). The minimum DO level that can be associated with the draft EPA DO criteria document (*i.e.* the level below which there would be no exposure period consistent with resource protection) is 2.3 mg/l. Given the environmental variability, DEP has used more protective minimum DO criteria of 3.5-3.8 mg/l with no more than 5 days exposure.

Because estuarine systems are variable, DO levels are unlikely to remain within one of the three incremental ranges presented in Table 1. Typically, DO conditions would fall through a range to a minimum and then begin to rebound depending on weather and stratification conditions. To account for this, the number of days within each incremental DO range is pro-rated, as follows. A decimal fraction is calculated for each range, *e.g.*, 10.5 days in the 4.3-4.8 mg/l range would produce a decimal fraction of 0.50 (10.5 days/21 days). As long as the sum of those fractions calculated for each range is less than 1.0, resource protection goals are maintained for larval recruitment.

Table 1. DO incremental ranges and duration (exposure) data to be applied to LIS in the area affected to ensure protection of larval recruitment.		
DO Range (mg/l)		No. of Days Allowed
Maximum	Minimum	
4.8	4.3	21
4.3	3.8	11
3.8	3.5	5

APPENDIX H
 CTDEP BUREAU OF WATER MANAGEMENT/PLANNING AND STANDARDS DIVISION
 AMBIENT BIOLOGICAL MONITORING PROGRAM
 SAMPLING LOCATIONS AND PROVISIONAL RESULTS USEPA RBP PROTOCOL III ASSESSMENTS

SPRING 2002-FALL 2003

River/BasinID Date/Location	Community Description			Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Moderate Quality	High Quality				
PAWCATUCK RIVER BASIN:							
Wyassup Brook North Stonington CT1001-00_01 10/24/2002 at mouth upstream of Clarks Falls Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: NA 2002	245	Non-Impaired RBP1	Fully Supporting
Green Fall River North Stonington CT1002-00_02 10/24/2002 US Clarks Fall Rd., US Wyassup Bk.	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 159 2002	245	Reference 100%	Fully Supporting
Green Fall River North Stonington CT1002-00_02 10/7/2003 US Clarks Fall Rd., US Wyassup Bk.	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate X Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 168 2003	245	Reference RBP1	Fully Supporting
Shunock River North Stonington CT1004-00_01 10/24/2002 upstream Route 184	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 168 2002	- - -	Not Assessed Low Gradient	Unknown
Shunock River North Stonington CT1004-00_01 10/24/2002 upstream Route 184	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 168 2002	245	Slight 76%	Fully Supporting
Shunock River North Stonington CT1004-00_01 10/7/2003 upstream Route 49	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 161 2003	245	Non-Impaired RBP1	Fully Supporting
SOUTHEAST COASTAL BASIN:							
Seth Williams Brook Ledyard CT2103-00_02 10/7/2003 behind Apartment buildings 10-11	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 143 2003	250	Non-Impaired RBP1	Fully Supporting
Whitford Brook Groton CT2104-00_01 10/24/2002 upstream North Stonington Rd.	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 123 2002	250	Reference 100%	Fully Supporting
Whitford Brook Groton CT2104-00_01 10/9/2003 upstream North Stonington Rd.	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 158 2003	250	Reference RBP1	Fully Supporting
Latimer Brook East Lyme CT2202-00_02 10/15/2002 between Brook Bend and Robin Drive	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 158 2002	250	Slight 67%	Fully Supporting
THAMES RIVER BASIN:							
Flat Brook Ledyard CT3000-08_01 10/15/2002 upstream Baldwin Hill Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 143 2002	20	Slight 56%	Fully Supporting
Willimantic River Willington CT3100-00_05 10/23/2002 downstream Stafford POTW	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 138 2002	211	Slight 58%	Fully Supporting

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
THAMES RIVER BASIN:								
Willimantic River Wilmington CT3100-00_05 10/2/2003 downstream Stafford POTW	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 143 2003	211	Non-Impaired RBP1	Fully Supporting
Willimantic River Stafford CT3100-00_06 10/23/2002 park upstream of Stafford POTW	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 109 2002	211	Moderate 38%	Partially Supporting
Willimantic River Stafford CT3100-00_06 10/2/2003 park upstream of Stafford POTW	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 128 2003	211	Non-Impaired RBP1	Fully Supporting
Eagleville Brook Mansfield CT3100-19_02 10/24/2003 downstream Hunting Lodge Road	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 117 2003	211	Impaired RBP1	Partially Supporting
Eagleville Brook Mansfield CT3100-19_02 10/24/2003 upstream Separatist Road	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 147 2003	211	Impaired RBP1	Partially Supporting
Eagleville Brook Mansfield CT3100-19_02 10/24/2003 upstream Hillyndale Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness X Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 142 2003	211	Impaired RBP1	Partially Supporting
Eagleville Brook Mansfield CT3100-19_02 10/24/2003 upstream driveway adj. N. Eagleville Rd.	Low EPT High HBI Dom.Tolerant X Low Taxa Richness X Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 140 2003	211	Impaired RBP1	Partially Supporting
Eagleville Brook Mansfield CT3100-19_01 10/24/2003 DS driveway adj. N. Eagleville Rd.	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: NA 2003	211	Impaired RBP1	Partially Supporting
Middle River Stafford CT3102-00_01 10/23/2002 downstream Route 32 bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 108 2002	211	Moderate 44%	Partially Supporting
Middle River Stafford CT3102-00_01 10/2/2003 downstream Route 32 bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 123 2003	211	Non-Impaired RBP1	Fully Supporting
Still Brook Stafford CT3102-03_01 10/21/2003 upstream Whispering Pine Lane	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 157 2003	20	Non-Impaired RBP1	Fully Supporting
Roaring Brook Wilmington CT3104-00_01 10/23/2002 at Route 32	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 170 2002	211	Reference 100%	Fully Supporting
Roaring Brook Wilmington CT3104-00_01 10/2/2003 at Route 32	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 160 2003	211	Reference RBP1	Fully Supporting
Ruby Lake Outlet Wilmington CT3104-00-2-L8 OUTLET_02 10/31/2003 downstream Ruby Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: NA 2003	211	Non-Impaired RBP1	Fully Supporting

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
THAMES RIVER BASIN:								
Stickney Hill Brook Union CT3104-01_01 10/10/2002 upstream Brown Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 167 2002	20	Non-Impaired 94%	Fully Supporting	
Skungamaug River Tolland CT3106-00_01 10/10/2002 downstream Old Cathole Road	X Low EPT High HBI X Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 146 2002	---	Not Assessed Low Gradient	Unknown	
Hop River Andover CT3108-00_01 10/7/2002 adjacent Route 6 at Andover auto parts	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 152 2002	---	Not Assessed Low Gradient	Unknown	
Natchaug River Chaplin CT3200-00_02 10/18/2002 downstream North Bear Hill Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 159 2002	20	Reference 100%	Fully Supporting	
Natchaug River Chaplin CT3200-00_02 10/18/2002 upstream North Bear Hill Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 161 2002	---	Not Assessed Low Gradient	Unknown	
Natchaug River Chaplin CT3200-00_02 10/8/2003 downstream North Bear Hill Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 155 2003	20	Reference 100%	Fully Supporting	
Sawmill Brook Mansfield CT3208-00_02 10/8/2003 upstream Meadowbrook Lane	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 168 2003	20	Non-Impaired RBP1	Fully Supporting	
Rocky Brook Thompson CT3401-00_02 10/17/2002 upstream East Thompson Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 175 2002	20	Moderate 50%	Fully Supporting	
Moosup River Sterling CT3500-00_03 10/6/2003 adj.old RR grade 500 m DS of RR bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 168 2003	20	Non-Impaired RBP1	Fully Supporting	
Ekokk Brook Plainfield CT3503-00_01 10/17/2002 Gorman Street between buildings 6 & 7	Low EPT High HBI X Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 159 2002	20	Slight 67%	Fully Supporting	
Crooked Brook Griswold CT3600-05_01 10/6/2003 DS Rte 201	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 155 2003	20	Non-Impaired RBP1	Fully Supporting	
North Running Brook Woodstock CT3708-10_01 10/1/2003 off Child Hill Rd 1000' US Muddy Brook	X Low EPT High HBI X Dom.Tolerant X Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 135 2003	20	Impaired RBP1	Partially Supporting	
North Running Brook Woodstock CT3708-10_02 10/1/2003 upstream farm run off/drainage swale	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 135 2003	20	Non-Impaired RBP1	Fully Supporting	
Wappaquia Brook Pomfret CT3709-00_01 10/1/2003 off Rt.169 Wappaquia Brook Farm bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance	Score: 168 2003	20	Non-Impaired RBP1	Fully Supporting	

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
THAMES RIVER BASIN:								
Mashamoquet Brook Pomfret CT3710-00_01 10/22/2002 adjacent route 101	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT X Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 127 2002	--- 	Not Assessed Low Gradient	Unknown
Mashamoquet Brook Pomfret CT3710-00_01 10/22/2002 downstream Wrights Mill Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 148 2002	20 	Non-Impaired 100%	Fully Supporting
Bentley Brook Bozrah CT3900-09_01 10/15/2002 upstream Gifford Lane	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT X Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 162 2002	20 	Slight 56%	Fully Supporting
CONNECTICUT RIVER BASIN:								
Clark Creek Haddam CT4000-54_02 10/9/2003 upstream Rt. 82 culvert	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 160 2003	17A 	Non-Impaired RBP1	Fully Supporting
Freshwater Brook Enfield CT4003-00_04 10/21/2003 Moody Road behind last parking lot 9	X Low EPT High HBI Dom.Tolerant Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 131 2003	--- 	Not Assessed Low Gradient	Unknown
Beaver Meadow Brook Haddam CT4015-02_01 10/9/2002 adjacent to Beaver Meadow Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 162 2002	17A 	Slight 57%	Fully Supporting
Muddy Brook Suffield CT4101-00_02 11/4/2002 Route 187 #1600 US of private bridge	X Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: 142 2002	--- 	Not Assessed Low Gradient	Unknown
Farmington River Canton CT4300-00_04 10/21/2002 Old Town Bridge Rd. 100 m US bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT X Moderate HBI X Dom. Intermediate Mod. Taxa Richness X High Abundance	X High EPT Low HBI Dom. Sensitive X High Taxa Richness Norm.Abundance		Score: 159 2002	17A 	Slight 76%	Fully Supporting
Indian Meadow Brook Winchester CT4302-09_01 10/8/2002 between Route 44 and Loomis Street	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 138 2002	17A 	Non-Impaired 95%	Fully Supporting
Sandy Brook Colebrook CT4304-00_01 10/8/2002 Sandy Brk Rd. 250 m US second bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 172 2002	17A 	Non-Impaired 100%	Fully Supporting
Sandy Brook Colebrook CT4304-00_01 10/8/2002 opposite Grange Hall	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT X Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 169 2002	21 	Reference 100%	Fully Supporting
Sandy Brook Colebrook CT4304-00_01 11/12/2003 opposite Grange Hall	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI X Dom. Sensitive X High Taxa Richness X Norm.Abundance		Score: 171 2003	21 	Reference RBP1	Fully Supporting
Beach Brook Granby CT4319-07_01 10/22/2003 Broad Hill Road adjacent to bend	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate X Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: 172 2003	17A 	Non-Impaired RBP1	Fully Supporting

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
CONNECTICUT RIVER BASIN:								
East Branch Salmon Brook	Low EPT	Moderate EPT	X High EPT					
Granby	High HBI	Moderate HBI	Low HBI		Score:			
CT4320-00_01	Dom.Tolerant	Dom. Intermediate	X Dom. Sensitive		153	17A	Non-Impaired	
10/22/2003	Low Taxa Richness	Mod. Taxa Richness	X High Taxa Richness				Fully Supporting	
Rt.189 #160 Woodhaven Riding Facility	Low Abundance	High Abundance	X Norm.Abundance		2003			
Mountain Brook	Low EPT	Moderate EPT	X High EPT					
Granby	High HBI	Moderate HBI	Low HBI		Score:			
CT4320-08_01	Dom.Tolerant	Dom. Intermediate	X Dom. Sensitive		172	17A	Slight	
10/28/2002	Low Taxa Richness	Mod. Taxa Richness	X High Taxa Richness				71%	
adjacent old logging road	Low Abundance	High Abundance	X Norm.Abundance		2002		Fully Supporting	
Hockanum River	Low EPT	X Moderate EPT	High EPT					
Manchester	High HBI	Moderate HBI	Low HBI		Score:			
CT4500-00_04	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		143	17A	Impaired	
11/12/2003	Low Taxa Richness	X Mod. Taxa Richness	High Taxa Richness				RBP1	
Rt. 83 behind #440 (Odessey School)	Low Abundance	High Abundance	X Norm.Abundance		2003		Partially Supporting	
Hockanum River	X Low EPT	Moderate EPT	High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4500-00_06	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		113	17a	Impaired	
11/13/2003	Low Taxa Richness	Mod. Taxa Richness	High Taxa Richness				RBP1	
downstream Route 74/Tolland Ave	Low Abundance	High Abundance	X Norm.Abundance		2003		Partially Supporting	
Hockanum River	X Low EPT	Moderate EPT	High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4500-00_06	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		140	17A	Impaired	
11/13/2003	Low Taxa Richness	Mod. Taxa Richness	High Taxa Richness				RBP1	
upstream West Street	Low Abundance	High Abundance	X Norm.Abundance		2003		Partially Supporting	
Hockanum River	X Low EPT	Moderate EPT	High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4500-00_06	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		NA	17A	Impaired	
11/13/2003	Low Taxa Richness	Mod. Taxa Richness	High Taxa Richness				RBP1	
upstream Vernon STP	Low Abundance	High Abundance	X Norm.Abundance		2003		Partially Supporting	
Hockanum River	X Low EPT	Moderate EPT	High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4500-00_05	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		128	17A	Impaired	
11/13/2003	Low Taxa Richness	Mod. Taxa Richness	High Taxa Richness				RBP1	
upstream Dart Hill Road	Low Abundance	High Abundance	X Norm.Abundance		2003		Partially Supporting	
Hockanum River	Low EPT	X Moderate EPT	High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4500-00_04	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		110	17A	Impaired	
11/13/2003	Low Taxa Richness	X Mod. Taxa Richness	High Taxa Richness				RBP1	
US 100 meters of Tankerhoosen River	Low Abundance	High Abundance	X Norm.Abundance		2003		Partially Supporting	
Charters Brook	Low EPT	Moderate EPT	X High EPT					
Tolland	High HBI	Moderate HBI	Low HBI		Score:			
CT4501-00_01	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		177	17A	Non-Impaired	
11/13/2003	Low Taxa Richness	X Mod. Taxa Richness	High Taxa Richness				RBP1	
downstream Browns Bridge Road	Low Abundance	High Abundance	X Norm.Abundance		2003		Fully Supporting	
Tankerhoosen River	Low EPT	Moderate EPT	X High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4503-00_02	Dom.Tolerant	Dom. Intermediate	X Dom. Sensitive		162	17A	Non-Impaired	
11/13/2003	Low Taxa Richness	Mod. Taxa Richness	X High Taxa Richness				RBP1	
upstream Tunnel Road	Low Abundance	High Abundance	X Norm.Abundance		2003		Fully Supporting	
Tankerhoosen River	Low EPT	Moderate EPT	X High EPT					
Vernon	High HBI	Moderate HBI	Low HBI		Score:			
CT4503-00_01	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		138	17A	Non-Impaired	
11/13/2003	Low Taxa Richness	X Mod. Taxa Richness	High Taxa Richness				RBP1	
upstream 100 m mouth at Golf Land	Low Abundance	High Abundance	X Norm.Abundance		2003		Fully Supporting	
Mattabeset River	X Low EPT	Moderate EPT	High EPT					
Berlin	High HBI	Moderate HBI	Low HBI		Score:			
CT4600-00_02	Dom.Tolerant	X Dom. Intermediate	Dom. Sensitive		129	- - -	Not Assessed	
11/12/2003	Low Taxa Richness	Mod. Taxa Richness	High Taxa Richness				Low	
Lower Lane upstream of Belcher Brook	X Low Abundance	High Abundance	Norm.Abundance		2003		Gradient	
Salmon River	Low EPT	Moderate EPT	X High EPT					
Colchester	High HBI	Moderate HBI	Low HBI		Score:			
CT4700-00_01	Dom.Tolerant	Dom. Intermediate	X Dom. Sensitive		169	17a	Reference	
10/18/2002	Low Taxa Richness	Mod. Taxa Richness	X High Taxa Richness				100%	
downstream 0.7 miles RR bridge	Low Abundance	High Abundance	X Norm.Abundance		2002		Fully Supporting	
Salmon River	Low EPT	Moderate EPT	X High EPT					
Colchester	High HBI	Moderate HBI	Low HBI		Score:			
CT4700-00_01	Dom.Tolerant	Dom. Intermediate	X Dom. Sensitive		168	17a	Reference	
10/8/2003	Low Taxa Richness	Mod. Taxa Richness	X High Taxa Richness				RBP1	
downstream 0.7 miles RR bridge	Low Abundance	High Abundance	X Norm.Abundance		2003		Fully Supporting	

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
CONNECTICUT RIVER BASIN:								
Cabin Brook Colchester CT4703-01_01 10/8/2003 upstream Cabin Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 156 2003	17A	Impaired RBP1	Partially Supporting
Flat Brook Marlborough CT4707-06_06 10/7/2002 at #30 Finley Hill Rd	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 154 2002	17A	Slight 76%	Fully Supporting
Eightmile River Lyme CT4800-00_01 10/9/2003 Rt.156,150 m DS East Br. Eightmile River	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 173 2003	17A	Non-Impaired RBP1	Fully Supporting
SOUTH CENTRAL COASTAL BASIN:								
Pond Meadow Brook Killingworth CT5105-01_01 10/9/2002 Adj. to Abner Lane at yellow road marker	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 165 2002	18	Non-Impaired 85%	Fully Supporting
Neck River Madison CT5107-00_01 10/9/2002 at Warpus Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: NA 2002	18	Slight 75%	Fully Supporting
Neck River Madison CT5107-00_01 10/9/2002 upstream Route 95	X Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 135 2002	---	Not Assessed Low Gradient	Unknown
Farm River East Haven CT5112-00_02 11/4/2003 at end of dirt rd off Gloria Place	X Low EPT High HBI X Dom.Tolerant X Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 148 2003	---	Not Assessed Low Gradient	Unknown
Farm River North Branford CT5112-00_03 11/4/2003 # 1775 Middletown Ave US farm road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 155 2003	18	Non-Impaired RBP1	Fully Supporting
Eightmile River Southington CT5201-00_01 10/4/2002 downstream Marion Avenue	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: NA 2002	18	Reference 100%	Fully Supporting
Eightmile River Southington CT5201-00_01 10/17/2003 downstream Marion Avenue	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 132 2003	18	Reference RBP1	Fully Supporting
Mill River Hamden CT5302-00_02 11/5/2003 at first pull-off DS Tuttle Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 164 2003	18	Non-Impaired RBP1	Fully Supporting
HOUSATONIC RIVER BASIN:								
Housatonic River Cornwall CT6000-00_06 11/17/2003 Swifts Bridge, upstream Gunn Brook	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 169 2003	25	Non-Impaired RBP1	Fully Supporting
Fivemile Brook Oxford CT6000-62_01 10/17/2003 50 meters US mouth, at old dam structure	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 156 2003	25	Non-Impaired RBP1	Fully Supporting

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
HOUSATONIC RIVER BASIN:								
Sages Ravine Brook Salisbury CT6001-00_02 10/21/2002 Route 41, upstream 500 feet	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 160 2002	25	Moderate 50%	Fully Supporting
Bull Mountain Brook Kent CT6016-03_02 10/29/2002 upstream Camp Flat and Mud Pond Rds.	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 152 2002	25	Slight 75%	Fully Supporting
Pumpkin Ground Brook Stratford CT6026-00_01 10/31/2002 upstream Cutspring Road	X Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 135 2002	25	Moderate 41%	Partially Supporting
Blackberry River North Canaan CT6100-00_02A 11/3/2003 1st rifle DS ford at quarry discharge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: NA 2003	25	Non-Impaired RBP1	Fully Supporting
Blackberry River North Canaan CT6100-00_02A 11/3/2003 1st rifle US ford at quarry discharge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: NA 2003	25	Non-Impaired RBP1	Fully Supporting
Blackberry River North Canaan CT6100-00_03 11/3/2003 Elm Knoll Farm at 2nd tractor crossing	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 145 2003	25	Non-Impaired RBP1	Fully Supporting
Hollenbeck River Canaan CT6200-00_01 11/17/2003 Adjacent to Rt. 63 at SNET pole #856	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 150 2003	- - -	Not Assessed Low Gradient	Unknown
Sawmill Brook Sherman CT6401-00_01 10/29/2002 at confluence with spring lake outfall	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 169 2002	25	Non-Impaired 95%	Fully Supporting
Lake Waramaug Brook Warren CT6502-01_01 10/30/2002 Route 341 at farm bridge crossing #21	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 136 2002	25	Non-Impaired 90%	Fully Supporting
Limekiln Brook Bethel CT6606-00_03 11/5/2002 upstream Rockwell Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 152 2002	25	Moderate 50%	Fully Supporting
Shepaug River Roxbury CT6700-00_01 10/25/2002 Wellers Bridge Road (Rt. 67) DS 100 m	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 137 2002	25	Reference 100%	Fully Supporting
Shepaug River Roxbury CT6700-00_01 10/20/2003 Wellers Bridge Road (Rt. 67) DS 100 m	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 171 2003	25	Reference RBP1	Fully Supporting
Bantam River Litchfield CT6705-00_04 11/10/2003 upstream of West Branch Bantam River	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 173 2003	25	Non-Impaired RBP1	Fully Supporting
Pomperaug River Southbury CT6800-00_04 11/10/2003 at United Water Company behind church	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 158 2003	25	Non-Impaired RBP1	Fully Supporting

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
HOUSATONIC RIVER BASIN:								
Wood Creek Bethlehem CT6804-04_01 11/10/2003 upstream Paddy Hollow Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	X	Score: 150 2003	25	Non-Impaired RBP1	Fully Supporting
Naugatuck River Beacon Falls CT6900-00_02 10/4/2002 behind Fire Station	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness X High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: NA 2002	25	Moderate 30%	Partially Supporting
Naugatuck River Beacon Falls CT6900-00_02 11/19/2003 behind Fire Station	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: NA 2003	25	Impaired RBP1	Partially Supporting
Naugatuck River Naugatuck CT6900-00_02 10/2/2002 adjacent North end of Linden Park	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness X High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 125 2002	25	Moderate 30%	Partially Supporting
Naugatuck River Naugatuck CT6900-00_02 11/19/2003 adjacent North end of Linden Park	X Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: NA 2003	25	Impaired RBP1	Partially Supporting
Naugatuck River Waterbury CT6900-00_03 10/2/2002 at RR crossing DS of Mad River	X Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: 136 2002	25	Moderate 35%	Partially Supporting
Naugatuck River Waterbury CT6900-00_03 10/2/2002 upstream South Leonard Street	X Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: 121 2002	25	Moderate 35%	Partially Supporting
Naugatuck River Thomaston CT6900-00_05 10/2/2002 between RR and Dredge Hole	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness X High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 146 2002	25	Moderate 40%	Partially Supporting
Naugatuck River Thomaston CT6900-00_05 11/19/2003 between RR and Dredge Hole	Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: NA 2003	25	Impaired RBP1	Partially Supporting
Naugatuck River Watertown CT6900-00_05 10/1/2002 upstream Frost Bridge Rd. (Route 263)	X Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness X High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 170 2002	25	Severe 15%	Not Supporting
Naugatuck River Watertown CT6900-00_05 11/19/2003 upstream Frost Bridge Rd. (Route 263)	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: NA 2003	25	Impaired RBP1	Partially Supporting
Naugatuck River Harwinton CT6900-00_06 10/1/2002 upstream Campville Road	Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness X High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 165 2002	25	Moderate 40%	Partially Supporting
Naugatuck River Harwinton CT6900-00_06 11/19/2003 upstream Campville Road	Low EPT High HBI Dom.Tolerant X Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance		Score: NA 2003	25	Impaired RBP1	Partially Supporting
Naugatuck River Thomaston CT6900-00_06 10/1/2002 first pull off downstream Reynolds Bridge	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate X Mod. Taxa Richness X High Abundance	High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance		Score: 159 2002	25	Slight 60%	Fully Supporting

River/Basin	Community Description				Habitat Category	Reference Site	RBP Assessment	Meets Benthic Standards
	Poor Quality	Mod. Quality	High Quality					
HOUSATONIC RIVER BASIN:								
Bladdens River Woodbridge CT6919-00_02 10/31/2002 riffle upstream Sanford Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 154 2002	25	Non-Impaired 85%	Fully Supporting	
Bladdens River Woodbridge CT6919-00_02 10/31/2002 upstream Sanford Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 163 2002	- - -	Not Assessed Low Gradient	Unknown	
SOUTHWEST COASTAL BASIN:								
Saugatuck River Redding CT7200-00_03 11/5/2002 downstream Rt.107 & 53 Junction	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 172 2002	25	Reference 100%	Fully Supporting	
Saugatuck River Redding CT7200-00_03 10/14/2003 downstream Rt.107 & 53 Junction	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 167 2003	50	Reference RBP1	Fully Supporting	
West Branch Saugatuck River Weston CT7203-00_02 10/14/2003 at end of Whiporwill Lane	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 170 2003	50	Non-Impaired RBP1	Fully Supporting	
Norwalk River Wilton CT7300-00_02 10/3/2002 adjacent Wilton Jr High/ Middle School	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 151 2002	50	Moderate 47%	Fully Supporting	
Five Mile River New Canaan CT7401-00_02 10/14/2003 under Old Norwalk Road	X Low EPT High HBI Dom.Tolerant Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 127 2002	50	Impaired RBP1	Partially Supporting	
East Branch Byram River Greenwich CT7410-00_00 10/3/2002 upstream John Street	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 146 2002	50	Slight 75%	Fully Supporting	
HUDSON RIVER BASIN:								
Quaker Brook New Fairfield CT8101-00_01 10/20/2003 Rt. 37 behind Wesleyan Outdoor School	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 155 2003	234	Reference RBP1	Fully Supporting	
Titicus River Ridgefield CT8104-00_01 10/20/2003 behind track Ridgefield High School	X Low EPT High HBI X Dom.Tolerant X Low Taxa Richness X Low Abundance	Moderate EPT Moderate HBI Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness Norm.Abundance	Score: 159 2003	- - -	Not Assessed Low Gradient	Unknown	
Titicus River Ridgefield CT8104-00_01 10/20/2003 upstream Sherwood Road	Low EPT High HBI Dom.Tolerant Low Taxa Richness Low Abundance	X Moderate EPT Moderate HBI X Dom. Intermediate Mod. Taxa Richness High Abundance	X High EPT Low HBI Dom. Sensitive High Taxa Richness X Norm.Abundance	Score: 142 2003	234	Non-Impaired RBP1	Fully Supporting	