Estuary 1: Norwalk

Watershed Summary

WATERSHED DESCRIPTION AND MAPS

The Norwalk Estuary (Estuary 1) covers an area of approximately 9,002 acres in the southwestern corner of Connecticut. These impaired segments are located in the western portion of Long Island Sound (LIS). Most of the impaired segments in this summary are located in the municipality of Norwalk, though one segment is located in the southwestern corner of Westport, CT.

The Norwalk Estuary includes six segments impaired for commercial shellfish and one segment impaired for recreation due to elevated bacteria levels. These segments were assessed by Connecticut Department of Energy and Environmental Protection (CT DEEP) and included in the CT 2016 303(d) list of impaired waterbodies. Some segments in the estuary are currently unassessed as of the writing of this document. This does not mean there are no potential issues on these segments, but indicates a lack of current data to evaluate the segments as part of the assessment process. An excerpt of the Integrated Water Quality Report is included in Table 1 (CTDEEP, 2016).

Impaired Segments

Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach) (CT-W1_013-SB) is part of the eastern embayment of Norwalk Harbor from Gregory Point to Fitch Point, and includes Marvin Beach (Figure 1).

Segment 7: LIS WB Inner Norwalk Harbor (CT-W1_012-SB) is from the mouth of Norwalk Harbor to the saltwater limit at Wall Street crossing. These 2 impaired segments of the Norwalk Estuary have a water quality classification of SB. Designated uses include commercial shellfish harvesting, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Segment 1 (CT-W1_013-SB) of the estuary is impaired due to elevated bacteria concentrations, affecting the designated use of recreation. Segment 1 (CT-W1_013-SB) is also a designated beach (Marvin Beach) and the specific recreation impairment is for designated swimming and other water contact related activities.

Impaired Segment Facts

Impaired Segments, Classifications, and Areas (square miles):

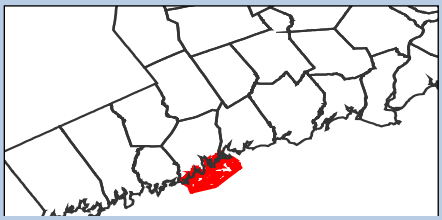
Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach) (*CT-W1_013-SB*); SB; 0.37
Segment 2: LIS WB Shore - Canfield Island (*CT-W2_011*); SA; 0.43
Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (*CT-W2_012*); SA; 0.26
Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (*CT-W2_013*), SA; 0.37
Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (*CT-W2_014*); SA; 0.42
Segment 6: LIS WB Midshore – Norwalk Islands (*CT-W3_008-I*); SA: 5.94
Segment 7: LIS WB Inner Norwalk Harbor (CT-W1_012-SB); SB: 0.942

Municipalities: Norwalk and Westport

Designated Use Impairments: Shellfish, Recreation (W1_013-SB & W1_012)

MS4 Applicable? Yes

Applicable Season: Recreation Season (May 1 to September 30) Year-Round for Shellfish Uses



Segment 7 (CT-W1_012-SB) is impaired for the designated uses of recreation and commercial shellfishing due to the presence of one Combined Sewer Overflow (CSO). We do not have any Enterococci monitoring data at this time to assess the recreation impairment so the remainder of the TMDL will focus on the impairment of commercial shellfishing. Fecal coliform data shows this area is meeting the bacteria requirements for commercial shellfishing however, there remains an administrative closure. This permitted and treated combination of stormwater and domestic sewage is located at the South Smith Street Waste Water Treatment Plant (WWTP). All wet weather flows over 30 MGD receive full preliminary treatment, screening and grit removal as well as micro drum screening and chlorination.

Segments 2 – 5 extend from the shoreline to approximately 1000 feet offshore in Westport and Norwalk, CT. Segment 2: LIS WB Shore – Canfield Island (CT-W2_011) is located in Westport just west of Canfield Island to the Saugatuck Shores area and includes Canfield Island, Saugatuck Shores, and Seymour Point. Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) is located in Norwalk from the midpoint of outer Norwalk Harbor to just west of the Canfield Island area and includes Calf Pasture Beach, Shady Beach, and Calf Pasture Point. Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (CT-W2_013) is located in Norwalk from the midpoint of outer Norwalk Harbor to just west of Hoyt Island and includes Hickory Bluff Beach, Hoyt Island, and Keyser Point. Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014) is located in Norwalk from just west of Hoyt Island to Norton Point and includes Rowayton Beach, Bell Island, and Wilson Point (Figure 1).

Segment 6: LIS WB-Midshore – Norwalk Islands (CT-W3_008-I) in LIS begins approximately 1000 feet offshore, beyond Segments 2 – 5, from Norton Point to Seymour Point and includes the entire Norwalk Islands area. The segment continues out just beyond Sheffield Island to Cockenoe Island (Figure 1).

These impaired segments (Segments 2 – 6) of the Norwalk Estuary have a water quality classification of SA. Designated uses include shellfish harvesting for direct human consumption, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of shellfishing.

Table 1: Impaired segments in the Norwalk Estuary from the Connecticut 2016 Integrated Water Quality Report

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
CT-W1_012-SB	**LIS WB Inner - Norwalk Harbor, Norwalk**	**Western portion of LIS, Inner Estuary, from SA/SB water quality line at mouth of Norwalk Harbor (Calf Pasture Point), US to saltwater limit at Wall Street Crossing (EXCLUDES eastern cove of Marvin Beach), Norwalk.**	**0.94**	**NOT**	**NOT**	**////**	**NOT***	**FULL**
CT-W1_013-SB	**LIS WB Inner - Norwalk Harbor (Marvin Beach), Norwalk**	**Western portion of LIS, Inner Estuary, eastern embayment of Norwalk Harbor, from Gregory Point to Fitch Point into shore (includes Marvin Beach), Norwalk.**	**0.04**	**NOT**	**NOT**	**////**	**FULL**	**FULL**
CT-W2_011	LIS WB Shore - Canfield Island, Westport	Western portion of LIS from just west of Canfield Island to Saugatuck Shores area (includes Canfield Island, Saugatuck Shores, Seymour Point) out approximately 1000 ft offshore, Westport.	0.43	U	U	NOT	////	FULL
CT-W2_012	LIS WB Shore - Outer Norwalk Harbor(East), Norwalk	Western portion of LIS from midpoint of outer Norwalk Harbor to just west of Canfield Island area (includes Calf Pasture Beach, Shady Beach, Calf Pasture Point) out approximately 1000 ft offshore, Norwalk.	0.26	NOT	FULL	NOT	////	FULL
CT-W2_013	LIS WB Shore - Outer Norwalk Harbor(West), Norwalk	Western portion of LIS from just west of Hoyt Island to midpoint of outer Norwalk Harbor (includes Hickory Bluff Beach, Hoyt Island, Keyser Point) out approximately 1000 ft offshore, Norwalk.	0.37	NOT	FULL	NOT	////	FULL

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
CT-W2_014	LIS WB Shore - Wilson Cove, Farm Creek, Norwalk	Western portion of LIS from Norton Point to just west of Hoyt Island (includes Rowayton Beach, Bell Island, Wilson Point) out approximately 1000 ft offshore, Norwalk.	0.42	U	FULL	NOT	////	FULL
CT-W3_007	LIS WB Midshore - Offshore Norwalk Islands, Norwalk	Western portion of LIS from line just beyond cluster of Norwalk Islands (Sheffield Island to Cockenoe Island area), out to 50 ft contour, Norwalk.	5.66	NOT	U	FULL	////	FULL
CT-W3_008-I	LIS WB Midshore - Norwalk Islands, Norwalk	Western portion of LIS from approximately 1000 ft offshore (Norton Point to Seymour Point, includes all Norwalk Islands area), out to line just beyond Sheffield Island to Cockenoe Island, Norwalk.	5.94	NOT	U	NOT	////	FULL

Shaded cells indicate segments addressed in this TMDL

Bold text indicates recreation impairment addressed in this TMDL
***Bacteria data through 2011 shows attainment**

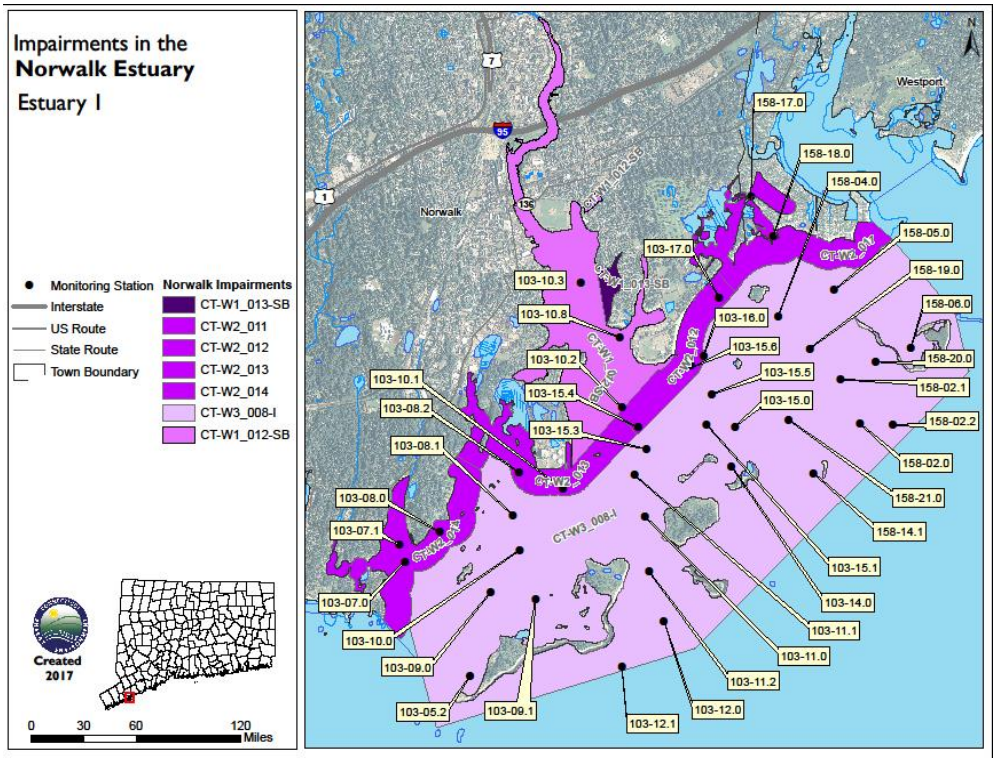
FULL = Designated Use Fully Supported

NOT = Designated Use Not Supported

U = Unassessed

/// = Not Applicable to Segment

Figure 1: GIS map featuring general location for impaired segments in the Norwalk Estuary



Shellfish Bed Classifications, Closures, and Lease Locations

The Connecticut Department of Agriculture/Bureau of Aquaculture (CT DA/BA) is responsible for regulating shellfish harvesting (www.ct.gov/doag/cwp/view.asp?a=1369&Q=259170). A shellfish growing area is defined by CT DA/BA as any area that supports or could support the growth and/or propagation of molluscan shellstock. Shellfish are defined by CT DA/BA as oysters, clams, mussels, and scallops, either shucked or in the shell, fresh or frozen, whole or in part. All shellfish growing areas are classified by CT DA/BA in accordance with the Interstate Shellfish Sanitation Conference (ISSC) National Shellfish Sanitation Program Model Ordinance (NSSP-MO) and CT General Statutes Chapter 491, §26-192e. These classifications, summarized below, are established to minimize health risks and may restrict the take and use of shellfish from some areas. They are based on fecal coliform bacteria standards as provided in the NSSP-MO (Interstate Shellfish Sanitation Conference, 2007). Any shellfish area, regardless of classification, may be temporarily closed to all activities when a potential public health emergency exists as a result of a storm event, flooding, sewage, chemical, or petroleum discharges, or a hazardous algal bloom.

Shellfish harvesting has been divided into two designated uses as specified in the Connecticut Water Quality Standards (WQS): shellfish harvesting suitable for direct human consumption (Class SA waters), and shellfish harvesting suitable for commercial operations requiring depuration or relay (Class SB waters). The impaired segments in the Norwalk Estuary include both Class SA and SB waters.

Shellfish Bed Classifications and Closures in the Norwalk Estuary

Shellfish classification areas in the Norwalk Estuary are shown in Figure 2. The following classifications for shellfish growing areas are defined by CT DA/BA for more detailed information and maps please see their website www.ct.gov/doag/cwp/view.asp?a=3768&q=478054 :

> **Approved Area**: A growing area that is safe for the direct marketing or consumption of shellfish. An area may be classified as "Approved" when a sanitary survey finds that there is no contamination from human or animal fecal matter at levels that present an actual or potential public health hazard, and is not contaminated by pathogenic organisms, poisonous or deleterious substances, or marine biotoxins, and has water quality that meets the bacteriological standards for an Approved growing area.
>
> **Conditionally Approved Area**: A growing area that, when open, shellfish may be harvested recreationally for consumption, or commercially for market. An area may be classified as "Conditionally Approved" when a sanitary survey finds that these areas can remain open for a reasonable period of time, and that factors impacting the area are known and predictable and do not preclude a reasonable management approach. Bacteriological water quality must correlate with the factors impacting the growing area. Each Conditionally Approved growing area must have a written management plan that is adhered to by all responsible parties.
>
> **CONDITIONALLY APPROVED SEASONAL AREA**: Conditionally Approved Seasonal areas are closed under certain seasonal conditions, either due to the operations of marinas or mooring fields, or because the area may be subject to elevated bacteria levels during certain times of the year.
>
> **Restricted**: A growing area in which the sanitary survey finds there are levels of fecal pollution, human pathogens, or poisonous or deleterious substances that can be reduced by relaying the shellstock to Approved or Conditionally Approved waters for natural cleansing or depuration. Shellfish from these areas may not be directly harvested for market or consumption.
>
> **Conditionally Restricted:** A growing area that the sanitary survey finds meets "Restricted" classification when the area is in the open status, and meets the "Prohibited" classification when the area is in the closed status. The management plan must designate whether harvested shellfish are relayed or depurated.
>
> **Prohibited**: A growing area where there has not been a sanitary survey conducted within the last 12 years must be classified as Prohibited. Any area with a sewage treatment plant outfall or other point source that could impact public health is classified as Prohibited. This classification prohibits the harvest of shellfish except for seed oystering or depletion of the area.

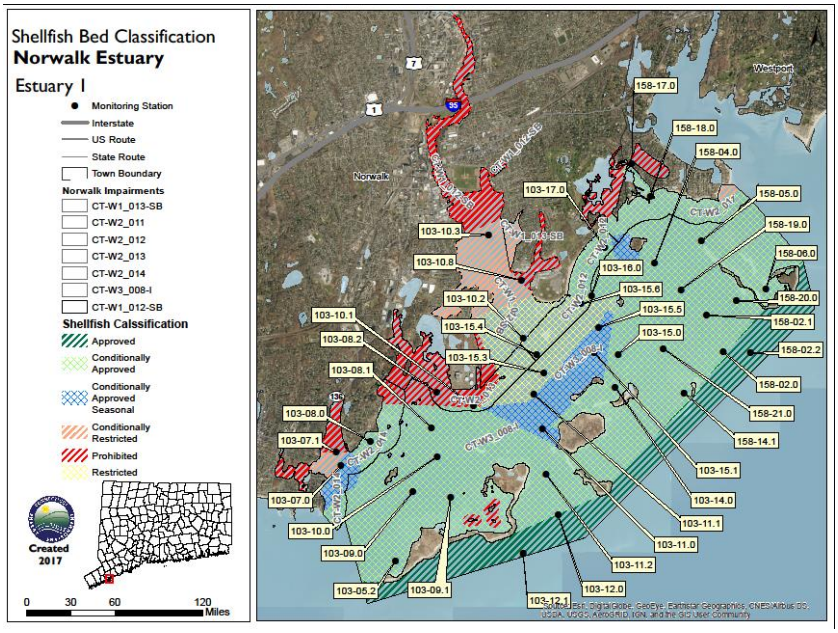
As discussed above and shown in Table 1, Segment 1 (CT-W1_013-SB) does not meet its designated use for recreation due to bacteria and Shellfishing is Conditionally Restricted in Norwalk Harbor (Figure 2).

Segments 2 – 6 did not meet their designated use for shellfish harvesting for direct human consumption due to bacteria (Table 1). The majority of Segment 2 (CT-W2_011) is Conditionally Approved for shellfish harvesting, though the eastern-most part of the impaired segment is classified as Restricted. The eastern portion of Segment 3 (CT-W2_012) is Conditionally Approved for shellfishing and the western portion is

classified as Restricted-. Shellfishing is prohibited from most of Segment 4 (CT-W2_013) and the northern portion of Segment 5 (CT-W2_014). However, shellfishing is Conditionally Approved and Conditionally Approved Seasonal in the southern portion of Segment 5 and Conditionally Restricted in the central portion of the segment. Segment 6 (CT-W3_008-I) is Conditionally Approved and Conditionally Approved Seasonal on the northern side of the Norwalk Islands and Approved on the southern side (Figure 2).

As discussed earlier, the northern portion of Segment 7 (CT-W1_012-SB) has an administrative closure due to the presence of one CSO. The southern part of the segment is Restricted for shellfishing.

Figure 2: GIS map featuring shellfish bed classifications and closures for the impaired segments in the Norwalk Estuary



Shellfish Bed Lease Locations

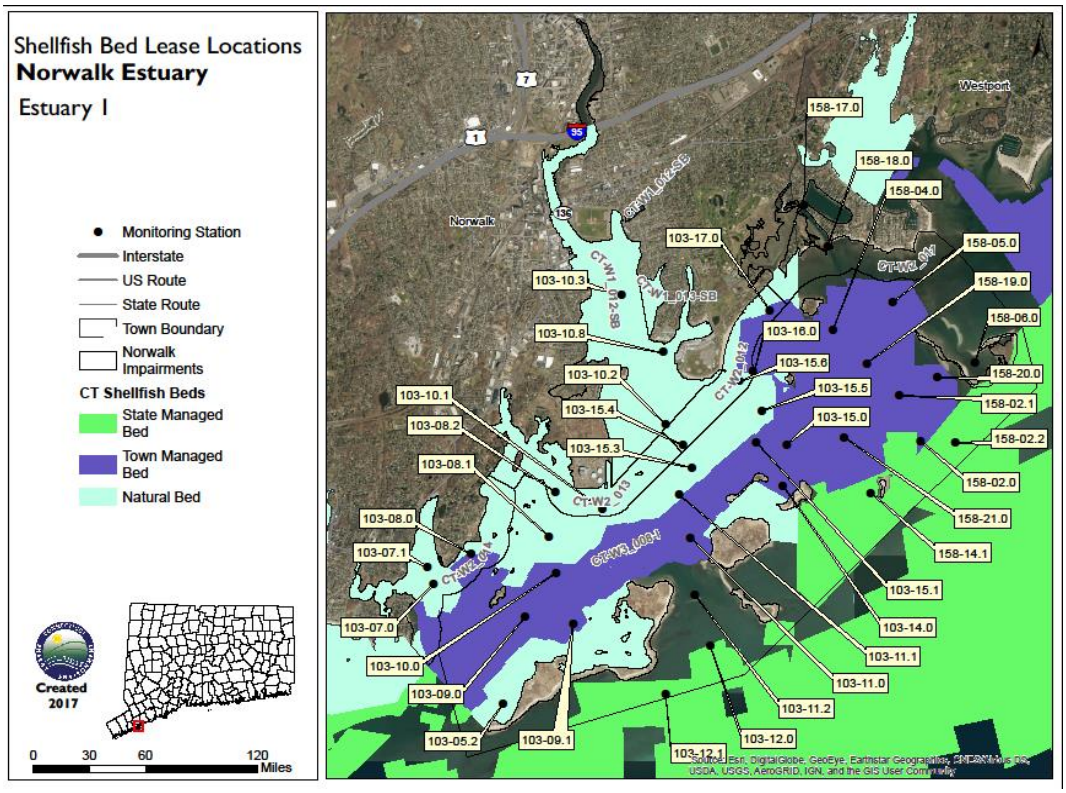
Shellfish beds in the Norwalk Estuary are also classified by their management (Figure 3). CT DA/BA defines these areas as follows:

> **State and Town Beds**: In 1881, a line, referred to as the Commissioner's Line, was established to divide the waters of the State into northern and southern sections. All beds south of this line are State beds and most beds north of this line are town beds. Town beds are leased, owned or managed through the local shellfish commission. However, CT DA/BA still controls all the licensing and regulations for both state and town beds. For example, DA/BA issues licenses and determines when an area will be closed to shellfishing due to a change in water quality. Towns may require additional permits to work in waters under local jurisdiction. Beds north of the line in Westport, Milford, West Haven, and New Haven are exceptions to this as they are fully under State control.
>
> **State and Town Natural Beds**: Natural beds get their name from the fact that shellfish, especially oyster, naturally inhabited the area. These areas tend to be closer to shore, usually at the mouth of a river. Natural beds have specific regulations concerning their use, including licensing and harvesting methods. They are predominately seed beds that cannot be

mechanically harvested. Use of natural beds requires a Relay/Transplant License I or II and/or Seed Oyster Harvesting License from CT DA/BA. Any person assisting in the harvesting of seed oysters must have a Helper's License. These beds cannot be leased or subdivided; they are to remain open to any properly licensed harvester. State natural beds are natural beds south of the Commissioner's Line. Descriptions of these beds can be found in §3295 of the Connecticut General Statutes (CGS), revision of 1918. Not all beds listed in §3295 were mapped, and many natural beds in State waters off Greenwich are managed through leases. Town natural beds were defined by law under §2326 of the CGS of 1888. Each town had the opportunity to map areas to be considered natural beds. The documents, written descriptions, and maps were submitted to the Superior Court with jurisdiction for that town. Several towns did not avail themselves to this opportunity, and some, such as Westport, have changed the delineation of their natural beds in recent court decisions. There are also areas that may have been declared natural beds, but are now leased.

Most shellfish beds in the Norwalk Estuary are natural beds. Most beds in Segment 6 (CT-W3_008-I) and portions of Segments 3 (CT_W2_012) and 5 (CT-W2_014) are town-managed beds (Figure 3) and beds in Segment 6 (CT-W3_008-I) are mostly Town managed with some natural and some State managed.

Figure 3: GIS map featuring Shellfish Bed Lease Locations for the impaired segments in the Norwalk Estuary



WHY IS A TMDL NEEDED?

For saltwater segments, the indicator bacteria, fecal coliform, is used in the CT Water Quality Standards (WQS) to assess shellfish uses for Class SA and SB waters (CTDEEP, 2013). Enterococcus is the indicator bacteria used to assess recreational uses for Class SA and SB waters. All data are from CT DEEP, USGS, Bureau of Aquaculture, or volunteer monitoring efforts at stations located on the impaired segments.

Segment 1 (CT-W1_013-SB) is a Class SB saltwater waterbody. Its applicable designated uses include commercial shellfish harvesting, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Water quality analyses were conducted using data from one sampling location on Segment 1 (CT-W1_013-SB) (Table 2). The water quality criteria for enterococci, along with bacteria sampling results from 2000 – 2011, are presented in Table 13.

Segment 1 (CT-W1_013-SB) is impaired due to elevated bacteria concentrations, affecting the designated use of recreation. Segment 1 (CT-W1_013-SB) is also a designated beach (Marvin Beach), and the specific recreation impairment is for designated swimming and other water contact related activities. As shown in Table 13, single sample values at Marvin Beach exceeded the WQS for enterococci.

To aid in identifying possible bacteria sources, geometric means for data collected during the sampling period were also calculated for each station on Segment 1 (CT-W1_013-SB) using wet and dry-weather conditions, resulting in exceedance of WQS for enterococci during wet-weather (Table 13).

Segments 2 - 6 are Class SA saltwater waterbodies. Their applicable designated uses include shellfish harvesting for direct human consumption, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Water quality analyses were conducted using data from two sampling locations on Segments 2 (CT-W2_011) and 4 (CT-W2_013), four sampling locations on Segment 3 (CT-W2_012), three sampling locations on Segment 5 (CT-W2_014), and 25 sampling locations on Segment 6 (CT-W3_008-I). The water quality criteria for fecal coliform, along with bacteria sampling results from 2000 – 2011, are presented in Tables 13 – 18. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of shellfishing.

Segment 2 (CT-W2_011): As shown in Table 14, 90% less than values exceeded the WQS for fecal coliform multiple times during the sampling period at both stations in Segment 2. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of WQS for fecal coliform.

Segment 3 (CT-W2_012): As shown in Table 15, geometric mean and 90% less than values exceeded the WQS for fecal coliform multiple times at multiple stations in Segment 3 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 4 (CT-W2_013): As shown in Table 16, geometric mean and 90% less than values exceeded the WQS for fecal coliform multiple times at multiple stations in Segment 4 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 5 (CT-W2_014): As shown in Table 17, 90% less than values exceeded the WQS for fecal coliform multiple times at multiple stations in Segment 5 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of WQS for fecal coliform.

Segment 6 (CT-W3_008-I): As shown in Table 18, geometric mean and 90% less than values exceeded the WQS for fecal coliform multiple times at multiple stations in Segment 6. Geometric means for data collected during the sampling period were also calculated for each station using wet-weather and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 7 (CT-W1_012-SB): Geometric means for data collected during the sampling period were calculated at 3 stations using wet-weather and dry-weather conditions are shown in Table 19. No single sample of fecal coliform exceeded WQS. The geomean for wet weather samples was higher than the geomean for dry weather samples at all three stations.

Due to the elevated bacteria measurements presented in Tables 13 – 18, these six impaired segments did not meet CT's bacteria WQS, were identified as impaired, and were placed on the CT List of Waterbodies Not Meeting Water Quality Standards, also known as the CT 303(d) Impaired Waters List. The Clean Water Act requires that all 303(d) listed waters undergo a TMDL assessment that describes the impairments and identifies the measures needed to restore water quality. The goal is for all waterbodies to comply with State WQS.

Table 2: Sampling station information for the impaired segments in the Norwalk Estuary

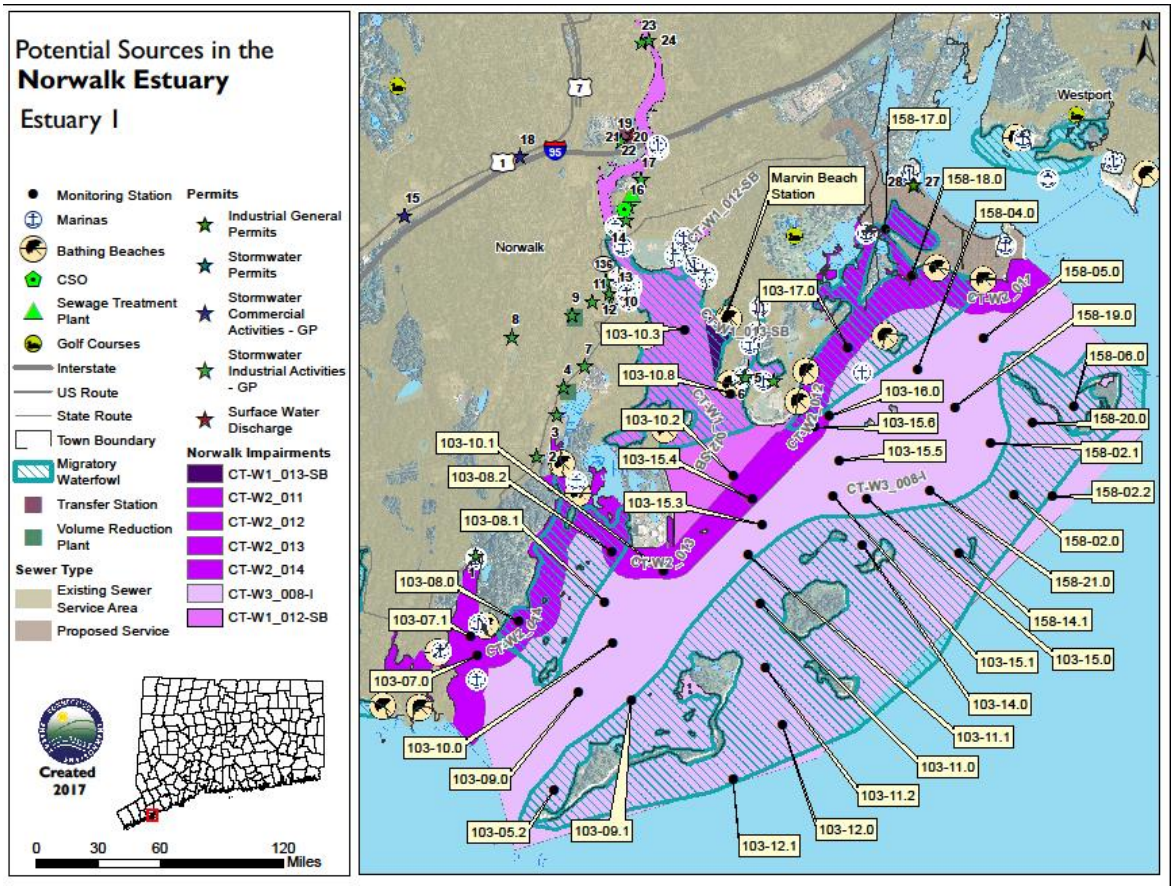
Waterbody ID	Waterbody Name	Station	Station Description	Town	Latitude	Longitude
CT-W1_013-SB	LIS WB Inner - Norwalk Harbor (Marvin Beach), Norwalk	Marvin Beach	Marvin Beach	Norwalk	41.0919	-73.4009
CT-W2_011	LIS WB Shore - Canfield Island, Westport	158-17.0	Bermuda Lagoon at "elbow"	Westport	41.1000	-73.3824
		158-18.0	entrance to Bermuda Lagoon	Westport	41.0959	-73.3793
CT-W2_012	LIS WB Shore - Outer Norwalk Harbor(East), Norwalk	103-15.4	SW Round Beach	Norwalk	41.0759	-73.3980
		103-15.6	off Calf Pasture Pier	Norwalk	41.0823	-73.3907
		103-16.0	over sandbar to Calf Pasture Island	Norwalk	41.0833	-73.3889
		103-17.0	NW Sprite Is./near Shorehaven	Norwalk	41.0894	-73.3868
CT-W2_013	LIS WB Shore - Outer Norwalk Harbor(West), Norwalk	103-08.2	W. Manresa Island	Norwalk	41.0711	-73.4146
		103-10.1	N"8"/C"7" channel	Norwalk	41.0694	-73.4084
CT-W2_014	LIS WB Shore - Wilson Cove, Farm Creek	103-07.0	Wilson Cove	Norwalk	41.0617	-73.4304
		103-07.1	N. Wilson Cove	Norwalk	41.0634	-73.4312
		103-08.0	E. Wilson Pt.	Norwalk	41.0648	-73.4256

Waterbody ID	Waterbody Name	Station	Station Description	Town	Latitude	Longitude
CT-W3_008-I	LIS WB Midshore - Norwalk Islands	103-05.2	N. of Sheffield dock	Norwalk	41.0498	-73.4212
		103-08.1	Tavern Island and Cedar Hammock	Norwalk	41.0666	-73.4154
		103-09.0	R"2"/C"3" channel	Norwalk	41.0585	-73.4184
		103-09.1	W. Dog Island	Norwalk	41.0579	-73.4121
		103-10.0	R"4"/C"5" channel	Norwalk	41.0630	-73.4144
		103-11.0	NW Chimon Island	Norwalk	41.0666	-73.3969
		103-11.1	S. Raymond Rocks	Norwalk	41.0709	-73.3984
		103-11.2	between Shea and Chimon Island	Norwalk	41.0609	-73.3963
		103-12.0	between Sheffield and Copps Island	Norwalk	41.0558	-73.3942
		103-12.1	S. Shea Is/E. end Sheffield Island	Norwalk	41.0510	-73.4000
		103-14.0	between Betts and Grassy Island	Norwalk	41.0719	-73.3849
		103-15.0	Grassy Hammock	Norwalk	41.0760	-73.3844
		103-15.1	N. C"9" / W. Grassy Hammock	Norwalk	41.0762	-73.3884
		103-15.3	C"1" NE Raymond Rocks	Norwalk	41.0736	-73.3968
		103-15.5	SW Calf Pasture Island	Norwalk	41.0794	-73.3877
		158-02.0	G"5" near Pecks Ledge	Norwalk	41.0764	-73.3670
		158-02.1	N. Pecks Ledge	Norwalk	41.0810	-73.3698
		158-02.2	SW Cockenoe Is. N"4"	Norwalk	41.0763	-73.3624
		158-04.0	SE Sprite Island	Norwalk	41.0875	-73.3785
		158-05.0	NW Cockenoe Island	Norwalk	41.0903	-73.3707
		158-06.0	Cockenoe Island Cove	Norwalk	41.0844	-73.3599
		158-14.1	N. side Goose Island	Norwalk	41.0713	-73.3734
		158-19.0	E. Sheep Rocks	Norwalk	41.0842	-73.3740
		158-20.0	W. Cockenoe Island	Norwalk	41.0828	-73.3649
		158-21.0	E. Grassy Hammock	Norwalk	41.0768	-73.3770
CT-W1_012	LIS WB Inner-Norwalk Harbor	103-10.2		Norwalk	41.0779	-73.40025
		103-10.3		Norwalk	41.090883	-73.406117
		103-10.8		Norwalk	41.085181	-73.40063

POTENTIAL BACTERIA SOURCES

Potential sources of indicator bacteria in a watershed include point and non-point sources, such as stormwater runoff, agriculture, sanitary sewer overflows (collection system failures), illicit discharges, and inappropriate discharges to the waterbody. Potential sources that have been tentatively identified in the Norwalk Estuary are presented in Table 3 and Figure 4. However, the list of potential sources is general in nature and should not be considered comprehensive. There may be other sources not listed here that contribute to the observed water quality impairment in the study segments. Further monitoring and investigation will confirm listed sources and discover additional ones. Some segments in this watershed are currently listed as unassessed by CT DEEP procedures. This does not mean that there are no data or impairments in existence in the segment. There are data from permitted sources for some segments, and CT DEEP recommends that any elevated concentrations found from those permitted sources be addressed through voluntary reduction measures. More detailed evaluation of potential sources is expected to become available as activities are conducted to implement these TMDLs.

Figure 4: Potential bacteria sources to the impaired segments in the Norwalk Estuary



The potential sources map for the impaired basin was developed after thorough analysis of available data sets. If information is not displayed in the map, then no sources were discovered during the analysis. The following is the list of potential sources that were evaluated: problems with migratory waterfowl, golf course locations, reservoirs, proposed and existing sewer service, cattle farms, poultry farms, permitted sources of bacteria loading (surface water discharge, MS4 permit, industrial stormwater, commercial stormwater, and groundwater permits), and leachate and discharge sources (agricultural waste, CSOs, failing septic systems, landfills, large septic tank leach fields, septage lagoons, sewage treatment plants, and water treatment or filter backwash).

Table 3: Potential bacteria sources to the impaired segments in the Norwalk Estuary

Segment #	Impaired Segment	Permit Source	Illicit Discharge	CSO/SSO Issue	Failing Septic System	Marinas	Stormwater Runoff	Nuisance Wildlife/Pets	Other
1	LIS WB Inner – Norwalk Harbor (Marvin Beach) CT-W1_013-SB	**x**	**x**		**x**		**x**	**x**	**x**
2	LIS WB Shore – Canfield Island CT-W2_011	**x**			**x**		**x**	**x**	**x**
3	LIS WB Shore – Outer Norwalk Harbor (East) CT-W2_012	**x**			**x**	**x**	**x**	**x**	**x**
4	LIS WB Shore – Outer Norwalk Harbor (West) CT-W2_013	**x**	**x**		**x**		**x**	**x**	**x**
5	LIS WB Shore – Wilson Cove, Farm Creek CT-W2_014	**x**	**x**		**x**	**x**	**x**	**x**	**x**
6	LIS WB Midshore – Norwalk Islands CT-W3_008-I					**x**		**x**	**x**

Segment #	Impaired Segment	Permit Source	Illicit Discharge	CSO/SSO Issue	Failing Septic System	Marinas	Stormwater Runoff	Nuisance Wildlife/Pets	Other
7	LIS WB Inner-Norwalk Harbor CT-W1_012	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**

Point Sources

Permitted sources within the watershed that could potentially contribute to the bacteria loading are identified in Table 4. This table includes permit types that may or may not be present in the impaired watershed. A list of active permits in municipalities that drain to the Norwalk estuary is included in Table 5. Additional investigation and monitoring could reveal the presence of other discharges in the estuary.

Table 4: General categories list of permitted discharges

Permit Code	Permit Description Type	Number in Estuary
CT	Surface Water Discharges	1
GPL	Discharge of Swimming Pool Wastewater	1
GSC	Stormwater Discharge Associated with Commercial Activity	2
GSI	Stormwater Associated with Industrial Activity	22
GSM	Part B Municipal Stormwater MS4	2
LF	Groundwater Permit (Landfill)	0
UI	Underground Injection	1

Permitted Sources

As shown in Table 5, there are multiple permitted discharges in Norwalk that could be contributing bacteria to the impaired segments. These facilities include industrial facilities, the Norwalk Water Pollution Control Facility, and multiple marinas throughout the watershed. These marinas include Total Marine (GSI002272), Norwalk Cove Marina (GSI000319), Rex Marine Center (GSI002465) and Wilson Cove Marina (GSI001052). As shown in Table 6, there are water quality data available from some of these discharges. Fecal coliform data cannot be compared to the WQS as there is no single sample shellfish standard for fecal coliform, however, no more than 10% of the samples can exceed 31 cfu/100 mL for an SA waterbody and no more than 10% of the samples can exceed 260 cfu/100 mL for an SB waterbody. Several samples reported fecal coliform amounts exceeding 2,000 colonies/100 mL, including King Industries (GSI000628), Fed Ex (GSI000972), City Carting (GSI002501), Devine Brothers (GSI002538), the Norwalk WWTP (GSI001829), and Norwalk Public Works Center (GSI000965), (Table 6).

Since the Municipal Separate Storm Sewer Systems (MS4) permits are not targeted to a specific location, but the geographic area of the regulated municipality, there is no one accurate location on the map to display the location of these permits, therefore the MS4 permit will not be displayed in the Potential Sources Map.

Using the municipal border as a guideline will show which areas of an affected watershed are covered by an MS4 permit.

Table 5: Permitted facilities that may be affecting the Norwalk Estuary. Map # corresponds with the numbers on the Potential Sources map (Figure 4)

Town	Client	Permit ID	Permit Type	Site Name	Address	Map #
Norwalk	Wilson Cove Marina, Inc	GSI001052	Stormwater Associated with Industrial Activity	Wilson Cove Marina	120 Wilson Ave	1
Norwalk	Norwalk Transit District	GSI001668	Stormwater Associated with Industrial Activity	Norwalk Transit District	275 Wilson Ave	2
Norwalk	First Student, Inc.	GSI002114	Stormwater Associated with Industrial Activity	First Student, Inc.	334 Wilson Ave	3
Norwalk	City Carting, Inc.	GSI001974	Stormwater Associated with Industrial Activity	Norwalk Meadow Street Facility	8-18, 30-32, 30-120, 30B, 36 Meadow Street	4
Norwalk	Norwalk Cove Marina, Inc.	GSI000319	Stormwater Associated with Industrial Activity	Norwalk Cove Marina, Inc.	48 Calf Pasture Beach Rd	5
Norwalk	Shore And Country Club Inc.	GSI002570	Stormwater Associated with Industrial Activity	220 Gregory Boulevard	220 Gregory Blvd	6
Norwalk	Lajoie Auto Wrecking Company	GSI000477	Stormwater Associated with Industrial Activity	Lajoie's Auto Wrecking Company, Inc.	40 Meadow St	7
Norwalk	United Parcel Service, Inc.	GSI000237	Stormwater Associated with Industrial Activity	United Parcel Service, Inc.	190 Dr Martin Luther King Jr Dr	8
Norwalk	J.L. Seaman, LLC	GSI001457	Stormwater Associated with Industrial Activity	J.L. Seaman, LLC	3 Merritt St	9
Norwalk	Total Marine Of Norwalk Inc.	GSI002272	Stormwater Associated with Industrial Activity	160 Water St.	160 Water St	10
Norwalk	Ecometics, Inc.	GSI000975	Stormwater Associated with Industrial Activity	Ecometics, Inc.	19 Concord St	11
Norwalk	Rex Marine Center, Inc.	GSI002465	Stormwater Associated with Industrial Activity	Rex Marine Center, Incorporated	144 Water St	12
Norwalk	Marinemax Northeast, LLC	GSI002695	Stormwater Associated with Industrial Activity	Marinemax	130 Water St	13
Norwalk	Coastwise Boatworks, LLC	GSI002415	Stormwater Associated with Industrial Activity	11 Goldstein Place	11 Goldstein Pl	14

Town	Client	Permit ID	Permit Type	Site Name	Address	Map #
Norwalk	The Stop & Shop Supermarket Co LLC	GSC000147	Stormwater Discharge Associated with Commercial Activity	Stop & Shop #640	385 Connecticut Ave	15
Norwalk	City Of Norwalk	GSI001829	Stormwater Associated with Industrial Activity	Norwalk Sewage Treatment	60 S Smith St	16
Norwalk	City Carting, Inc.	GSI000965	Stormwater Associated with Industrial Activity	15 South Smith Street	15 S Smith St	17
Norwalk	Lowe's Home Centers, LLC	GSC000423	Stormwater Discharge Associated with Commercial Activity	100 Connecticut Avenue	100 Connecticut Ave	18
Norwalk	City Carting, Inc.	GSI002501	Stormwater Associated with Industrial Activity	Norwalk Transfer Station	61 Science Road	19
Norwalk	Amec Carting, LLC	GSI002151	Stormwater Associated with Industrial Activity	Norwalk Transfer Station	61 Science Road	20
Norwalk	King Industries, Inc.	GSI000628	Stormwater Associated with Industrial Activity	King Industries, Inc.	1 Science Rd	21
Norwalk	King Industries, Inc.	CT0000841	Surface Water Discharge	King Industries, Inc.	1 Science Rd	22
Norwalk	Devine Bros., Inc.	GSI002538	Stormwater Associated with Industrial Activity	Devine Bros., Inc.	38 Commerce St	23
Norwalk	O & G Industries, Inc.	GSI001565	Stormwater Associated with Industrial Activity	Norwalk Asphalt	34 Smith Street	24
Norwalk	City of Norwalk	GSM000024	Municipal Stormwater MS4	City of Norwalk	MS4 Permit	Entire city
Norwalk	City Of Norwalk	UI0000301	Groundwater Discharge	Silvermine Elementary School	157 Perry Ave	26
Westport	City of Westport	GSM000026	Municipal Stormwater MS4	City of Westport	MS4 Permit	Entire city
Westport	Saugatuck Harbor Yacht Club, Inc	GSI002502	Stormwater Associated with Industrial Activity	Saugatuck Harbor Yacht Club, Inc	29 Harbor Rd	27
Westport	Saugatuck Harbor Yacht Club, Inc	GPL000251	Discharge of Swimming Pool Wastewater	Saugatuck Harbor Yacht Club, Inc	29 Harbor Rd	28

Table 6: Industrial permits affecting the Norwalk Estuary and available bacteria data (colonies/100mL). Fecal coliform results cannot be directly compared to the water quality standard as there is no single sample shellfish standard for fecal coliform however, no more than 10% of the samples can exceed 31 cfu/100 mL for an SA waterbody and no more than 10% of the samples can exceed 260 cfu/100 mL for an SB waterbody. Elevated levels of bacteria are highlighted below.

Town	Facility	Permit Number	Receiving Water	Sample Location	Sample Date	Fecal Coliform	Enterococcus
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	04/30/13	49	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	07/31/13	500	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	10/31/13	17	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	04/30/14	369	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	10/31/14	184	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	04/30/15	30	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	10/31/15	8	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	01/31/16	2	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	04/30/16	20	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	07/31/16	810	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	10/31/16	20	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	01/31/17	190	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	04/30/17	48	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001D	07/31/17	124	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	06/30/13	10,600	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	07/31/13	330	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	03/31/14	364	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	09/30/14	123	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	03/31/15	16	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	08/31/15	129	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	10/31/15	960	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	08/31/16	1,890	
Norwalk	King Industries, Inc.	CT0000841	Norwalk River	001W	03/31/17	6	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-11	11/06/14	1,290	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-12	11/06/14	1,370	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-21	11/06/14	230	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-3	11/06/14	>3,000	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-11	10/28/15	2,270	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-12	10/28/15	>3,000	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-21	10/28/15	2,690	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-3	10/28/15	2,400	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-11	08/10/16	>3,000	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-12	08/10/16	>3,000	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-21	08/10/16	22	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-3	08/10/16	>3,000	

Town	Facility	Permit Number	Receiving Water	Sample Location	Sample Date	Fecal Coliform	Enterococcus
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-11	11/29/16	>3,000	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-12	11/29/16	>3,000	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-21	11/29/16	194	
Norwalk	King Industries, Inc.	GSI000628	Norwalk River	SD-3	11/29/16	620	
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	05/01/12	162	573
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	11/01/13	1,100	>2,4196
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	12/23/13	87,000	>2,4196
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	09/10/15	6,400	>2,4196
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	03/14/16	11,100	3,448
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	09/19/16	11,100	3,448
Norwalk	City of Norwalk	GSI000965	Norwalk River	Outfall 1-DPW	11/15/16	673	2,172
Norwalk	City of Norwalk WWTP	GSI001829	Norwalk River	Yard Grit Separator	11/01/13	37,000	>2,4196
Norwalk	City Carting, Inc.	GSI002501	Norwalk River	DSN 001	02/03/16	>20,000	24,200
Norwalk	City Carting, Inc.	GSI002501	Norwalk River	DSN 001	09/30/16	>20,000	24,200
Norwalk	Devine Brothers, Inc.	GSI002538	Norwalk Inner Harbor/River	SP-1	05/08/13	31	281
Norwalk	Devine Brothers, Inc.	GSI002538	Norwalk Inner Harbor/River	SP-1	10/16/14	3,400	1,723
Norwalk	Devine Brothers, Inc.	GSI002538	Norwalk Inner Harbor/River	SP-1	10/28/15	1,400	1,674
Norwalk	The Shore and Country Club	GSI002570	Norwalk Harbor	Outfall Location One	10/16/14		1,989
Norwalk	The Shore and Country Club	GSI002570	Norwalk Harbor	Outfall Location One	04/07/15		5
Norwalk	The Shore and Country Club	GSI002570	Norwalk Harbor	Outfall Location One	10/27/16		20

Municipal Stormwater Permitted Sources

Per the EPA Phase II Stormwater rule all municipal storm sewer systems (MS4s) operators located within US Census Bureau Urbanized Areas (UAs) must be covered under MS4 permits regulated by the appropriate State agency. The Phase II Stormwater Rule also required coverage of state and federal institutions that it called "non-traditional" MS4s. State and federal prisons, colleges, hospitals and military facilities are covered by the general permit as non-traditional MS4s. There are 121 municipalities and 12 institutions currently regulated by CT DEEP's General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems, effective January 1, 2017 (MS4 permit). These municipalities and institutions are considered small MS4s as defined by EPA. Stormwater discharges from CT's only medium MS4, Stamford, as defined by EPA, are regulated by an individual permit.

The US Census Bureau defines a UA as a densely settled area that exceeds a population of 50,000 people and has a population density of at least 1,000 people per square mile. The UA will also include adjacent block groups and blocks with at least 500 people per square mile. A UA consists of all or part of one or more incorporated places and/or census designated places, and may include additional territory outside of any place. (67 FR 11663)) Maps of UAs are published after each decennial census, the most recent maps reflect the results of the 2010 census. The current MS4 permit requires implementation of the six minimum control measures throughout the municipality with some additional or alternate measures within the UA portion of the MS4. These six minimum measures are explained later in this document.

The impaired segments in the Norwalk Estuary are located within the City of Norwalk and the Town of Westport, CT. Both municipalities have designated urban areas, as defined by the U.S. Census Bureau, and are required to comply with the General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems (MS4 permit) issued by CT DEEP (Figure 5). This general permit is only applicable to municipalities that are identified in Appendix A of the MS4 permit that contain designated urban areas and discharge stormwater via a separate storm sewer system to surface waters of the State. The permit requires municipalities to develop a Stormwater Management Plan (SMP) to reduce the discharge of pollutants as well as protect water quality. The MS4 permit is discussed further in the "TMDL Implementation Guidance" section of the core TMDL document. Additional information regarding stormwater management and the MS4 permit can be obtained on CTDEEP's website www.ct.gov/deep/stormwater.

None of the sampled MS4 outfall locations in Westport discharge into this estuary. Norwalk has sampled MS4 outfalls for E. coli bacteria in the watershed discharging directly to the shoreline of LIS or indirectly through the Norwalk River (Table 7). Although the results cannot be compared to the water quality standard as E. coli is the wrong indicator species for saltwater segments, high counts were detected.

Figure 5: MS4 areas near the Norwalk Estuary

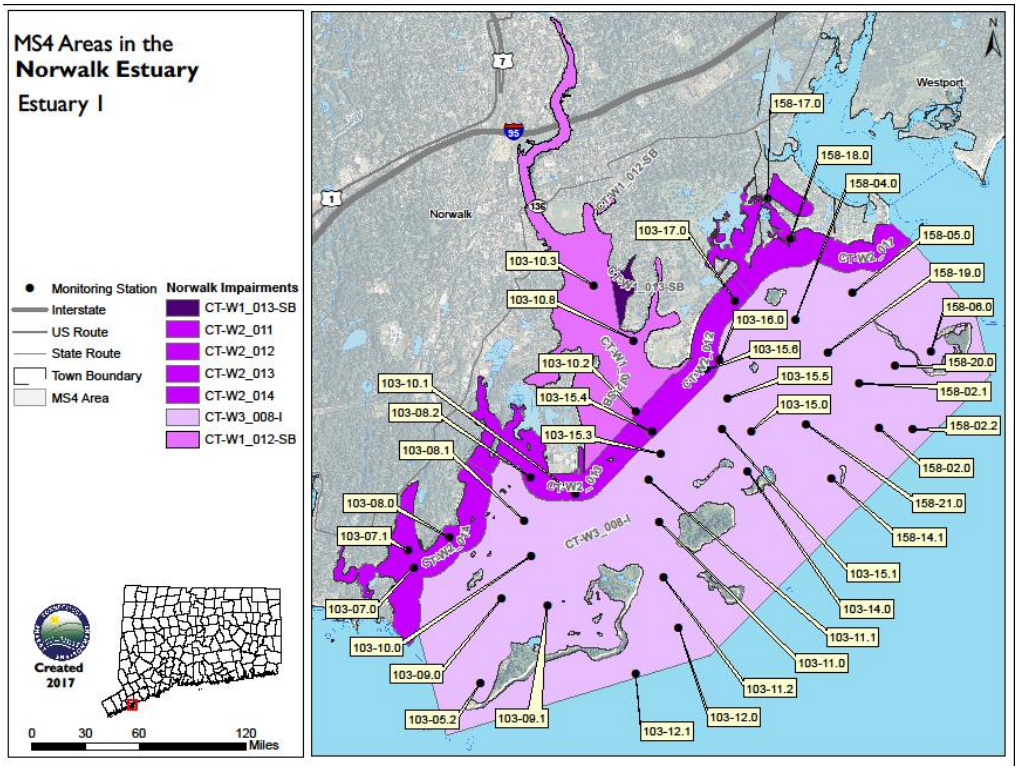


Table 7: List of MS4 sample locations and *E. coli* (colonies/100 mL) sample results reported by the City of Norwalk for the MS4 permit (GSM000024). The results cannot be compared to the water quality standard as *E. coli* is the wrong indicator species for saltwater segments.

Town	Location	Receiving Waters	Sample Date	Result
Norwalk	Day & Concord (catch basin)	Norwalk River	2/17/2006	111
Norwalk	Day & Concord (manhole)	Norwalk River	2/17/2006	980
Norwalk	Merritt Street (Catch Basin)	Norwalk River	2/17/2006	214
Norwalk	Merritt Street (Manhole)	Norwalk River	2/17/2006	326
Norwalk	Raymond St (catch basin)	Norwalk River	2/17/2006	205
Norwalk	Raymond St (manhole)	Norwalk River	2/17/2006	5
Norwalk	Total Marina outfall	Norwalk River	2/17/2006	24
Norwalk	Total Marina surface depression	Norwalk River	2/17/2006	1
Norwalk	Woodland (catch basin)		2/17/2006	59
Norwalk	Woodland (manhole)		2/17/2006	276
Norwalk	Day & Concord (catch basin)	Norwalk River	4/24/2006	>2,419.6
Norwalk	Day & Concord (manhole)	Norwalk River	4/24/2006	>2,419.6
Norwalk	Merritt Street (Catch Basin)	Norwalk River	4/24/2006	914
Norwalk	Merritt Street (Manhole)	Norwalk River	4/24/2006	1,733
Norwalk	Raymond St (manhole)	Norwalk River	4/24/2006	1,414
Norwalk	Woodland (catch basin)		4/24/2006	1,511
Norwalk	Woodland (manhole)		4/24/2006	1,033
Norwalk	Day & Concord (catch basin)	Norwalk River	5/15/2006	82
Norwalk	Day & Concord (manhole)	Norwalk River	5/15/2006	>2,419.6
Norwalk	Merritt Street (Catch Basin)	Norwalk River	5/15/2006	>2,419.6
Norwalk	Merritt Street (Manhole)	Norwalk River	5/15/2006	2,420
Norwalk	Raymond St (manhole)	Norwalk River	5/15/2006	1,414
Norwalk	Total Marina (catch basin)	Norwalk River	5/15/2006	1
Norwalk	Total Marina (smaller outfall)	Norwalk River	5/15/2006	1
Norwalk	Woodland (catch basin)		5/15/2006	830
Norwalk	Woodland (manhole)		5/15/2006	1,553
Norwalk	NR0.3	Norwalk River	6/27/2007	390

Town	Location	Receiving Waters	Sample Date	Result
Norwalk	NR0.4	Norwalk River	6/27/2007	3,300
Norwalk	NR0.5	Norwalk River	6/27/2007	310
Norwalk	NR1.1	Norwalk River	6/27/2007	190
Norwalk	NR1.2	Norwalk River	6/27/2007	730
Norwalk	NR0.3	Norwalk River	7/11/2007	50
Norwalk	NR0.4	Norwalk River	7/11/2007	50
Norwalk	NR0.5	Norwalk River	7/11/2007	330
Norwalk	NR1.2	Norwalk River	7/11/2007	1,200
Norwalk	NR1.1	Norwalk River	7/11/2007	0
Norwalk	NR0.3	Norwalk River	7/19/2007	2,600
Norwalk	NR0.4	Norwalk River	7/19/2007	300
Norwalk	NR0.5	Norwalk River	7/19/2007	310
Norwalk	NR1.2	Norwalk River	7/19/2007	380
Norwalk	NR0.3	Norwalk River	7/25/2007	90
Norwalk	NR0.4	Norwalk River	7/25/2007	60
Norwalk	NR0.5	Norwalk River	7/25/2007	150
Norwalk	NR1.1	Norwalk River	7/25/2007	120
Norwalk	NR1.2	Norwalk River	7/25/2007	1,800
Norwalk	Main Street/Wall St	Norwalk River	10/27/2016	700
Norwalk	School St		10/27/2016	4,900
Norwalk	Medical Center	Norwalk River	10/27/2016	7,500
Norwalk	New Canaan Ave	Norwalk River	10/27/2016	2,000
Norwalk	Perry Avenue		10/27/2016	100
Norwalk	Linden Street		10/27/2016	2,400

Publicly Owned Treatment Works

The Norwalk Water Pollution Control Facility (CT0101249) is located on the Norwalk River on South Smith Street and has the potential to impact the shellfish growing waters in the Norwalk Estuary (Norwalk, 2013). According to the 2013 Norwalk Estuary Report, during 2013 there were 18 reported collection system bypasses in Norwalk. Most of these had no impact on shellfish growing areas in Norwalk, and none of them resulted in a closure. Bacteria data from the effluent of the Norwalk Water Pollution Control Facility (WPCF) are included in Table 8a and table 8b. The plant did not exceed its permit limits for fecal coliform but exceeded enterococci maximum daily limit once.

Table 8a: Norwalk Water Pollution Control Facility (WPCF) Fecal coliform (colonies/100 mL) discharging to the Norwalk Estuary

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean
City of Norwalk	CT010124	Norwalk River	10/31/2015	5
City of Norwalk	CT010124	Norwalk River	11/30/2015	4
City of Norwalk	CT010124	Norwalk River	12/31/2015	2
City of Norwalk	CT010124	Norwalk River	1/31/2016	2
City of Norwalk	CT010124	Norwalk River	2/29/2016	2
City of Norwalk	CT010124	Norwalk River	3/31/2016	2
City of Norwalk	CT010124	Norwalk River	4/30/2016	2
City of Norwalk	CT010124	Norwalk River	5/31/2016	3
City of Norwalk	CT010124	Norwalk River	6/30/2016	6
City of Norwalk	CT010124	Norwalk River	7/31/2016	4
City of Norwalk	CT010124	Norwalk River	8/31/2016	20
City of Norwalk	CT010124	Norwalk River	9/30/2016	15
City of Norwalk	CT010124	Norwalk River	10/31/2016	6
City of Norwalk	CT010124	Norwalk River	11/30/2016	3
City of Norwalk	CT010124	Norwalk River	12/31/2016	2
City of Norwalk	CT010124	Norwalk River	1/31/2017	2
City of Norwalk	CT010124	Norwalk River	2/28/2017	2
City of Norwalk	CT010124	Norwalk River	3/31/2017	2
City of Norwalk	CT010124	Norwalk River	4/30/2017	3
City of Norwalk	CT010124	Norwalk River	5/31/2017	3
City of Norwalk	CT010124	Norwalk River	6/30/2017	3
City of Norwalk	CT010124	Norwalk River	7/31/2017	2
City of Norwalk	CT010124	Norwalk River	8/31/2017	4
30-Day Geometric Mean Permit Limit = 88 colonies/100 mL				

Table 8b: Norwalk Water Pollution Control Facility (WPCF) Enterococci data (colonies/100 mL) discharging to the Norwalk Estuary

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean	Maximum
City of Norwalk	CT010124	Norwalk River	10/31/2015	18	63
City of Norwalk	CT010124	Norwalk River	11/30/2015	12	52
City of Norwalk	CT010124	Norwalk River	12/31/2015	12	30
City of Norwalk	CT010124	Norwalk River	01/31/2016	13	20
City of Norwalk	CT010124	Norwalk River	02/29/2016	10	10
City of Norwalk	CT010124	Norwalk River	03/31/2016	10	10
City of Norwalk	CT010124	Norwalk River	04/30/2016	12	20
City of Norwalk	CT010124	Norwalk River	05/31/2016	11	20
City of Norwalk	CT010124	Norwalk River	06/30/2016	12	30
City of Norwalk	CT010124	Norwalk River	07/31/2016	15	283
City of Norwalk	CT010124	Norwalk River	08/31/2016	27	106

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean	Maximum
City of Norwalk	CT010124	Norwalk River	09/30/2016	12	61
City of Norwalk	CT010124	Norwalk River	10/31/2016	13	20
City of Norwalk	CT010124	Norwalk River	11/30/2016	11	20
City of Norwalk	CT010124	Norwalk River	12/31/2016	11	20
City of Norwalk	CT010124	Norwalk River	01/31/2017	13	20
City of Norwalk	CT010124	Norwalk River	02/28/2017	14	121
City of Norwalk	CT010124	Norwalk River	03/31/2017	10	10
City of Norwalk	CT010124	Norwalk River	04/30/2017	29	9208
City of Norwalk	CT010124	Norwalk River	05/31/2017	11	20
City of Norwalk	CT010124	Norwalk River	06/30/2017	10	10
City of Norwalk	CT010124	Norwalk River	07/31/2017	11	20
City of Norwalk	CT010124	Norwalk River	08/31/2017	20	75
30-Day Geometric Mean Permit Limit = 35 colonies/100 mL					
Maximum Daily Permit Limit = 500 colonies/100 mL					

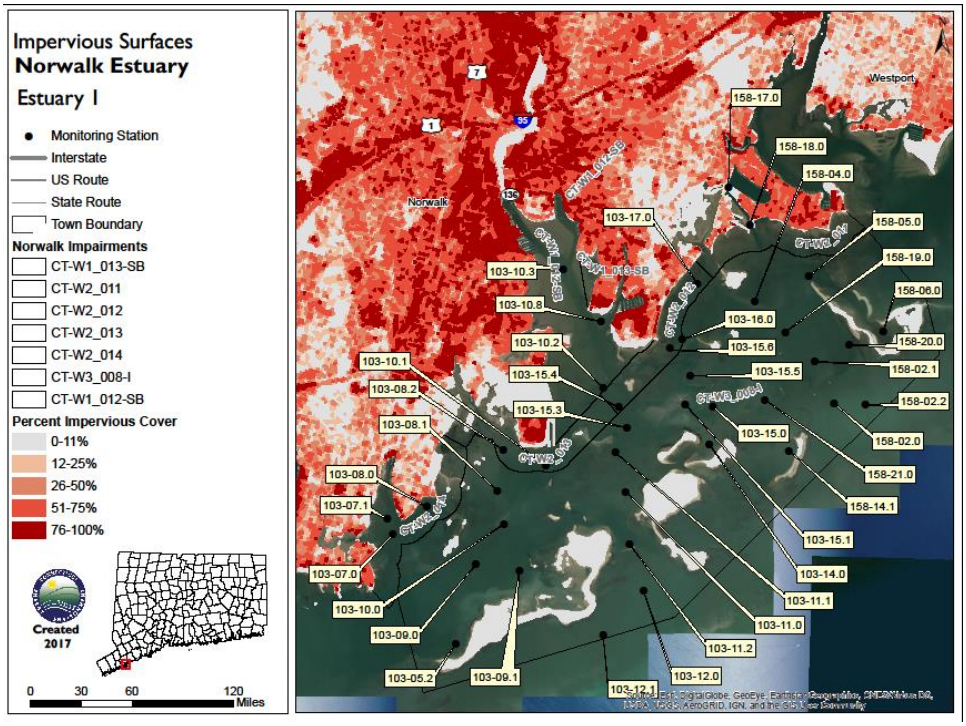
Non-point Sources

Non-point source (NPS) pollution comes from many diffuse sources and is more difficult to identify and control. NPS pollution is often associated with certain land-use practices. Examples of NPS that can contribute bacteria to surface waters include stormwater runoff, illicit discharges, insufficient septic systems, pet and wildlife waste, agriculture, and contact recreation (swimming or wading). With the waters of the Norwalk Estuary being tidally influenced, many bacterial sources that appear to be downstream of the impaired segment may be also affecting the water quality in upstream segments. Potential sources of NPS to the impaired segments in the Norwalk Estuary are described below.

Stormwater Runoff from Developed Areas

The City of Norwalk and the Town of Westport are heavily developed. Impervious surfaces, or surface areas such as roofs and roads that force water to run off land surfaces rather than infiltrate soil, often characterize developed areas. Studies have shown a link between the amount of impervious area in a watershed and water quality conditions. In one study, researchers correlated the amount of fecal coliform to the percentage of land with impervious cover in a watershed (Mallin *et al.,* 2000). While all levels of IC can contribute stormwater to streams, it is important to note that land with greater than 12% IC is likely to be contributing enough stormwater to streams to have a negative impact on water quality (CWP, 2003). Towns should aim to make stormwater improvements in areas with IC greater than 12% in an effort to reduce the amount of stormwater pollution reaching surface waters which will protect and improve water quality. For more information please refer to the town factsheets on our web site, scroll down to access the map or pulldown list (www.ct.gov/deep/cwp/view.asp?A=2719&Q=567336). According to the 2013 Norwalk Estuary Report, commercial and residential land use has increased total impervious cover along coastal regions of Norwalk, which has increased stormwater runoff to the estuary. Coastal land bordering the Norwalk Estuary in Norwalk and Westport exceeds 12% impervious surfaces (Figure 6). Some areas in the City of Norwalk exceeds 76% impervious surfaces. As such, stormwater runoff from these developed areas are likely contributing bacteria to the Norwalk Estuary.

Figure 6: Impervious cover (%) for Norwalk and Westport, CT



Illicit Discharges and Insufficient Septic Systems

As shown in Figure 4, the majority of Norwalk and Westport rely on a municipal sanitary sewer system. Sewer system leaks and other illicit discharges can contribute bacteria to nearby surface waters.

A portion of the watershed, particularly near Segments 3 - 6, also relies on onsite wastewater treatment systems, such as septic systems. Properly managed septic systems and leach fields have the ability to effectively remove bacteria from waste. If systems are not maintained, waste will not be adequately treated and may result in bacteria reaching nearby surface and ground water. In Connecticut, local health directors or health districts are responsible for investigating and issuing orders to abate insufficient or failing septic systems within their jurisdiction. The City of Norwalk has a full-time health director www.norwalkct.org/index.aspx?nid=676. Westport does not have a specific health director and is part of the Westport-Weston health district (www.wwhd.org/).

Wildlife and Domestic Animal Waste

Wildlife, including waterfowl, and domestic animals within the municipalities of Norwalk and Westport, including those present in the estuary, represent another potential source of bacteria to the impaired waterbodies. Elevated bacteria levels due solely to a natural population of wildlife are not subject to the WQS. However, any exacerbation of wildlife population sizes or residency times influenced by human activities is subject to the CT WQS and TMDL provisions. Multiple locations of concentrated migratory waterfowl have been identified throughout the Norwalk Estuary, including within Segment 6 (CT-W3_008-I) near the Norwalk Islands and along the shoreline (Figure 4). With the construction of roads and drainage systems, wastes from these waterfowl may no longer be retained on the landscape, but instead may be conveyed via stormwater to the nearest surface waterbody. As such, physical land alterations can exacerbate the impact of natural sources on water quality (USEPA, 2001).

Shorehaven Golf Course is located in the City of Norwalk near Segment 1 (CT-W1_013-SB), Segment 2 (CT-W2_011, Segment 3 (CT-W2_012) and Segment 7 (CT-W1_012-SB) Geese and other waterfowl are known to congregate in open areas, including recreational fields, agricultural crop fields, and golf courses. In addition to creating a nuisance, large numbers of geese can create unsanitary conditions on the grassed areas and cause water quality problems due to bacterial contamination associated with their droppings. Large populations of geese can also lead to habitat destruction as a result of overgrazing on wetland and riparian plants.

As indicated previously, portions of Norwalk and Westport near the estuary are heavily developed with commercial and residential properties. As such, waste from domestic animals, such as dogs, may also be contributing to bacteria concentrations in these impaired segments in the Norwalk Estuary.

Marinas

As noted previously, multiple marinas are located within the Norwalk Estuary (Figure 4 and Table 5). Marinas are located at the water's edge, and if no measures are taken to reduce pollutants, including buffering, pollutants can be transported via runoff from parking lots and hull maintenance areas directly into the marina basin. Common pollutants from marinas include bacteria and nutrients from stormwater runoff, solid and liquid materials used in boat maintenance and cleaning, fuel and oil, sewage from public restrooms and boat pump-outs, fish waste, and turbidity from boating activities. The use of pump out boats and facilities dramatically reduce bacteria loading from boats. There is a pump-out boat operating in the waters of southwestern Connecticut and multiple marinas with pump-out facilities. The CT DEEP has information on regional pump-out boats and facilities at its website, www.ct.gov/deep/pumpoutdirectory. The service is free and eliminates the possibility of vessels dumping raw wastes into Long Island Sound, which is prohibited by CT Water Quality Standards number 24, "the discharge of sewage from any vessel to any water is prohibited."

All Connecticut coastal waters are designated "No Discharge Areas" (NDAs) prohibiting the discharge of sewage, treated or untreated. Eliminating the release of all sewage from boats, will result in further reductions of human fecal waste discharge and, therefore, reductions in nutrient loading and potential human exposure to bacterial and viral pathogens in swimming areas, shellfish beds and other environmentally sensitive aquatic habitats. For more information please see our web site www.ct.gov/deep/cwp/view.asp?a=2705&q=399328&deepNav_GID=1620 .

Recreation

People coming in direct contact with surface water presents another potential source of bacterial contamination. Microbial source tracking (MST) surveys conducted in New Hampshire have shown humans to be a source of bacterial contamination at beaches (Jones, 2008). Since there is a designated beach (Marvin Beach) in the impaired Segment 1 (CT-W1_013-SB) in Norwalk Harbor, it is probable that some bacterial contamination can be attributed to human activities at Marvin Beach.

Additional Sources

There may be other sources not listed here or identified in Figure 4 that contribute to the observed water quality impairments in the Norwalk Estuary. Further monitoring and investigation will confirm the listed sources and discover additional ones. More detailed evaluation of potential sources is expected to become available as activities are conducted to implement this TMDL.

CURRENT MANAGEMENT ACTIVITIES

The City of Norwalk and the Town of Westport have developed and implemented programs to protect water quality from bacterial contamination. In addition, the National Shellfish Sanitation Program (NSSP) has multiple requirements for the protection and evaluation of shellfish growing areas. More information about this program is provided below and available online: www.fda.gov/food/guidanceregulation/federalstatefoodprograms/ucm2006754.htm.

The NSSP requires the completion of a sanitary survey to determine acceptable and unacceptable growing areas, and to accurately classify a growing area as Approved, Conditionally Approved, Restricted, Conditionally Restricted, or Prohibited. A sanitary survey is an in-depth evaluation of all environmental factors impacting water quality in a shellfish growing area. Environmental factors include both actual and potential pollutant sources, whether natural or man-made, along with meteorological and hydrographic characteristics of the growing area. The principal components of a sanitary survey are: (1) identification and evaluation of pollutant sources, (2) evaluation of meteorological factors, (3) evaluation of hydrographic factors affecting the distribution of pollutants, and (4) assessment of water quality.

The sanitary survey includes data and results from the following:

1. Shoreline survey;
2. Survey of the bacteriological quality of the water;
3. Evaluation of meteorological, hydrodynamic, and geographic characteristics of the growing area;
4. Analysis of shoreline survey, bacteriological water quality, and meteorological, hydrodynamic, and geographic characteristics; and
5. Determination of the appropriate growing area classification.

Maintaining updated sanitary survey records consists primarily of routinely evaluating major pollutant sources, collecting water quality data from sampling stations under the selected NSSP water quality monitoring strategy, and analyzing the data to ensure that the classification continues to represent current sanitary conditions in the growing area. The entire sanitary survey process must be repeated every 12 years. In the interim, the sanitary quality of each growing area must be reviewed as often as necessary to ensure appropriate classification. Certain sanitary survey components are required by the Model Ordinance to be updated annually and triennially.

The growing area classification and supporting data from the sanitary survey shall be reviewed at least every three years. As required by the NSSP, this triennial re-evaluation shall include:

1. A review of water quality sampling results;
2. Documentation of any new pollutant sources and evaluation of their impact on the growing area;
3. Re-evaluation of all pollutant sources, including sources previously identified in the sanitary survey, as necessary to fully evaluate any changes in the sanitary conditions of the growing area. Re-evaluation may or may not include a site visit;
4. A comprehensive report analyzing the sanitary survey data and determining whether the existing growing area classification is accurate or requires revision; and
5. Reclassification of the growing area if re-evaluation determines that conditions for classification have changed based on data collected during the triennial review.

NSSP also requires that the sanitary survey be updated annually to reflect changes in conditions in the growing area. The annual re-evaluation shall include:

1. Field observation of pollutant sources during drive-through surveys, sample collections, or other information sources;
2. Addition and review of current year's water quality sampling results to a database collected in accordance with the bacteriological standards and sample collection required;
3. Review of available inspection reports and effluent samples collected from pollutant sources;
4. Review of available performance standards for various types of discharges impacting the growing area; and
5. A brief report documenting annual re-evaluation findings.

The most recent annual re-evaluation for the Shellfish Growing Waters in the City of Norwalk was published in 2014 using data collected from 2011-2013 (Norwalk, 2013). According to this report, no growing areas are candidates for re-classification. The report also notes remediation efforts initiated by the City of Norwalk. In 2012 the City of Norwalk installed new equipment to improve water treatment at the WPCF.

Other efforts have been taken by Norwalk and Westport to reduce bacteria to its surface waters. There are multiple groups, both public and private, that work to improve water quality in the estuary. For more information please refer to these organizations and documents pertaining to the area.

Harbor Watch: www.harborwatch.org
Norwalk Shellfish Commission: norwalkct.org/1064/Shellfish-Commission
Norwalk Harbor Management Commission: norwalkct.org/1038/Harbor-Management-Commission
www.norwalkct.org/DocumentCenter/View/13498/Water-Quality-Bacterial-Analysis--Final-Report-6218
www.norwalkct.org/DocumentCenter/View/13499/Yankee-Doodle-Bridge-Stormwater--Report_Final-6218
Norwalk Water Quality Committee: www.norwalkct.org/Archive.aspx?AMID=103
Norwalk Harbor Management Plan: norwalkct.org/963/Harbor-Management-Plan
Norwalk Plan of Conservation and Development: www.norwalkct.org/DocumentCenter/View/389/Plan-of-Conservation-and-Development?bidId

As indicated previously, Norwalk and Westport are regulated under the MS4 program. The MS4 General Permit is required for any municipality with urbanized areas that initiates, creates, originates or maintains any discharge of stormwater from a storm sewer system to waters of the State. The MS4 permit requires towns to design a Stormwater Management Plan (SMP) that reduces the discharge of stormwater pollutants to improve water quality. The plan must address the following six minimum measures:

1. Public Education and Outreach.
2. Public Involvement/Participation.
3. Illicit discharge detection and elimination.
4. Construction site stormwater runoff control.
5. Post-construction stormwater management in the new development and redevelopment.
6. Pollution prevention/good housekeeping for municipal operations.

Each municipality is also required to submit an annual update outlining steps taken to meet the six minimum measures. The most recent updates that address stormwater contamination in the watershed are summarized in Tables 9 and 10.

Table 9: Summary of MS4 requirement updates from Norwalk, CT (Permit # GSM000024)

Minimum Measure	Norwalk Annual Report (2015)
Public Outreach and Education	1) The City of Norwalk works in partnership with local businesses and community organizations such as Norwalk River Watershed Initiative, Maritime Aquarium and Soundkeeper to provide public education and outreach. 2) Norwalk Conservation office website has information on stormwater impacts and low impact development. 3) There is educational material available on the City's website about stormdrains, septic systems, pet waste, wetland planting and buffers
Public Involvement and Participation	1) Sponsored annual DPW Open House for public participation. 2) Continue working with the Norwalk River Watershed Initiative, Maritime Aquarium and Soundkeeper to provide public participation and involvement. 3) Boy Scouts volunteers have applied stenciling to catch basins
	1) The City continues to work on mapping storm drainage system 2) The Harbor Watch program of Earthwatch has assisted the City with illicit discharge detection, multiple sources of leaking sewage were detected and repairs have been done by the City and by individual homeowners
Construction Site Stormwater Runoff Control	1) The Planning Commission continues to update the Plan of Conservation & Development as required by State law. 2) The Planning and Zoning Department continuously mandates the submissions of erosion and sedimentation control and stormwater control measures for all construction activities. Staff monitors to assure correct installation and maintenance of all controls
Post Construction Stormwater Management	The Planning and Zoning Department requires submittal of plans and continues to require standards for removal of oil, grit and other material from stormwater.
Pollution Prevention and Good Housekeeping	1) Street sweeping program swept 325 lane miles of streets annually. 2) City owned vacuum trucks cleaned 1,335 tons of debris from storm drain pipes and catch basins. 3) City owned closed circuit television inspects pipes 4) Public Works routinely clears debris from 17 critical inlets and outlets before major storms, primarily to prevent flooding 5) City employees a Litter ambassador during the warmer months to clean up, litter and debris from sidewalks

Table 10: Summary of MS4 requirement updates from Westport, CT (Permit # GSM000026)

Minimum Measure	Westport Annual Report Update (2014)
Public Outreach and Education	1) Utilizes town website to post educational material and information about the Phase II program. 2) Posted educational information about the Phase II program on bulletin board outside Public Works office.
Public Involvement and Participation	The Town has asked for volunteers to assist in education and outreach
Illicit Discharge Detection and Elimination	1) Mapped all outfalls greater than 12". 2) Working on an illicit discharge ordinance, as well as sediment and erosion control ordinance and a stormwater ordinance. They are having trouble with inability to gain access to private property to test and maintain drainage structures
Construction Site Stormwater Runoff Control	1) Reestablished the Construction Site Monitoring program, the Town filled a part-time erosion and sediment control inspector position. 2) Incorporated sediment and erosion control inspections and enforcement into job responsibilities of Conservation and Zoning enforcement officers.
Post Construction Stormwater management	1) Insists all development and redevelopment projects consider water quality in their design. 2) The town encourages the use of rain gardens and bio-filtration of stormwater
Pollution Prevention and Good Housekeeping	1) All town-owned streets are swept annually and high traffic areas are swept weekly. 2) Reduced the amount of sand used on town roads during winter storms.

RECOMMENDED NEXT STEPS

Norwalk and Westport have developed and implemented programs to protect water quality from bacterial contamination. Future mitigation activities are necessary to ensure the long-term protection of Segments 1 – 7 in the Norwalk Estuary and have been prioritized below. The 2011 Norwalk River Watershed Based Plan briefly discusses shellfish impairments within the estuary, and specifies current management activities and recommended next steps pertaining to impaired freshwater segments that directly affect the Norwalk Estuary (norwalkriver.org/wp-content/uploads/2018/11/NorwalkNorwalk_finalWBP_8-2011_take2_reduced.pdf).

1) Continue monitoring of permitted sources.

There are 28 permitted sources in the Norwalk Estuary, some of which have shown historically high bacteria concentrations. Further monitoring will provide information essential to better locate, understand, and reduce pollution sources. If any current monitoring is not done with appropriate bacterial indicator based on the receiving water, then a recommended change during the next permit reissuance is to include the

appropriate indicator species. If facility monitoring indicates elevated bacteria, then implementation of permit is required, and any voluntary measures to identify and reduce sources of bacterial contamination at the facility are also recommended. Regular monitoring should be established for all permitted sources to ensure compliance with permit requirements and to determine if current requirements are adequate or if additional measures are necessary for water quality protection.

The General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), effective July 1, 2017 requires some additional control measures for outfalls that discharge into impaired waters with or without a TMDL. In addition, waterbodies that are subject to an approved TMDL should be given priority when investigating illicit discharges. Section 6(k) of the MS4 Permit requires a municipality that discharges stormwater into impaired waters with or without a TMDL to perform monitoring based on the pollutant of concern. The sample shall be analyzed for the pollutants identified as the cause of the impairment. If phosphorus, nitrogen, bacteria or mercury are the stormwater pollutants of concern, control measures and outfall monitoring is required to investigate and target potential sources of these pollutants. Additional BMPs may be required to address areas with sample results showing elevated levels of the pollutant(s) of concern. In the case of bacteria related impairments municipal BMPs could include: implementation or improvement to existing nuisance wildlife programs, septic system monitoring programs, any additional measures that can be added to the required illicit discharge detection and elimination (IDDE) programs, and increased street sweeping above basic permit requirements. Any non-MS4 municipalities can implement these same types of initiatives in effort to reduce bacteria source loading to impaired waterways. For all other impairments Section 6(i)(1)C requires monitoring for turbidity at the outfall and immediately upstream of the outfall. Implementation of control measures is required if the turbidity at the outfall is 5 or more NTUs greater than the turbidity upstream. The permittee shall implement BMPs as necessary to achieve the Waste Load Allocation, Load Allocation or Water Quality Targets specified within the TMDL. Please see the current MS4 permit for information www.ct.gov/deep/municipalstormwater.

Any facilities regulated by CTDEEP that discharge non-MS4 regulated stormwater should update their Pollution Prevention Plan to reflect BMPs that can reduce bacteria loading to the receiving waterway. These BMPs could include nuisance wildlife control programs and any installations that increase surface infiltration to reduce overall stormwater volumes.

Tables 11 and 12 detail the appropriate bacteria criteria for use as waste load allocations established by this TMDL for use as water quality targets by permittees as permits are renewed and updated, within the Norwalk Estuary.

Table 11. Bacteria (Enterococci) TMDLs, WLAs, and LAs for Recreational Uses.

		Instantaneous Enterococcus (#/100mL)				Geometric Mean Enterococcus (#/100mL)	
Class	**Bacteria Source**	**WLA[6]**		**LA[6]**		**WLA[6]**	**LA[6]**
	Recreational Use	**1**	**2**	**1**	**3**	**All**	**All**
SA[5]	Illicit sewer connection	0	0			0	
	Leaking sewer lines	0	0			0	
	Stormwater (MS4s)	104[7]	500[7]			35[7]	
	Stormwater (non-MS4)			104[7]	500[7]		35[7]
	Wildlife direct discharge			104[7]	500[7]		35[7]
	Human or domestic animal direct discharge[3]			104	500		35
SB[5]	Non-Stormwater NPDES	104	500			35	
	CSOs	104	500			35	
	SSOs	0	0			0	
	OBDs[4]	0	0			0	
	Illicit sewer connection	0	0			0	
	Leaking sewer lines	0	0			0	
	Stormwater (MS4s)	104[7]	500[7]			35[7]	
	Stormwater (non-MS4)			104[7]	500[7]		35[7]
	Wildlife direct discharge			104[7]	500[7]		35[7]
	Human or domestic animal direct discharge[3]			104	500		35

(1) **Designated Swimming.** 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 Protections and the Department of Public Health. May 1989. Revised April 2003 and updated December 2008.

(2) **Non-Designated Swimming.** 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.

(3) **All Other Recreational Uses.**

(4) 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. (Class B surface waters located north of Interstate Highway I-95 and downstream of a sewage treatment plant providing seasonal disinfection May 1 through October 1, as authorized by the Commissioner.)

(5) Human direct discharge = swimmers

(6) Unless otherwise required by statute or regulation, compliance with this TMDL will be based on ambient concentrations and not end-of-pipe bacteria concentrations

(7) Replace numeric value with “natural levels” if only source is naturally occurring wildlife. Natural is defined as the biological, chemical and physical conditions and communities that occur within the environment which are unaffected or minimally affected by human influences (CTDEEP 2011). Sections 2.2.2 and 6.2.7 of this Core Document deal with BMPs and delineating type of wildlife inputs.

Table 12: Bacteria (Fecal Coliform) TMDLs WLAs, and LAs for Shellfish Harvesting Areas.

		Geometric Mean Fecal coliform (#/100mL)[4]		90% less than Fecal Coliform (#/100mL)[4]	
Class	**Bacteria Source[1]**	**WLA[5]**	**LA[5]**	**WLA[5]**	**LA[5]**
SA Direct Consumption	CSOs	14		31	
	SSOs	0		0	
	OBDs[3]	0		0	
	Illicit sewer connection	0		0	
	Leaking sewer lines	0		0	
	Stormwater (MS4s)	14[6]		31[6]	
	Stormwater (non-MS4)		14[6]		31[6]
	Wildlife direct discharge		14[6]		31[6]
	Human or domestic animal direct discharge[2]		14		31
SB Indirect Consumption	Non-Stormwater NPDES	88		260	
	CSOs	88		260	
	SSOs	0		0	
	OBDs[3]	0		0	
	Illicit sewer connection	0		0	
	Leaking sewer lines	0		0	
	Stormwater (MS4s)	88[6]		260[6]	
	Stormwater (non-MS4)		88[6]		260[6]
	Wildlife direct discharge		88[6]		260[6]
	Human or domestic animal direct discharge[2]		88		260

(1) Criteria are based on utilizing the mTec method as specified in the U.S. Food and Drug Administration National Shellfish Sanitation Program-Model Ordinance (NSSP-MO) document *Guide for the Control of Molluscan Shellfish 2007.*

(2) Human direct discharge = swimmers

(3) All coastal and inland waters in Connecticut are designated as No Discharge Areas for Overboard Discharges (OBDs) from marine vessels with Marine Sanitation Devices.

(4) Adverse Condition Allocations apply to areas affected by Point Sources. Adverse Condition or Random Sampling Allocations apply to areas affected by Nonpoint Sources. Adverse condition is defined as "... a State or situation caused by meteorological, hydrological or seasonal events or point source discharges that has historically resulted in elevated [bacteria] levels in the particular growing area." USFDA 2005

(5) Unless otherwise required by statute or regulation, compliance with this TMDL will be based on ambient concentrations and not end-of-pipe bacteria concentrations

(6) Replace numeric value with "natural levels" if only source is naturally occurring wildlife. Natural is defined as the biological, chemical and physical conditions and communities that occur within the environment which are unaffected or minimally affected by human influences (CTDEEP 2011). Sections 2.2.2 and 6.2.7 of this Core Document deal with BMPs and delineating type of wildlife inputs.

2) Identify areas in Norwalk and Westport to implement Best Management Practices (BMPs) to control stormwater runoff.

As noted previously, most of Norwalk and Westport near the Norwalk Estuary have impervious cover greater than 16% and are urban areas regulated under the MS4 program. As such, stormwater runoff is likely contributing bacteria to the Norwalk Estuary. To identify areas that are contributing bacteria to the impaired segments, municipalities should conduct wet-weather sampling at stormwater outfalls that discharge directly to the impaired segments in Norwalk Estuary. To manage stormwater runoff, the towns should identify areas along the developed sections of the impaired segments to install BMPs designed to encourage stormwater to infiltrate the ground before entering the waterbodies. These BMPs would disconnect impervious areas and reduce pollutant loads to the estuary. More detailed information and BMP recommendations can be found in the core TMDL document.

3) Implement a program to evaluate the sanitary sewer system.

Most of Norwalk and Westport near the estuary rely on a municipal sewer system (Figure 4). It is important for Norwalk and Westport to develop a program to evaluate its sanitary sewer system and reduce leaks and overflows. This program should include periodic inspections of the sewer line.

4) Develop a system to monitor septic systems.

Although the majority of residents near the Norwalk Estuary rely on a municipal sanitary sewer system, some rely on septic systems. If not already in place, Norwalk and Westport should establish a program to ensure that existing septic systems are properly operated and maintained. For instance, communities can create an inventory of existing septic systems through mandatory inspections. Inspections help encourage proper maintenance and identify failed and sub-standard systems. Policies that govern the eventual replacement of the sub-standard systems within a reasonable timeframe could be adopted. Municipalities can also develop programs to assist citizens with the replacement and repair of older and failing systems.

5) Evaluate municipal education and outreach programs regarding animal waste.

Any education and outreach program should highlight the importance of not feeding waterfowl and wildlife and managing waste from horses, dogs, and other pets. Municipalities and residents can take measures to minimize waterfowl-related impacts by allowing tall, coarse vegetation to grow in riparian areas of impaired segments frequented by waterfowl. Waterfowl, especially grazers like geese, prefer easy access to water. Maintaining an uncut vegetated buffer along the shore will make the habitat less desirable to geese and encourage migration. In addition, any educational program should emphasize that feeding waterfowl, such as ducks, geese, and swans, may contribute to water quality impairments in the Norwalk Estuary and can harm human health and the environment. Animal wastes should be disposed of away from any waterbody or storm drain system. BMPs effective at reducing the impact of animal waste on water quality include installing signage, providing pet waste receptacles in high-use areas, enacting ordinances requiring the clean-up of pet waste, and targeting educational and outreach programs in problem areas.

6) Improve education and outreach programs regarding boats and marinas.

Marinas must comply with permit requirements that limit bacteria contribution to the Norwalk Estuary. Other programs, such as Connecticut's Clean Marina Program, may also be adopted by all marinas in the estuary to reduce bacteria contribution from non-point source pollution from marinas (www.ct.gov/deep/cleanmarina). The Clean Marina Program is a voluntary program that encourages inland and coastal marina operators to minimize pollution, and recognizes Connecticut marinas, boatyards, and yacht clubs that go above and beyond regulatory compliance as "Certified Clean Marinas." While the Clean Marina Program is not currently accepting new pledges or conducting recertifications, educational materials

are provided on the CT DEEP website. Marinas are encouraged to review and apply these recommendations at their facility, as appropriate, to minimize pollution from their site. All previously certified marinas receive a weatherproof Clean Marina Flag to fly at their facility and authorization to use the Clean Marina Program logo on company publications. CT DEEP recognized certified Clean Marinas through press releases, on its web page, and at public events. As a companion to the Clean Marina Program, the Clean Boater Program (www.ct.gov/deep/cwp/view.asp?a=2705&q=323526) encourages boaters to use clean boating techniques when operating and maintaining their boats

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BACTERIA DATA AND PERCENT REDUCTIONS TO MEET THE TMDL

Table 13: Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach) Bacteria Data

Waterbody ID: CT-W1_013-SB

Characteristics: Saltwater, Class SB, Commercial Shellfishing Harvesting, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Recreation (*enterococci bacteria)*

Water Quality Criteria for enterococci:

Geometric Mean: 35 colonies/100 mL

Single Sample: 104 colonies/100 mL (designated beach)

Percent Reduction to meet TMDL:

Geometric Mean: **34%**

Single Sample: **99%**

Data: 2004 – 2007; 2009 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach, CT-W1_013-SB) with annual geometric means calculated

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
Norwalk Harbor	Marvin Beach - Norwalk	5/20/2004	20	dry	24
Norwalk Harbor	Marvin Beach - Norwalk	5/26/2004	90	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/1/2004	134	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/2/2004	30	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/7/2004	85	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/14/2004	91	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/21/2004	238	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/22/2004	52	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/28/2004	1	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/6/2004	52	wet	
Norwalk Harbor	Marvin Beach - Norwalk	7/12/2004	1	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/19/2004	10	wet	
Norwalk Harbor	Marvin Beach - Norwalk	7/26/2004	1	wet	
Norwalk Harbor	Marvin Beach - Norwalk	8/2/2004	20	dry	
Norwalk Harbor	Marvin Beach - Norwalk	8/9/2004	30	dry	
Norwalk Harbor	Marvin Beach - Norwalk	8/17/2004	30	wet	
Norwalk Harbor	Marvin Beach - Norwalk	8/25/2004	30	dry	
Norwalk Harbor	Marvin Beach - Norwalk	8/30/2004	52	dry	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach, CT-W1_013-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
Norwalk Harbor	Marvin Beach - Norwalk	5/28/2005	1	dry	39
Norwalk Harbor	Marvin Beach - Norwalk	6/1/2005	1	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/6/2005	61	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/15/2005	10	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/20/2005	10	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/27/2005	390	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/28/2005	2651	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/29/2005	801	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/30/2005	**10111* (99%)**	wet	
Norwalk Harbor	Marvin Beach - Norwalk	7/5/2005	1	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/11/2005	10	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/18/2005	166	wet	
Norwalk Harbor	Marvin Beach - Norwalk	7/19/2005	96	wet	
Norwalk Harbor	Marvin Beach - Norwalk	7/25/2005	173	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/26/2005	1	dry	
Norwalk Harbor	Marvin Beach - Norwalk	8/1/2005	1	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/8/2005	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/15/2005	4352	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	8/16/2005	20	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/22/2005	41	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	8/29/2005	41	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	5/23/2006	51	dry**	**53* (34%)**
Norwalk Harbor	Marvin Beach - Norwalk	5/30/2006	41	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/7/2006	399	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/12/2006	97	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/20/2006	41	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/26/2006	299	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/27/2006	215	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	7/5/2006	74	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/10/2006	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/20/2006	63	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/24/2006	72	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/31/2006	30	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/8/2006	41	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/14/2006	21	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/21/2006	21	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	8/28/2006	10	wet**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach, CT-W1_013-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
Norwalk Harbor	Marvin Beach - Norwalk	5/22/2007	1	dry**	22
Norwalk Harbor	Marvin Beach - Norwalk	5/29/2007	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/5/2007	40	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/13/2007	52	wet	
Norwalk Harbor	Marvin Beach - Norwalk	6/18/2007	30	dry	
Norwalk Harbor	Marvin Beach - Norwalk	6/25/2007	74	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/9/2007	52	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/16/2007	1	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/20/2007	20	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/25/2007	120	dry	
Norwalk Harbor	Marvin Beach - Norwalk	7/31/2007	51	dry	
Norwalk Harbor	Marvin Beach - Norwalk	8/9/2007	142	wet	
Norwalk Harbor	Marvin Beach - Norwalk	8/13/2007	20	dry	
Norwalk Harbor	Marvin Beach - Norwalk	8/27/2007	10	dry	
Norwalk Harbor	Marvin Beach - Norwalk	5/16/2009	10	dry**	21
Norwalk Harbor	Marvin Beach - Norwalk	6/1/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/2/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/8/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/15/2009	226	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/16/2009	96	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/22/2009	20	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/29/2009	121	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/6/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/13/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/20/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/27/2009	10	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	8/3/2009	71	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	8/10/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/17/2009	20	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/24/2009	108	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	8/25/2009	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/31/2009	10	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach, CT-W1_013-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
Norwalk Harbor	Marvin Beach - Norwalk	5/24/2010	52	dry**	33
Norwalk Harbor	Marvin Beach - Norwalk	6/1/2010	187	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/2/2010	10	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/7/2010	74	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/14/2010	20	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	6/21/2010	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	6/28/2010	31	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/5/2010	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/13/2010	95	wet**	
Norwalk Harbor	Marvin Beach - Norwalk	7/19/2010	63	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	7/26/2010	63	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/2/2010	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/9/2010	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/16/2010	52	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/18/2010	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/24/2010	681	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/25/2010	10	dry**	
Norwalk Harbor	Marvin Beach - Norwalk	8/30/2010	30	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach, CT-W1_013-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
Norwalk Harbor	Marvin Beach - Norwalk	5/31/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	6/6/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	6/14/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	6/20/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	6/27/2011	41	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	7/5/2011	73	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	7/11/2011	63	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	7/18/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	7/25/2011	10	unknown	25
Norwalk Harbor	Marvin Beach - Norwalk	8/1/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/8/2011	205	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/9/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/17/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/22/2011	131	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/24/2011	10	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/30/2011	156	unknown	
Norwalk Harbor	Marvin Beach - Norwalk	8/31/2011	84	unknown	

Shaded cells indicate an exceedance of water quality criteria

**** Weather conditions for selected data from Hartford because local station (Stamford) had missing data**

***Indicates geometric mean and single sample values used to calculate the percent reduction**

Wet and dry weather geometric mean values for all monitoring stations on Segment 1: LIS WB Inner – Norwalk Harbor (Marvin Beach, CT-W1_013-SB)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
Norwalk Harbor	Marvin Beach - Norwalk	2004 - 2011	36	69	25	77	14

Shaded cells indicate an exceedance of water quality criteria

Weather conditions from rain gauge in Stamford, CT (with selected data taken from Hartford because local station had missing data)

Table 14: Segment 2: LIS WB Shore – Canfield Island Bacteria Data

Waterbody ID: CT-W2_011

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (f*ecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **23%**

Data: 2000 – 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Canfield Island (CT-W2_011) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-17.0	Bermuda Lagoon at "elbow"	2/16/2000	2	wet	4	15
158-17.0	Bermuda Lagoon at "elbow"	5/15/2000	2	wet		
158-17.0	Bermuda Lagoon at "elbow"	6/21/2000	2	dry		
158-17.0	Bermuda Lagoon at "elbow"	9/13/2000	36	wet		
158-17.0	Bermuda Lagoon at "elbow"	1/23/2001	2	dry	6	10
158-17.0	Bermuda Lagoon at "elbow"	2/7/2001	2	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/14/2001	14	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/28/2001	51	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/30/2001	4	dry		
158-17.0	Bermuda Lagoon at "elbow"	1/9/2002	14	dry	11	NA
158-17.0	Bermuda Lagoon at "elbow"	10/28/2002	8	wet		
158-17.0	Bermuda Lagoon at "elbow"	4/29/2003	2	dry	7	NA
158-17.0	Bermuda Lagoon at "elbow"	6/11/2003	18	dry		
158-17.0	Bermuda Lagoon at "elbow"	8/6/2003	18	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/19/2003	4	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/23/2004	6	wet	NA	NA
158-17.0	Bermuda Lagoon at "elbow"	8/16/2005	8	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Canfield Island (CT-W2_011) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-17.0	Bermuda Lagoon at "elbow"	8/11/2008	1	dry	6	**23**
158-17.0	Bermuda Lagoon at "elbow"	9/10/2008	4	wet		
158-17.0	Bermuda Lagoon at "elbow"	9/16/2008	65	wet		
158-17.0	Bermuda Lagoon at "elbow"	4/2/2009	1	dry	1	NA
158-17.0	Bermuda Lagoon at "elbow"	4/22/2009	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	6/10/2009	10	wet		
158-17.0	Bermuda Lagoon at "elbow"	6/29/2009	4	dry		
158-17.0	Bermuda Lagoon at "elbow"	7/28/2009	1	dry		
158-17.0	Bermuda Lagoon at "elbow"	8/3/2009	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/26/2009	1	dry		
158-17.0	Bermuda Lagoon at "elbow"	8/31/2009	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	9/15/2009	1	dry		
158-17.0	Bermuda Lagoon at "elbow"	11/16/2009	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	3/17/2010	1	wet	2	NA
158-17.0	Bermuda Lagoon at "elbow"	5/4/2010	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	5/19/2010	7	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/17/2010	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	8/25/2010	4	wet		
158-17.0	Bermuda Lagoon at "elbow"	9/16/2010	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	12/13/2010	4	wet		
158-17.0	Bermuda Lagoon at "elbow"	12/16/2010	1	wet		
158-17.0	Bermuda Lagoon at "elbow"	4/19/2011	1	wet	2	NA
158-17.0	Bermuda Lagoon at "elbow"	4/26/2011	1	dry		
158-17.0	Bermuda Lagoon at "elbow"	5/23/2011	5	wet		
158-17.0	Bermuda Lagoon at "elbow"	6/27/2011	1	dry		
158-17.0	Bermuda Lagoon at "elbow"	7/20/2011	3	wet		
158-18.0	entrance to Bermuda Lagoon	2/16/2000	4	wet	2	NA
158-18.0	entrance to Bermuda Lagoon	5/15/2000	2	wet		
158-18.0	entrance to Bermuda Lagoon	6/21/2000	2	dry		
158-18.0	entrance to Bermuda Lagoon	9/13/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Canfield Island (CT-W2_011) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-18.0	entrance to Bermuda Lagoon	1/23/2001	4	dry		
158-18.0	entrance to Bermuda Lagoon	2/7/2001	4	wet		
158-18.0	entrance to Bermuda Lagoon	8/14/2001	51	wet		
158-18.0	entrance to Bermuda Lagoon	8/15/2001	14	wet	12	19
158-18.0	entrance to Bermuda Lagoon	8/16/2001	18	dry		
158-18.0	entrance to Bermuda Lagoon	8/28/2001	50	wet		
158-18.0	entrance to Bermuda Lagoon	8/30/2001	4	dry		
158-18.0	entrance to Bermuda Lagoon	1/9/2002	18	dry		
158-18.0	entrance to Bermuda Lagoon	5/22/2002	2	dry	4	NA
158-18.0	entrance to Bermuda Lagoon	10/28/2002	2	wet		
158-18.0	entrance to Bermuda Lagoon	2/26/2003	2	wet		
158-18.0	entrance to Bermuda Lagoon	4/29/2003	2	dry		
158-18.0	entrance to Bermuda Lagoon	6/11/2003	14	dry	5	NA
158-18.0	entrance to Bermuda Lagoon	8/6/2003	22	wet		
158-18.0	entrance to Bermuda Lagoon	8/19/2003	6	wet		
158-18.0	entrance to Bermuda Lagoon	8/23/2004	6	wet	NA	NA
158-18.0	entrance to Bermuda Lagoon	8/16/2005	32	wet	NA	90
158-18.0	entrance to Bermuda Lagoon	9/6/2006	6	dry	NA	NA
158-18.0	entrance to Bermuda Lagoon	6/18/2007	14	wet		
158-18.0	entrance to Bermuda Lagoon	6/20/2007	9	dry		
158-18.0	entrance to Bermuda Lagoon	7/9/2007	1	dry	4	NA
158-18.0	entrance to Bermuda Lagoon	9/13/2007	8	wet		
158-18.0	entrance to Bermuda Lagoon	10/30/2007	4	dry		
158-18.0	entrance to Bermuda Lagoon	12/5/2007	2	wet		
158-18.0	entrance to Bermuda Lagoon	2/20/2008	1	wet		
158-18.0	entrance to Bermuda Lagoon	8/11/2008	1	dry		
158-18.0	entrance to Bermuda Lagoon	9/10/2008	4	wet	2	NA
158-18.0	entrance to Bermuda Lagoon	9/16/2008	4	wet		
158-18.0	entrance to Bermuda Lagoon	12/15/2008	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Canfield Island (CT-W2_011) with annual geometric means and reduction goals for sample

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-18.0	entrance to Bermuda Lagoon	4/2/2009	1	dry	2	NA
158-18.0	entrance to Bermuda Lagoon	4/22/2009	3	wet		
158-18.0	entrance to Bermuda Lagoon	6/10/2009	39	wet		
158-18.0	entrance to Bermuda Lagoon	6/29/2009	4	dry		
158-18.0	entrance to Bermuda Lagoon	7/28/2009	1	dry		
158-18.0	entrance to Bermuda Lagoon	8/3/2009	2	wet		
158-18.0	entrance to Bermuda Lagoon	8/26/2009	1	dry		
158-18.0	entrance to Bermuda Lagoon	8/31/2009	2	wet		
158-18.0	entrance to Bermuda Lagoon	9/15/2009	2	dry		
158-18.0	entrance to Bermuda Lagoon	10/28/2009	2	dry		
158-18.0	entrance to Bermuda Lagoon	11/16/2009	2	wet		
158-18.0	entrance to Bermuda Lagoon	3/2/2010	1	wet	3	NA
158-18.0	entrance to Bermuda Lagoon	3/17/2010	1	wet		
158-18.0	entrance to Bermuda Lagoon	5/4/2010	5	wet		
158-18.0	entrance to Bermuda Lagoon	5/19/2010	9	wet		
158-18.0	entrance to Bermuda Lagoon	6/23/2010	4	wet		
158-18.0	entrance to Bermuda Lagoon	8/17/2010	1	wet		
158-18.0	entrance to Bermuda Lagoon	8/25/2010	16	wet		
158-18.0	entrance to Bermuda Lagoon	9/16/2010	3	wet		
158-18.0	entrance to Bermuda Lagoon	12/13/2010	5	wet		
158-18.0	entrance to Bermuda Lagoon	12/16/2010	2	wet		
158-18.0	entrance to Bermuda Lagoon	4/19/2011	1	wet	2	NA
158-18.0	entrance to Bermuda Lagoon	4/26/2011	1	dry		
158-18.0	entrance to Bermuda Lagoon	5/23/2011	12	wet		
158-18.0	entrance to Bermuda Lagoon	6/27/2011	1	dry		
158-18.0	entrance to Bermuda Lagoon	7/20/2011	1	wet		

Shaded cells indicate an exceedance of water quality criteria

Bolded Value Indicates 90% less than sample value used to calculate the percent reduction

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 2: LIS WB Shore – Canfield Island (CT-W2_011)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
158-17.0	Bermuda Lagoon at "elbow"	2000-2005, 2007-2011	39	20	3	4	3
158-18.0	entrance to Bermuda Lagoon	2000-2011	38	21	4	4	3
Shaded cells indicate an exceedance of water quality criteria							

Table 15: Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) Bacteria Data

Waterbody ID: CT-W2_012

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **56%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-15.4	SW Round Beach	2/16/2000	2	wet	4	NA
103-15.4	SW Round Beach	5/15/2000	22	wet		
103-15.4	SW Round Beach	6/21/2000	2	dry		
103-15.4	SW Round Beach	1/23/2001	2	dry	11	15
103-15.4	SW Round Beach	2/7/2001	8†	wet		
103-15.4	SW Round Beach	8/28/2001	51	wet		
103-15.4	SW Round Beach	8/30/2001	18	dry		
103-15.4	SW Round Beach	1/9/2002	8	dry	8	NA
103-15.4	SW Round Beach	10/28/2002	8	wet		
103-15.4	SW Round Beach	2/26/2003	2	wet	12	15
103-15.4	SW Round Beach	6/17/2003	8	dry		
103-15.4	SW Round Beach	8/6/2003	51	wet		
103-15.4	SW Round Beach	8/19/2003	28	wet		
103-15.4	SW Round Beach	8/23/2004	51	wet	NA	90
103-15.4	SW Round Beach	8/16/2005	81	wet	NA	90

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.4	SW Round Beach	7/9/2007	1	dry	7	10
103-15.4	SW Round Beach	9/13/2007	10	wet		
103-15.4	SW Round Beach	10/15/2007	34	wet		
103-15.4	SW Round Beach	10/30/2007	8	wet		
103-15.4	SW Round Beach	12/5/2007	5	wet		
103-15.4	SW Round Beach	1/15/2008	24	dry	6	3
103-15.4	SW Round Beach	2/4/2008	8	dry		
103-15.4	SW Round Beach	2/20/2008	1	wet		
103-15.4	SW Round Beach	8/11/2008	2	dry		
103-15.4	SW Round Beach	9/10/2008	1	wet		
103-15.4	SW Round Beach	9/16/2008	18	wet		
103-15.4	SW Round Beach	12/15/2008	10	wet		
103-15.4	SW Round Beach	12/16/2008	40	wet		
103-15.4	SW Round Beach	4/2/2009	1	dry	4	3
103-15.4	SW Round Beach	4/22/2009	8	wet		
103-15.4	SW Round Beach	6/10/2009	9	wet		
103-15.4	SW Round Beach	8/3/2009	38	wet		
103-15.4	SW Round Beach	8/26/2009	2	dry		
103-15.4	SW Round Beach	8/31/2009	6	wet		
103-15.4	SW Round Beach	9/15/2009	3	dry		
103-15.4	SW Round Beach	10/28/2009	1	dry		
103-15.4	SW Round Beach	3/17/2010	1	wet	16	23
103-15.4	SW Round Beach	5/4/2010	45	wet		
103-15.4	SW Round Beach	5/19/2010	27	wet		
103-15.4	SW Round Beach	6/23/2010	20	wet		
103-15.4	SW Round Beach	8/17/2010	81	wet		
103-15.4	SW Round Beach	8/25/2010	9	wet		
103-15.4	SW Round Beach	6/27/2011	2	dry	NA	NA
103-15.6	off Calf Pasture Pier	2/16/2000	2	wet	4	NA
103-15.6	off Calf Pasture Pier	5/15/2000	8	wet		
103-15.6	off Calf Pasture Pier	6/21/2000	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-15.6	off Calf Pasture Pier	2/7/2001	8	wet	9	23
103-15.6	off Calf Pasture Pier	8/28/2001	51	wet		
103-15.6	off Calf Pasture Pier	8/30/2001	2	dry		
103-15.6	off Calf Pasture Pier	1/9/2002	2	dry	2	NA
103-15.6	off Calf Pasture Pier	10/28/2002	2	wet		
103-15.6	off Calf Pasture Pier	2/26/2003	14	wet	**30* (53%)**	**56**
103-15.6	off Calf Pasture Pier	8/6/2003	36	wet		
103-15.6	off Calf Pasture Pier	8/19/2003	51	wet		
103-15.6	off Calf Pasture Pier	8/23/2004	50	wet	NA	90
103-15.6	off Calf Pasture Pier	8/16/2005	74	wet	NA	90
103-15.6	off Calf Pasture Pier	7/9/2007	2	dry	5	NA
103-15.6	off Calf Pasture Pier	9/13/2007	6	wet		
103-15.6	off Calf Pasture Pier	10/30/2007	5	wet		
103-15.6	off Calf Pasture Pier	12/5/2007	9	wet		
103-15.6	off Calf Pasture Pier	1/15/2008	1	dry	2	NA
103-15.6	off Calf Pasture Pier	2/20/2008	1	wet		
103-15.6	off Calf Pasture Pier	8/11/2008	1	dry		
103-15.6	off Calf Pasture Pier	9/10/2008	25	wet		
103-15.6	off Calf Pasture Pier	9/16/2008	4	wet		
103-15.6	off Calf Pasture Pier	12/15/2008	2	wet		
103-15.6	off Calf Pasture Pier	12/23/2008	1	wet		
103-15.6	off Calf Pasture Pier	4/2/2009	1	dry	3	NA
103-15.6	off Calf Pasture Pier	4/22/2009	20	wet		
103-15.6	off Calf Pasture Pier	6/10/2009	6	wet		
103-15.6	off Calf Pasture Pier	6/29/2009	2	dry		
103-15.6	off Calf Pasture Pier	8/3/2009	8	wet		
103-15.6	off Calf Pasture Pier	8/26/2009	1	dry		
103-15.6	off Calf Pasture Pier	8/31/2009	4	wet		
103-15.6	off Calf Pasture Pier	9/15/2009	2	dry		
103-15.6	off Calf Pasture Pier	11/16/2009	1	wet		
103-15.6	off Calf Pasture Pier	12/15/2009	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.6	off Calf Pasture Pier	3/2/2010	1	wet	6	15
103-15.6	off Calf Pasture Pier	3/17/2010	1	wet		
103-15.6	off Calf Pasture Pier	5/4/2010	5	wet		
103-15.6	off Calf Pasture Pier	5/19/2010	5	wet		
103-15.6	off Calf Pasture Pier	8/17/2010	41	wet		
103-15.6	off Calf Pasture Pier	8/25/2010	70	wet		
103-15.6	off Calf Pasture Pier	12/13/2010	4	wet		
103-15.6	off Calf Pasture Pier	12/16/2010	5	dry		
103-15.6	off Calf Pasture Pier	1/19/2011	6	wet	4	NA
103-15.6	off Calf Pasture Pier	4/19/2011	7	wet		
103-15.6	off Calf Pasture Pier	4/26/2011	3	dry		
103-15.6	off Calf Pasture Pier	5/23/2011	7	wet		
103-15.6	off Calf Pasture Pier	5/26/2011	5	wet		
103-15.6	off Calf Pasture Pier	6/20/2011	1	wet		
103-15.6	off Calf Pasture Pier	6/27/2011	2	dry		
103-15.6	off Calf Pasture Pier	7/20/2011	3	wet		
103-16.0	over sandbar to Calf Pasture Island	2/16/2000	1.6	wet	3	NA
103-16.0	over sandbar to Calf Pasture Island	5/15/2000	8.1	wet		
103-16.0	over sandbar to Calf Pasture Island	6/21/2000	1.7	dry		
103-16.0	over sandbar to Calf Pasture Island	9/13/2000	3.6	wet		
103-16.0	over sandbar to Calf Pasture Island	1/23/2001	1.7	dry	5	10
103-16.0	over sandbar to Calf Pasture Island	2/7/2001	1.6	wet		
103-16.0	over sandbar to Calf Pasture Island	8/14/2001	11	wet		
103-16.0	over sandbar to Calf Pasture Island	8/28/2001	51	wet		
103-16.0	over sandbar to Calf Pasture Island	8/30/2001	1.7	dry		
103-16.0	over sandbar to Calf Pasture Island	1/9/2002	1.6	dry	2	NA
103-16.0	over sandbar to Calf Pasture Island	10/28/2002	1.6	wet		
103-16.0	over sandbar to Calf Pasture Island	2/26/2003	1.7	wet	9	23
103-16.0	over sandbar to Calf Pasture Island	6/11/2003	5.8	dry		
103-16.0	over sandbar to Calf Pasture Island	8/6/2003	51	wet		
103-16.0	over sandbar to Calf Pasture Island	8/19/2003	14	wet		
103-16.0	over sandbar to Calf Pasture Island	8/23/2004	51	wet	NA	90

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-16.0	over sandbar to Calf Pasture Island	8/16/2005	60	wet	NA	90
103-16.0	over sandbar to Calf Pasture Island	9/6/2006	28	dry	NA	NA
103-16.0	over sandbar to Calf Pasture Island	7/9/2007	5	dry	6	NA
103-16.0	over sandbar to Calf Pasture Island	9/13/2007	8	wet		
103-16.0	over sandbar to Calf Pasture Island	10/30/2007	8	wet		
103-16.0	over sandbar to Calf Pasture Island	12/5/2007	4	wet		
103-16.0	over sandbar to Calf Pasture Island	1/15/2008	4	dry	3	4
103-16.0	over sandbar to Calf Pasture Island	8/11/2008	1	dry		
103-16.0	over sandbar to Calf Pasture Island	9/10/2008	33	wet		
103-16.0	over sandbar to Calf Pasture Island	9/16/2008	1	wet		
103-16.0	over sandbar to Calf Pasture Island	12/15/2008	2	wet		
103-16.0	over sandbar to Calf Pasture Island	12/16/2008	6	wet		
103-16.0	over sandbar to Calf Pasture Island	12/23/2008	4	wet		
103-16.0	over sandbar to Calf Pasture Island	4/2/2009	1	dry	4	NA
103-16.0	over sandbar to Calf Pasture Island	4/22/2009	17	wet		
103-16.0	over sandbar to Calf Pasture Island	6/10/2009	7	wet		
103-16.0	over sandbar to Calf Pasture Island	6/29/2009	8	dry		
103-16.0	over sandbar to Calf Pasture Island	8/3/2009	6	wet		
103-16.0	over sandbar to Calf Pasture Island	8/26/2009	7	dry		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-16.0	over sandbar to Calf Pasture Island	8/31/2009	1	wet		
103-16.0	over sandbar to Calf Pasture Island	9/15/2009	1	dry		
103-16.0	over sandbar to Calf Pasture Island	10/28/2009	2	dry		
103-16.0	over sandbar to Calf Pasture Island	11/16/2009	4	wet		
103-16.0	over sandbar to Calf Pasture Island	12/15/2009	6	wet		
103-16.0	over sandbar to Calf Pasture Island	3/2/2010	1	wet		
103-16.0	over sandbar to Calf Pasture Island	3/17/2010	1	wet		
103-16.0	over sandbar to Calf Pasture Island	5/4/2010	6	wet		
103-16.0	over sandbar to Calf Pasture Island	5/19/2010	8	wet		
103-16.0	over sandbar to Calf Pasture Island	6/23/2010	5	wet	6	12
103-16.0	over sandbar to Calf Pasture Island	8/17/2010	35	wet		
103-16.0	over sandbar to Calf Pasture Island	8/25/2010	40	wet		
103-16.0	over sandbar to Calf Pasture Island	12/13/2010	4	wet		
103-16.0	over sandbar to Calf Pasture Island	12/16/2010	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-16.0	over sandbar to Calf Pasture Island	1/19/2011	8	wet	5	NA
103-16.0	over sandbar to Calf Pasture Island	4/19/2011	5	wet		
103-16.0	over sandbar to Calf Pasture Island	4/26/2011	1	dry		
103-16.0	over sandbar to Calf Pasture Island	5/23/2011	6	wet		
103-16.0	over sandbar to Calf Pasture Island	5/26/2011	8	wet		
103-16.0	over sandbar to Calf Pasture Island	6/20/2011	2	wet		
103-16.0	over sandbar to Calf Pasture Island	6/27/2011	7	dry		
103-16.0	over sandbar to Calf Pasture Island	7/20/2011	8	wet		
103-17.0	NW Sprite Island near Shorehaven	2/16/2000	3.6	wet	5	NA
103-17.0	NW Sprite Island near Shorehaven	5/15/2000	8.1	wet		
103-17.0	NW Sprite Island near Shorehaven	6/21/2000	1.7	dry		
103-17.0	NW Sprite Island near Shorehaven	9/13/2000	11	wet		
103-17.0	NW Sprite Island near Shorehaven	1/23/2001	1.6	dry	7	23
103-17.0	NW Sprite Island near Shorehaven	2/7/2001	1.6	wet		
103-17.0	NW Sprite Island near Shorehaven	8/14/2001	51	wet		
103-17.0	NW Sprite Island near Shorehaven	8/16/2001	14	dry		
103-17.0	NW Sprite Island near Shorehaven	8/28/2001	51	wet		
103-17.0	NW Sprite Island near Shorehaven	8/30/2001	1.6	dry		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-17.0	NW Sprite Island near Shorehaven	1/9/2002	3.6	dry	2	NA
103-17.0	NW Sprite Island near Shorehaven	10/28/2002	1.6	wet		
103-17.0	NW Sprite Island near Shorehaven	2/26/2003	1.7	wet	9	NA
103-17.0	NW Sprite Island near Shorehaven	6/11/2003	11	dry		
103-17.0	NW Sprite Island near Shorehaven	8/6/2003	22	wet		
103-17.0	NW Sprite Island near Shorehaven	8/19/2003	14	wet		
103-17.0	NW Sprite Island near Shorehaven	8/23/2004	11	wet	NA	NA
103-17.0	NW Sprite Island near Shorehaven	8/16/2005	45	wet	NA	90
103-17.0	NW Sprite Island near Shorehaven	9/6/2006	12	dry	NA	NA
103-17.0	NW Sprite Island near Shorehaven	7/9/2007	1	dry	1	NA
103-17.0	NW Sprite Island near Shorehaven	9/13/2007	4	wet		
103-17.0	NW Sprite Island near Shorehaven	10/30/2007	1	wet		
103-17.0	NW Sprite Island near Shorehaven	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-17.0	NW Sprite Island near Shorehaven	1/15/2008	1	dry		
103-17.0	NW Sprite Island near Shorehaven	2/20/2008	1	wet		
103-17.0	NW Sprite Island near Shorehaven	8/11/2008	1	dry		
103-17.0	NW Sprite Island near Shorehaven	9/10/2008	4	wet	2	NA
103-17.0	NW Sprite Island near Shorehaven	9/16/2008	1	wet		
103-17.0	NW Sprite Island near Shorehaven	12/15/2008	4	wet		
103-17.0	NW Sprite Island near Shorehaven	12/23/2008	5	wet		
103-17.0	NW Sprite Island near Shorehaven	4/2/2009	1	dry		
103-17.0	NW Sprite Island near Shorehaven	4/22/2009	2	wet		
103-17.0	NW Sprite Island near Shorehaven	6/10/2009	2	wet		
103-17.0	NW Sprite Island near Shorehaven	6/29/2009	6	dry		
103-17.0	NW Sprite Island near Shorehaven	8/3/2009	5	wet		
103-17.0	NW Sprite Island near Shorehaven	8/26/2009	1	dry	2	NA
103-17.0	NW Sprite Island near Shorehaven	8/31/2009	1	wet		
103-17.0	NW Sprite Island near Shorehaven	9/15/2009	1	dry		
103-17.0	NW Sprite Island near Shorehaven	10/28/2009	1	dry		
103-17.0	NW Sprite Island near Shorehaven	11/16/2009	1	wet		
103-17.0	NW Sprite Island near Shorehaven	12/15/2009	4	wet		
103-17.0	NW Sprite Island near Shorehaven	3/2/2010	1	wet		
103-17.0	NW Sprite Island near Shorehaven	3/17/2010	1	wet		
103-17.0	NW Sprite Island near Shorehaven	5/4/2010	5	wet		
103-17.0	NW Sprite Island near Shorehaven	5/19/2010	12	wet		
103-17.0	NW Sprite Island near Shorehaven	6/23/2010	1	wet	3	NA
103-17.0	NW Sprite Island near Shorehaven	8/17/2010	3	wet		
103-17.0	NW Sprite Island near Shorehaven	8/25/2010	6	wet		
103-17.0	NW Sprite Island near Shorehaven	12/13/2010	2	wet		
103-17.0	NW Sprite Island near Shorehaven	12/16/2010	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-17.0	NW Sprite Island near Shorehaven	4/19/2011	2	wet	2	NA
103-17.0	NW Sprite Island near Shorehaven	4/26/2011	1	dry		
103-17.0	NW Sprite Island near Shorehaven	5/23/2011	2	wet		
103-17.0	NW Sprite Island near Shorehaven	5/26/2011	6	wet		
103-17.0	NW Sprite Island near Shorehaven	6/20/2011	1	wet		
103-17.0	NW Sprite Island near Shorehaven	6/27/2011	1	dry		
103-17.0	NW Sprite Island near Shorehaven	7/20/2011	3	wet		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 3: LIS WB Shore – Outer Norwalk Harbor (East) (CT-W2_012)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
103-15.4	SW Round Beach	2000-2005, 2007-2011	30	14	8	12	3
103-15.6	off Calf Pasture Pier	2000-2005, 2007-2011	37	13	5	6	2
103-16.0	over sandbar to Calf Pasture Island	2000-2011	40	17	5	6	3
103-17.0	NW Sprite Is./near Shorehaven	2000-2011	39	18	3	4	2

Shaded cells indicate an exceedance of water quality criteria

Table 16: Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) Bacteria Data

Waterbody ID: CT-W2_013

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **40%**

Data: 2000 – 2005; 2007 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (CT-W2_013) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-08.2	W. Manresa Island	2/16/2000	11	wet	4	NA
103-08.2	W. Manresa Island	5/15/2000	6	wet		
103-08.2	W. Manresa Island	6/21/2000	2	dry		
103-08.2	W. Manresa Island	9/13/2000	4	wet		
103-08.2	W. Manresa Island	1/23/2001	2	dry	4	10
103-08.2	W. Manresa Island	2/7/2001	4	wet		
103-08.2	W. Manresa Island	8/15/2001	2	wet		
103-08.2	W. Manresa Island	8/28/2001	51	wet		
103-08.2	W. Manresa Island	8/30/2001	4	dry		
103-08.2	W. Manresa Island	10/28/2002	14	wet	NA	NA
103-08.2	W. Manresa Island	2/26/2003	2	wet	2	NA
103-08.2	W. Manresa Island	8/6/2003	6	wet		
103-08.2	W. Manresa Island	8/19/2003	2	wet		
103-08.2	W. Manresa Island	8/16/2005	53	wet	NA	NA
103-08.2	W. Manresa Island	8/23/2007	1	wet	8	NA
103-08.2	W. Manresa Island	9/13/2007	22	Wet		
103-08.2	W. Manresa Island	10/15/2007	14	Wet		
103-08.2	W. Manresa Island	10/22/2007	15	Wet		
103-08.2	W. Manresa Island	10/30/2007	9	Wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (CT-W2_013) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-08.2	W. Manresa Island	2/4/2008	1	dry	5	15
103-08.2	W. Manresa Island	8/5/2008	2	dry		
103-08.2	W. Manresa Island	9/10/2008	43	wet		
103-08.2	W. Manresa Island	12/23/2008	8	wet		
103-08.2	W. Manresa Island	4/2/2009	1	dry	4	NA
103-08.2	W. Manresa Island	4/22/2009	5	wet		
103-08.2	W. Manresa Island	6/10/2009	21	wet		
103-08.2	W. Manresa Island	8/3/2009	10	wet		
103-08.2	W. Manresa Island	8/26/2009	1	dry		
103-08.2	W. Manresa Island	8/31/2009	4	wet		
103-08.2	W. Manresa Island	3/25/2010	1	wet	5	NA
103-08.2	W. Manresa Island	5/4/2010	16	wet		
103-08.2	W. Manresa Island	5/19/2010	6	wet		
103-08.2	W. Manresa Island	8/17/2010	7	wet		
103-08.2	W. Manresa Island	8/25/2010	6	wet		
103-08.2	W. Manresa Island	6/27/2011	1	dry	NA	NA
103-10.1	N"8"/C"7" channel	2/16/2000	2	wet	3	NA
103-10.1	N"8"/C"7" channel	5/15/2000	14	wet		
103-10.1	N"8"/C"7" channel	6/21/2000	3.6	dry		
103-10.1	N"8"/C"7" channel	9/13/2000	2	wet		
103-10.1	N"8"/C"7" channel	1/23/2001	2	dry	10	6
103-10.1	N"8"/C"7" channel	2/2/2001	22	dry		
103-10.1	N"8"/C"7" channel	2/7/2001	6	wet		
103-10.1	N"8"/C"7" channel	8/15/2001	14	wet		
103-10.1	N"8"/C"7" channel	8/28/2001	51	wet		
103-10.1	N"8"/C"7" channel	8/30/2001	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (CT-W2_013) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-10.1	N"8"/C"7" channel	1/9/2002	2	dry	5	NA
103-10.1	N"8"/C"7" channel	10/28/2002	14	wet		
103-10.1	N"8"/C"7" channel	2/26/2003	4	wet	13	23
103-10.1	N"8"/C"7" channel	6/17/2003	51	dry		
103-10.1	N"8"/C"7" channel	8/6/2003	51	wet		
103-10.1	N"8"/C"7" channel	8/19/2003	6	wet		
103-10.1	N"8"/C"7" channel	10/1/2003	18	dry		
103-10.1	N"8"/C"7" channel	10/2/2003	6	dry		
103-10.1	N"8"/C"7" channel	8/23/2004	51	wet	NA	90
103-10.1	N"8"/C"7" channel	8/16/2005	67	wet	**27* (48%)**	**40**
103-10.1	N"8"/C"7" channel	10/26/2005	11	wet		
103-10.1	N"8"/C"7" channel	3/5/2007	2	wet	6	4
103-10.1	N"8"/C"7" channel	8/23/2007	6	wet		
103-10.1	N"8"/C"7" channel	9/13/2007	4	wet		
103-10.1	N"8"/C"7" channel	10/15/2007	70	wet		
103-10.1	N"8"/C"7" channel	10/22/2007	4	wet		
103-10.1	N"8"/C"7" channel	10/30/2007	12	wet		
103-10.1	N"8"/C"7" channel	12/5/2007	1	wet		
103-10.1	N"8"/C"7" channel	1/15/2008	3	dry	4	4
103-10.1	N"8"/C"7" channel	2/4/2008	1	dry		
103-10.1	N"8"/C"7" channel	2/20/2008	1	wet		
103-10.1	N"8"/C"7" channel	8/5/2008	6	dry		
103-10.1	N"8"/C"7" channel	9/10/2008	46	wet		
103-10.1	N"8"/C"7" channel	12/15/2008	4	wet		
103-10.1	N"8"/C"7" channel	12/23/2008	3	wet		
103-10.1	N"8"/C"7" channel	4/2/2009	1	dry	3	3
103-10.1	N"8"/C"7" channel	4/22/2009	5	wet		
103-10.1	N"8"/C"7" channel	6/10/2009	81	wet		
103-10.1	N"8"/C"7" channel	8/3/2009	4	wet		
103-10.1	N"8"/C"7" channel	8/26/2009	1	dry		
103-10.1	N"8"/C"7" channel	8/31/2009	1	wet		
103-10.1	N"8"/C"7" channel	11/16/2009	1	wet		
103-10.1	N"8"/C"7" channel	12/15/2009	12	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (CT-W2_013) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-10.1	N"8"/C"7" channel	3/17/2010	1	wet	12	12
103-10.1	N"8"/C"7" channel	3/25/2010	8	wet		
103-10.1	N"8"/C"7" channel	5/4/2010	27	wet		
103-10.1	N"8"/C"7" channel	5/19/2010	26	wet		
103-10.1	N"8"/C"7" channel	6/23/2010	17	wet		
103-10.1	N"8"/C"7" channel	8/17/2010	81	wet		
103-10.1	N"8"/C"7" channel	8/25/2010	9	wet		
103-10.1	N"8"/C"7" channel	12/13/2010	68	wet		
103-10.1	N"8"/C"7" channel	12/16/2010	1	dry		
103-10.1	N"8"/C"7" channel	4/26/2011	1	dry	7	6
103-10.1	N"8"/C"7" channel	5/23/2011	51	wet		
103-10.1	N"8"/C"7" channel	5/26/2011	20	wet		
103-10.1	N"8"/C"7" channel	6/20/2011	14	wet		
103-10.1	N"8"/C"7" channel	6/27/2011	1	dry		
103-10.1	N"8"/C"7" channel	7/21/2011	6	dry		

Shaded cells indicate an exceedance of water quality criteria

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather geometric mean values for all monitoring stations on Segment 4: LIS WB Shore – Outer Norwalk Harbor (West) (CT-W2_013)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
103-08.2	W. Manresa Island	2000-2003, 2005, 2007-2011	27	8	5	7	2
103-10.1	N"8"/C"7" channel	2000-2005, 2007-2011	41	17	7	10	3

Shaded cells indicate an exceedance of water quality criteria

Table 17: Segment 5: LIS WB Shore – Wilson Cove, Farm Creek, Norwalk Bacteria Data

Waterbody ID: CT-W2_014

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples than: **40%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-07.0	Wilson Cove	2/16/2000	2	wet	4	NA
103-07.0	Wilson Cove	5/15/2000	2	wet		
103-07.0	Wilson Cove	6/21/2000	4	dry		
103-07.0	Wilson Cove	9/13/2000	28	wet		
103-07.0	Wilson Cove	1/23/2001	2	dry	5	4
103-07.0	Wilson Cove	2/2/2001	2	dry		
103-07.0	Wilson Cove	2/7/2001	8	wet		
103-07.0	Wilson Cove	4/2/2001	4	wet		
103-07.0	Wilson Cove	8/15/2001	2	wet		
103-07.0	Wilson Cove	8/28/2001	51	wet		
103-07.0	Wilson Cove	8/30/2001	8	dry		
103-07.0	Wilson Cove	1/9/2002	4	dry	4	NA
103-07.0	Wilson Cove	10/28/2002	4	wet		
103-07.0	Wilson Cove	2/26/2003	2	wet	2	NA
103-07.0	Wilson Cove	4/30/2003	2	dry		
103-07.0	Wilson Cove	6/11/2003	4	dry		
103-07.0	Wilson Cove	8/6/2003	2	wet		
103-07.0	Wilson Cove	8/19/2003	6	wet		
103-07.0	Wilson Cove	8/23/2004	14	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-07.0	Wilson Cove	8/16/2005	81	wet	NA	90
103-07.0	Wilson Cove	9/6/2006	9	dry	NA	NA
103-07.0	Wilson Cove	7/9/2007	2	dry	2	NA
103-07.0	Wilson Cove	8/23/2007	2	wet		
103-07.0	Wilson Cove	9/13/2007	4	wet		
103-07.0	Wilson Cove	12/5/2007	1	wet		
103-07.0	Wilson Cove	2/20/2008	1	wet	3	6
103-07.0	Wilson Cove	8/11/2008	1	dry		
103-07.0	Wilson Cove	9/10/2008	51	wet		
103-07.0	Wilson Cove	9/16/2008	5	wet		
103-07.0	Wilson Cove	12/15/2008	1	wet		
103-07.0	Wilson Cove	12/23/2008	2	wet		
103-07.0	Wilson Cove	4/2/2009	1	dry	3	8
103-07.0	Wilson Cove	4/22/2009	3	wet		
103-07.0	Wilson Cove	6/10/2009	50	wet		
103-07.0	Wilson Cove	6/29/2009	1	dry		
103-07.0	Wilson Cove	8/3/2009	4	wet		
103-07.0	Wilson Cove	8/26/2009	1	dry		
103-07.0	Wilson Cove	8/31/2009	1	wet		
103-07.0	Wilson Cove	9/15/2009	3	dry		
103-07.0	Wilson Cove	10/28/2009	44	dry		
103-07.0	Wilson Cove	11/16/2009	1	wet		
103-07.0	Wilson Cove	12/15/2009	8	wet		
103-07.0	Wilson Cove	3/2/2010	1	wet	5	1
103-07.0	Wilson Cove	3/17/2010	1	wet		
103-07.0	Wilson Cove	3/25/2010	1	wet		
103-07.0	Wilson Cove	5/4/2010	30	wet		
103-07.0	Wilson Cove	5/19/2010	11	wet		
103-07.0	Wilson Cove	8/17/2010	21	wet		
103-07.0	Wilson Cove	8/25/2010	6	wet		
103-07.0	Wilson Cove	12/13/2010	41	wet		
103-07.0	Wilson Cove	12/16/2010	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding
103-07.0	Wilson Cove	4/19/2011	1	wet	2	NA
103-07.0	Wilson Cove	4/26/2011	1	dry		
103-07.0	Wilson Cove	5/23/2011	19	wet		
103-07.0	Wilson Cove	6/20/2011	4	wet		
103-07.0	Wilson Cove	6/27/2011	1	dry		
103-07.0	Wilson Cove	7/21/2011	1	dry		
103-07.1	North Wilson Cove	2/16/2000	3.6	wet	7	NA
103-07.1	North Wilson Cove	5/15/2000	5.8	wet		
103-07.1	North Wilson Cove	5/25/2000	22	wet		
103-07.1	North Wilson Cove	6/21/2000	1.7	dry		
103-07.1	North Wilson Cove	9/13/2000	22	wet		
103-07.1	North Wilson Cove	1/23/2001	1.6	dry	7	10
103-07.1	North Wilson Cove	2/7/2001	1.6	wet		
103-07.1	North Wilson Cove	8/15/2001	5.8	wet		
103-07.1	North Wilson Cove	8/28/2001	51	wet		
103-07.1	North Wilson Cove	8/30/2001	22	dry		
103-07.1	North Wilson Cove	10/28/2002	3.6	wet	NA	NA
103-07.1	North Wilson Cove	2/26/2003	1.6	wet	7	4
103-07.1	North Wilson Cove	4/30/2003	1.6	dry		
103-07.1	North Wilson Cove	6/11/2003	14	dry		
103-07.1	North Wilson Cove	8/6/2003	22	wet		
103-07.1	North Wilson Cove	8/19/2003	5.8	wet		
103-07.1	North Wilson Cove	10/1/2003	36	dry		
103-07.1	North Wilson Cove	10/2/2003	3.6	dry		
103-07.1	North Wilson Cove	8/16/2005	81	wet	NA	90
103-07.1	North Wilson Cove	8/23/2007	3	wet	**13***	23
103-07.1	North Wilson Cove	9/13/2007	10	wet		
103-07.1	North Wilson Cove	10/15/2007	152	wet		
103-07.1	North Wilson Cove	10/22/2007	12	wet		
103-07.1	North Wilson Cove	10/30/2007	81	wet		
103-07.1	North Wilson Cove	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding
103-07.1	North Wilson Cove	2/4/2008	2	dry	6	15
103-07.1	North Wilson Cove	8/5/2008	10	dry		
103-07.1	North Wilson Cove	9/10/2008	66	wet		
103-07.1	North Wilson Cove	12/23/2008	1	wet		
103-07.1	North Wilson Cove	4/2/2009	1	dry	3	4
103-07.1	North Wilson Cove	4/22/2009	3	wet		
103-07.1	North Wilson Cove	6/10/2009	38	wet		
103-07.1	North Wilson Cove	8/3/2009	4	wet		
103-07.1	North Wilson Cove	8/26/2009	1	dry		
103-07.1	North Wilson Cove	8/31/2009	1	wet		
103-07.1	North Wilson Cove	12/15/2009	10	wet		
103-07.1	North Wilson Cove	3/25/2010	2	wet	11	10
103-07.1	North Wilson Cove	5/4/2010	15	wet		
103-07.1	North Wilson Cove	5/19/2010	16	wet		
103-07.1	North Wilson Cove	8/17/2010	37	wet		
103-07.1	North Wilson Cove	8/25/2010	10	wet		
103-07.1	North Wilson Cove	4/26/2011	1	dry	1	NA
103-07.1	North Wilson Cove	6/27/2011	1	dry		
103-08.0	East Wilson Point	2/16/2000	1.7	wet	4	NA
103-08.0	East Wilson Point	5/15/2000	11	wet		
103-08.0	East Wilson Point	6/21/2000	5.8	dry		
103-08.0	East Wilson Point	9/13/2000	1.6	wet		
103-08.0	East Wilson Point	1/23/2001	1.6	dry	5	6
103-08.0	East Wilson Point	2/2/2001	5.8	dry		
103-08.0	East Wilson Point	2/7/2001	1.7	wet		
103-08.0	East Wilson Point	8/15/2001	3.6	wet		
103-08.0	East Wilson Point	8/28/2001	51	wet		
103-08.0	East Wilson Point	8/30/2001	3.6	dry		
103-08.0	East Wilson Point	1/9/2002	3.6	dry	5	NA
103-08.0	East Wilson Point	10/28/2002	5.8	wet		
103-08.0	East Wilson Point	2/26/2003	1.6	wet	3	NA
103-08.0	East Wilson Point	4/30/2003	1.6	dry		
103-08.0	East Wilson Point	6/11/2003	5.8	dry		
103-08.0	East Wilson Point	8/6/2003	22	wet		
103-08.0	East Wilson Point	8/19/2003	1.6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-08.0	East Wilson Point	8/23/2004	5.8	wet	NA	NA
103-08.0	East Wilson Point	2/20/2005	1	wet	9	**40***
103-08.0	East Wilson Point	8/16/2005	81	wet		
103-08.0	East Wilson Point	9/6/2006	11	dry	NA	NA
103-08.0	East Wilson Point	7/9/2007	1	dry	1	NA
103-08.0	East Wilson Point	8/23/2007	1	wet		
103-08.0	East Wilson Point	9/13/2007	1	wet		
103-08.0	East Wilson Point	12/5/2007	5	wet		
103-08.0	East Wilson Point	8/11/2008	1	dry	4	10
103-08.0	East Wilson Point	9/10/2008	49	wet		
103-08.0	East Wilson Point	9/16/2008	16	wet		
103-08.0	East Wilson Point	12/15/2008	2	wet		
103-08.0	East Wilson Point	12/23/2008	1	wet		
103-08.0	East Wilson Point	4/2/2009	1	dry	2	NA
103-08.0	East Wilson Point	4/22/2009	2	wet		
103-08.0	East Wilson Point	6/10/2009	54	wet		
103-08.0	East Wilson Point	6/29/2009	1	dry		
103-08.0	East Wilson Point	8/3/2009	2	wet		
103-08.0	East Wilson Point	8/26/2009	1	dry		
103-08.0	East Wilson Point	8/31/2009	2	wet		
103-08.0	East Wilson Point	9/15/2009	1	dry		
103-08.0	East Wilson Point	10/28/2009	4	dry		
103-08.0	East Wilson Point	11/16/2009	1	wet		
103-08.0	East Wilson Point	12/15/2009	4	wet		
103-08.0	East Wilson Point	3/2/2010	1	wet	4	3
103-08.0	East Wilson Point	3/17/2010	1	wet		
103-08.0	East Wilson Point	5/4/2010	43	wet		
103-08.0	East Wilson Point	5/19/2010	13	wet		
103-08.0	East Wilson Point	8/17/2010	4	wet		
103-08.0	East Wilson Point	8/25/2010	1	wet		
103-08.0	East Wilson Point	12/13/2010	11	wet		
103-08.0	East Wilson Point	12/16/2010	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-08.0	East Wilson Point	4/19/2011	1	wet	2	NA
103-08.0	East Wilson Point	4/26/2011	3	dry		
103-08.0	East Wilson Point	5/23/2011	5	wet		
103-08.0	East Wilson Point	6/20/2011	14	wet		
103-08.0	East Wilson Point	6/27/2011	1	dry		
103-08.0	East Wilson Point	7/21/2011	1	dry		
Shaded cells indicate an exceedance of water quality criteria						
***Indicates geometric mean and 90% less than values used to calculate the percent reduction**						

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 5: LIS WB Shore – Wilson Cove, Farm Creek (CT-W2_014), Norwalk

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
103-07.0	Wilson Cove	2000-2011	38	19	4	5	2
103-07.1	N. Wilson Cove	2000-2003, 2005, 2007-2011	30	13	7	9	3
103-08.0	E. Wilson Pt.	2000-2011	36	19	3	4	2
Shaded cells indicate an exceedance of water quality criteria							

Table 18: Segment 6: LIS WB Midshore – Norwalk Islands Bacteria Data

Waterbody ID: CT-W3_008-I

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **90%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-05.2	North of Sheffield dock	2/16/2000	2	wet	2	NA
103-05.2	North of Sheffield dock	5/15/2000	2	wet		
103-05.2	North of Sheffield dock	6/21/2000	2	dry		
103-05.2	North of Sheffield dock	8/7/2000	2	dry		
103-05.2	North of Sheffield dock	9/13/2000	2	wet		
103-05.2	North of Sheffield dock	1/23/2001	2	dry	3	NA
103-05.2	North of Sheffield dock	2/2/2001	4	dry		
103-05.2	North of Sheffield dock	8/15/2001	2	wet		
103-05.2	North of Sheffield dock	8/28/2001	14	wet		
103-05.2	North of Sheffield dock	8/30/2001	4	dry		
103-05.2	North of Sheffield dock	1/9/2002	2	dry	2	NA
103-05.2	North of Sheffield dock	10/28/2002	2	wet		
103-05.2	North of Sheffield dock	2/26/2003	2	wet	2	NA
103-05.2	North of Sheffield dock	4/30/2003	2	dry		
103-05.2	North of Sheffield dock	6/11/2003	4	dry		
103-05.2	North of Sheffield dock	8/6/2003	4	wet		
103-05.2	North of Sheffield dock	8/19/2003	2	wet		

Single sample fecal coliform data (cols/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore-Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-05.2	North of Sheffield dock	8/16/2005	57	wet	NA	90
103-05.2	North of Sheffield dock	9/6/2006	1	dry	NA	NA
103-05.2	North of Sheffield dock	7/9/2007	1	dry	1	NA
103-05.2	North of Sheffield dock	8/23/2007	1	wet		
103-05.2	North of Sheffield dock	9/13/2007	1	wet		
103-05.2	North of Sheffield dock	12/5/2007	1	wet		
103-05.2	North of Sheffield dock	2/20/2008	2	wet	3	4
103-05.2	North of Sheffield dock	8/11/2008	2	dry		
103-05.2	North of Sheffield dock	9/10/2008	32	wet		
103-05.2	North of Sheffield dock	9/16/2008	5	wet		
103-05.2	North of Sheffield dock	12/15/2008	3	wet		
103-05.2	North of Sheffield dock	12/16/2008	2	wet		
103-05.2	North of Sheffield dock	12/23/2008	1	wet		
103-05.2	North of Sheffield dock	4/2/2009	1	dry	1	NA
103-05.2	North of Sheffield dock	4/22/2009	1	wet		
103-05.2	North of Sheffield dock	6/10/2009	1	wet		
103-05.2	North of Sheffield dock	6/29/2009	1	dry		
103-05.2	North of Sheffield dock	8/3/2009	4	wet		
103-05.2	North of Sheffield dock	8/26/2009	1	dry		
103-05.2	North of Sheffield dock	8/31/2009	1	wet		
103-05.2	North of Sheffield dock	9/15/2009	1	dry		
103-05.2	North of Sheffield dock	10/28/2009	1	dry		
103-05.2	North of Sheffield dock	10/29/2009	4	wet		
103-05.2	North of Sheffield dock	11/16/2009	1	wet		
103-05.2	North of Sheffield dock	12/15/2009	6	wet		
103-05.2	North of Sheffield dock	3/2/2010	1	wet	3	NA
103-05.2	North of Sheffield dock	3/17/2010	1	wet		
103-05.2	North of Sheffield dock	5/4/2010	19	wet		
103-05.2	North of Sheffield dock	5/19/2010	1	wet		
103-05.2	North of Sheffield dock	6/23/2010	10	wet		
103-05.2	North of Sheffield dock	8/17/2010	9	wet		
103-05.2	North of Sheffield dock	8/25/2010	1	wet		
103-05.2	North of Sheffield dock	12/13/2010	11	wet		
103-05.2	North of Sheffield dock	12/16/2010	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-05.2	North of Sheffield dock	4/19/2011	1	wet	1	NA
103-05.2	North of Sheffield dock	4/26/2011	1	dry		
103-05.2	North of Sheffield dock	5/23/2011	1	wet		
103-05.2	North of Sheffield dock	6/20/2011	1	wet		
103-05.2	North of Sheffield dock	6/27/2011	1	dry		
103-05.2	North of Sheffield dock	7/21/2011	1	dry		
103-08.1	between Tavern Island and Cedar Hammock	2/16/2000	2	wet	3	NA
103-08.1	between Tavern Island and Cedar Hammock	5/15/2000	2	wet		
103-08.1	between Tavern Island and Cedar Hammock	6/21/2000	2	dry		
103-08.1	between Tavern Island and Cedar Hammock	9/13/2000	28	wet		
103-08.1	between Tavern Island and Cedar Hammock	1/23/2001	2	dry	9	6
103-08.1	between Tavern Island and Cedar Hammock	2/2/2001	11	dry		
103-08.1	between Tavern Island and Cedar Hammock	2/7/2001	4	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/15/2001	22	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/28/2001	51	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/30/2001	6	dry		
103-08.1	between Tavern Island and Cedar Hammock	1/9/2002	4	dry	6	NA
103-08.1	between Tavern Island and Cedar Hammock	10/28/2002	11	wet		
103-08.1	between Tavern Island and Cedar Hammock	2/26/2003	2	wet	3	NA
103-08.1	between Tavern Island and Cedar Hammock	6/11/2003	2	dry		
103-08.1	between Tavern Island and Cedar Hammock	8/6/2003	8	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/23/2004	50	wet	NA	90
103-08.1	between Tavern Island and Cedar Hammock	8/16/2005	68	wet	NA	90
103-08.1	between Tavern Island and Cedar Hammock	9/6/2006	2	dry	NA	NA
103-08.1	between Tavern Island and Cedar Hammock	7/9/2007	1	dry	1	NA
103-08.1	between Tavern Island and Cedar Hammock	8/23/2007	1	wet		
103-08.1	between Tavern Island and Cedar Hammock	9/13/2007	2	wet		
103-08.1	between Tavern Island and Cedar Hammock	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-08.1	between Tavern Island and Cedar Hammock	4/2/2009	1	dry	3	NA
103-08.1	between Tavern Island and Cedar Hammock	4/22/2009	5	wet		
103-08.1	between Tavern Island and Cedar Hammock	6/10/2009	81	wet		
103-08.1	between Tavern Island and Cedar Hammock	6/29/2009	6	dry		
103-08.1	between Tavern Island and Cedar Hammock	8/3/2009	3	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/26/2009	1	dry		
103-08.1	between Tavern Island and Cedar Hammock	8/31/2009	1	wet		
103-08.1	between Tavern Island and Cedar Hammock	9/15/2009	1	dry		
103-08.1	between Tavern Island and Cedar Hammock	10/28/2009	4	dry		
103-08.1	between Tavern Island and Cedar Hammock	11/16/2009	1	wet		
103-08.1	between Tavern Island and Cedar Hammock	12/15/2009	2	wet		
103-08.1	between Tavern Island and Cedar Hammock	3/2/2010	1	wet	4	NA
103-08.1	between Tavern Island and Cedar Hammock	3/17/2010	1	wet		
103-08.1	between Tavern Island and Cedar Hammock	5/4/2010	7	wet		
103-08.1	between Tavern Island and Cedar Hammock	5/19/2010	15	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/17/2010	7	wet		
103-08.1	between Tavern Island and Cedar Hammock	8/25/2010	2	wet		
103-08.1	between Tavern Island and Cedar Hammock	12/13/2010	27	wet		
103-08.1	between Tavern Island and Cedar Hammock	12/16/2010	1	dry		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-08.1	between Tavern Island and Cedar Hammock	4/19/2011	1	wet	2	NA
103-08.1	between Tavern Island and Cedar Hammock	4/26/2011	1	dry		
103-08.1	between Tavern Island and Cedar Hammock	5/23/2011	10	wet		
103-08.1	between Tavern Island and Cedar Hammock	6/20/2011	7	wet		
103-08.1	between Tavern Island and Cedar Hammock	6/27/2011	3	dry		
103-08.1	between Tavern Island and Cedar Hammock	7/21/2011	1	dry		
103-09.0	R"2"/C"3" channel	2/16/2000	1.7	wet	2	NA
103-09.0	R"2"/C"3" channel	5/15/2000	1.6	wet		
103-09.0	R"2"/C"3" channel	6/21/2000	5.8	dry		
103-09.0	R"2"/C"3" channel	9/13/2000	1.7	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-09.0	R"2"/C"3" channel	1/23/2001	1.6	dry	5	6
103-09.0	R"2"/C"3" channel	2/2/2001	8.1	dry		
103-09.0	R"2"/C"3" channel	2/7/2001	3.6	wet		
103-09.0	R"2"/C"3" channel	8/15/2001	3.6	wet		
103-09.0	R"2"/C"3" channel	8/28/2001	51	wet		
103-09.0	R"2"/C"3" channel	8/30/2001	1.7	dry		
103-09.0	R"2"/C"3" channel	1/9/2002	1.7	dry	2	NA
103-09.0	R"2"/C"3" channel	10/28/2002	1.7	wet		
103-09.0	R"2"/C"3" channel	2/26/2003	1.6	wet	5	NA
103-09.0	R"2"/C"3" channel	6/11/2003	5.8	dry		
103-09.0	R"2"/C"3" channel	6/17/2003	22	dry		
103-09.0	R"2"/C"3" channel	8/6/2003	5.8	wet		
103-09.0	R"2"/C"3" channel	8/19/2003	1.6	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-09.0	R"2"/C"3" channel	8/23/2004	22	wet	NA	NA
103-09.0	R"2"/C"3" channel	8/16/2005	66	wet	20	40
103-09.0	R"2"/C"3" channel	10/26/2005	6	wet		
103-09.0	R"2"/C"3" channel	9/6/2006	1	dry	NA	NA
103-09.0	R"2"/C"3" channel	3/5/2007	1	wet	1	NA
103-09.0	R"2"/C"3" channel	7/9/2007	2	dry		
103-09.0	R"2"/C"3" channel	8/23/2007	1	wet		
103-09.0	R"2"/C"3" channel	9/13/2007	1	wet		
103-09.0	R"2"/C"3" channel	12/5/2007	1	wet		
103-09.0	R"2"/C"3" channel	1/15/2008	2	dry	2	4
103-09.0	R"2"/C"3" channel	2/20/2008	1	wet		
103-09.0	R"2"/C"3" channel	8/11/2008	1	dry		
103-09.0	R"2"/C"3" channel	9/10/2008	38	wet		
103-09.0	R"2"/C"3" channel	9/16/2008	6	wet		
103-09.0	R"2"/C"3" channel	12/15/2008	1	wet		
103-09.0	R"2"/C"3" channel	12/23/2008	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-09.0	R"2"/C"3" channel	4/2/2009	1	dry	2	NA
103-09.0	R"2"/C"3" channel	4/22/2009	2	wet		
103-09.0	R"2"/C"3" channel	6/10/2009	30	wet		
103-09.0	R"2"/C"3" channel	6/29/2009	4	dry		
103-09.0	R"2"/C"3" channel	8/3/2009	1	wet		
103-09.0	R"2"/C"3" channel	8/26/2009	1	dry		
103-09.0	R"2"/C"3" channel	8/31/2009	1	wet		
103-09.0	R"2"/C"3" channel	9/15/2009	1	dry		
103-09.0	R"2"/C"3" channel	10/28/2009	2	dry		
103-09.0	R"2"/C"3" channel	10/29/2009	3	wet		

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-09.0	R"2"/C"3" channel	11/16/2009	4	wet		
103-09.0	R"2"/C"3" channel	12/15/2009	4	wet		
103-09.0	R"2"/C"3" channel	3/2/2010	1	wet	3	NA
103-09.0	R"2"/C"3" channel	3/17/2010	1	wet		
103-09.0	R"2"/C"3" channel	5/4/2010	27	wet		
103-09.0	R"2"/C"3" channel	5/19/2010	10	wet		
103-09.0	R"2"/C"3" channel	6/23/2010	1	wet		
103-09.0	R"2"/C"3" channel	8/17/2010	4	wet		
103-09.0	R"2"/C"3" channel	8/25/2010	1	wet		
103-09.0	R"2"/C"3" channel	12/13/2010	6	wet		
103-09.0	R"2"/C"3" channel	12/16/2010	2	dry		
103-09.0	R"2"/C"3" channel	4/19/2011	1	wet	2	NA
103-09.0	R"2"/C"3" channel	4/26/2011	1	dry		
103-09.0	R"2"/C"3" channel	5/23/2011	1	wet		
103-09.0	R"2"/C"3" channel	6/20/2011	7	wet		
103-09.0	R"2"/C"3" channel	6/27/2011	2	dry		
103-09.0	R"2"/C"3" channel	7/21/2011	1	dry		
103-09.1	West Dog Island	2/16/2000	1.6	wet	3	NA
103-09.1	West Dog Island	5/15/2000	5.8	wet		
103-09.1	West Dog Island	6/21/2000	3.6	dry		
103-09.1	West Dog Island	8/7/2000	1.7	dry		
103-09.1	West Dog Island	9/13/2000	8.1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-09.1	West Dog Island	1/23/2001	2	dry	4	6
103-09.1	West Dog Island	2/2/2001	8	dry		
103-09.1	West Dog Island	2/7/2001	2	wet		
103-09.1	West Dog Island	8/15/2001	2	wet		
103-09.1	West Dog Island	8/28/2001	51	wet		

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
103-09.1	West Dog Island	8/30/2001	4	dry		
103-09.1	West Dog Island	1/9/2002	6	dry	7	NA
103-09.1	West Dog Island	10/28/2002	8	wet		
103-09.1	West Dog Island	2/26/2003	2	wet	2	NA
103-09.1	West Dog Island	6/11/2003	6	dry		
103-09.1	West Dog Island	8/6/2003	2	wet		
103-09.1	West Dog Island	8/19/2003	2	wet		
103-09.1	West Dog Island	8/23/2004	28	wet	NA	NA
103-09.1	West Dog Island	8/16/2005	72	wet	NA	90
103-09.1	West Dog Island	9/6/2006	7	dry	NA	NA
103-09.1	West Dog Island	7/9/2007	1	dry	1	NA
103-09.1	West Dog Island	8/23/2007	1	wet		
103-09.1	West Dog Island	9/13/2007	1	wet		
103-09.1	West Dog Island	12/5/2007	1	wet		
103-09.1	West Dog Island	1/15/2008	1	dry	3	3
103-09.1	West Dog Island	2/20/2008	1	wet		
103-09.1	West Dog Island	8/11/2008	2	dry		
103-09.1	West Dog Island	9/10/2008	47	wet		
103-09.1	West Dog Island	9/16/2008	10	wet		
103-09.1	West Dog Island	12/15/2008	1	wet		
103-09.1	West Dog Island	12/16/2008	5	wet		
103-09.1	West Dog Island	12/23/2008	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-09.1	West Dog Island	4/2/2009	1	dry	2	NA
103-09.1	West Dog Island	4/22/2009	4	wet		
103-09.1	West Dog Island	6/10/2009	24	wet		
103-09.1	West Dog Island	6/29/2009	1	dry		
103-09.1	West Dog Island	8/3/2009	2	wet		
103-09.1	West Dog Island	8/26/2009	1	dry		
103-09.1	West Dog Island	8/31/2009	1	wet		
103-09.1	West Dog Island	9/15/2009	1	dry		
103-09.1	West Dog Island	10/28/2009	1	dry		
103-09.1	West Dog Island	11/16/2009	1	wet		
103-09.1	West Dog Island	12/15/2009	8	wet		
103-09.1	West Dog Island	3/2/2010	1	wet	2	NA
103-09.1	West Dog Island	3/17/2010	1	wet		
103-09.1	West Dog Island	5/4/2010	2	wet		
103-09.1	West Dog Island	5/19/2010	1	wet		
103-09.1	West Dog Island	8/17/2010	1	wet		
103-09.1	West Dog Island	8/25/2010	1	wet		
103-09.1	West Dog Island	12/13/2010	15	wet		
103-09.1	West Dog Island	12/16/2010	2	dry		
103-09.1	West Dog Island	4/19/2011	2	wet	1	NA
103-09.1	West Dog Island	4/26/2011	1	dry		
103-09.1	West Dog Island	5/23/2011	2	wet		
103-09.1	West Dog Island	6/20/2011	1	wet		
103-09.1	West Dog Island	6/27/2011	1	dry		
103-09.1	West Dog Island	7/21/2011	1	dry		
103-10.0	R"4"/C"5" channel	2/16/2000	2	wet	2	NA
103-10.0	R"4"/C"5" channel	5/15/2000	2	wet		
103-10.0	R"4"/C"5" channel	6/21/2000	2	dry		
103-10.0	R"4"/C"5" channel	8/7/2000	2	dry		
103-10.0	R"4"/C"5" channel	9/13/2000	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-10.0	R"4"/C"5" channel	1/23/2001	2	dry	5	6
103-10.0	R"4"/C"5" channel	2/2/2001	8	dry		
103-10.0	R"4"/C"5" channel	2/7/2001	4	wet		
103-10.0	R"4"/C"5" channel	8/15/2001	2	wet		
103-10.0	R"4"/C"5" channel	8/28/2001	51	wet		
103-10.0	R"4"/C"5" channel	8/30/2001	6	dry		
103-10.0	R"4"/C"5" channel	1/9/2002	6	dry	7	NA
103-10.0	R"4"/C"5" channel	10/28/2002	8	wet		
103-10.0	R"4"/C"5" channel	2/26/2003	2	wet	5	NA
103-10.0	R"4"/C"5" channel	6/11/2003	11	dry		
103-10.0	R"4"/C"5" channel	6/17/2003	14	dry		
103-10.0	R"4"/C"5" channel	8/6/2003	2	wet		
103-10.0	R"4"/C"5" channel	8/23/2004	28	wet	NA	NA
103-10.0	R"4"/C"5" channel	8/16/2005	81	wet	16	40
103-10.0	R"4"/C"5" channel	10/26/2005	3	wet		
103-10.0	R"4"/C"5" channel	9/6/2006	2	dry	NA	NA
103-10.0	R"4"/C"5" channel	3/5/2007	1	wet	1	NA
103-10.0	R"4"/C"5" channel	7/9/2007	1	dry		
103-10.0	R"4"/C"5" channel	8/23/2007	1	wet		
103-10.0	R"4"/C"5" channel	9/13/2007	2	wet		
103-10.0	R"4"/C"5" channel	12/5/2007	1	wet		
103-10.0	R"4"/C"5" channel	2/20/2008	1	wet	4	4
103-10.0	R"4"/C"5" channel	8/11/2008	2	dry		
103-10.0	R"4"/C"5" channel	9/10/2008	41	wet		
103-10.0	R"4"/C"5" channel	9/16/2008	7	wet		
103-10.0	R"4"/C"5" channel	12/15/2008	3	wet		
103-10.0	R"4"/C"5" channel	12/16/2008	6	wet		
103-10.0	R"4"/C"5" channel	12/23/2008	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-10.0	R"4"/C"5" channel	4/2/2009	2	dry	3	NA
103-10.0	R"4"/C"5" channel	4/22/2009	1	wet		
103-10.0	R"4"/C"5" channel	6/10/2009	81	wet		
103-10.0	R"4"/C"5" channel	6/29/2009	6	dry		
103-10.0	R"4"/C"5" channel	8/3/2009	2	wet		
103-10.0	R"4"/C"5" channel	8/26/2009	1	dry		
103-10.0	R"4"/C"5" channel	8/31/2009	1	wet		
103-10.0	R"4"/C"5" channel	9/15/2009	1	dry		
103-10.0	R"4"/C"5" channel	10/28/2009	4	dry		
103-10.0	R"4"/C"5" channel	10/29/2009	10	wet		
103-10.0	R"4"/C"5" channel	11/16/2009	1	wet		
103-10.0	R"4"/C"5" channel	3/2/2010	1	wet	4	NA
103-10.0	R"4"/C"5" channel	3/17/2010	1	wet		
103-10.0	R"4"/C"5" channel	5/4/2010	28	wet		
103-10.0	R"4"/C"5" channel	5/19/2010	11	wet		
103-10.0	R"4"/C"5" channel	8/17/2010	6	wet		
103-10.0	R"4"/C"5" channel	8/25/2010	2	wet		
103-10.0	R"4"/C"5" channel	12/13/2010	26	wet		
103-10.0	R"4"/C"5" channel	12/16/2010	1	dry		
103-10.0	R"4"/C"5" channel	4/19/2011	3	wet	2	NA
103-10.0	R"4"/C"5" channel	4/26/2011	1	dry		
103-10.0	R"4"/C"5" channel	5/23/2011	28	wet		
103-10.0	R"4"/C"5" channel	5/26/2011	1	wet		
103-10.0	R"4"/C"5" channel	6/20/2011	1	wet		
103-10.0	R"4"/C"5" channel	6/27/2011	1	dry		
103-10.0	R"4"/C"5" channel	7/21/2011	1	dry		
103-11.0	NW Chimon Island	2/16/2000	2	wet	3	NA
103-11.0	NW Chimon Island	5/15/2000	4	wet		
103-11.0	NW Chimon Island	6/21/2000	2	dry		
103-11.0	NW Chimon Island	9/13/2000	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-11.0	NW Chimon Island	1/23/2001	2	dry	7	6
103-11.0	NW Chimon Island	2/2/2001	6	dry		
103-11.0	NW Chimon Island	2/7/2001	8	wet		
103-11.0	NW Chimon Island	8/15/2001	11	wet		
103-11.0	NW Chimon Island	8/28/2001	51	wet		
103-11.0	NW Chimon Island	8/30/2001	4	dry		
103-11.0	NW Chimon Island	1/9/2002	2	dry	4	NA
103-11.0	NW Chimon Island	10/28/2002	8	wet		
103-11.0	NW Chimon Island	2/26/2003	2	wet	11	10
103-11.0	NW Chimon Island	6/11/2003	11	dry		
103-11.0	NW Chimon Island	6/17/2003	28	dry		
103-11.0	NW Chimon Island	8/6/2003	5.8	wet		
103-11.0	NW Chimon Island	8/19/2003	51	wet		
103-11.0	NW Chimon Island	8/23/2004	51	wet	NA	90
103-11.0	NW Chimon Island	8/16/2005	64	wet	NA	90
103-11.0	NW Chimon Island	9/6/2006	4	dry	NA	NA
103-11.0	NW Chimon Island	7/9/2007	1	dry	1	NA
103-11.0	NW Chimon Island	9/13/2007	1	wet		
103-11.0	NW Chimon Island	12/5/2007	1	wet		
103-11.0	NW Chimon Island	1/15/2008	16	dry	4	4
103-11.0	NW Chimon Island	2/20/2008	1	wet		
103-11.0	NW Chimon Island	8/11/2008	1	dry		
103-11.0	NW Chimon Island	9/10/2008	40	wet		
103-11.0	NW Chimon Island	9/16/2008	11	wet		
103-11.0	NW Chimon Island	12/15/2008	1	wet		
103-11.0	NW Chimon Island	12/23/2008	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-11.0	NW Chimon Island	4/2/2009	1	dry		
103-11.0	NW Chimon Island	6/10/2009	48	wet		
103-11.0	NW Chimon Island	6/29/2009	24	dry		
103-11.0	NW Chimon Island	8/3/2009	3	wet		
103-11.0	NW Chimon Island	8/26/2009	3	dry		
103-11.0	NW Chimon Island	8/31/2009	1	wet	3	NA
103-11.0	NW Chimon Island	9/15/2009	1	dry		
103-11.0	NW Chimon Island	10/28/2009	1	dry		
103-11.0	NW Chimon Island	10/29/2009	9	wet		
103-11.0	NW Chimon Island	11/16/2009	1	wet		
103-11.0	NW Chimon Island	12/15/2009	3	wet		
103-11.0	NW Chimon Island	3/2/2010	1	wet		
103-11.0	NW Chimon Island	3/17/2010	1	wet		
103-11.0	NW Chimon Island	5/4/2010	38	wet		
103-11.0	NW Chimon Island	5/19/2010	41	wet		
103-11.0	NW Chimon Island	6/23/2010	3	wet	7	12
103-11.0	NW Chimon Island	8/17/2010	9	wet		
103-11.0	NW Chimon Island	8/25/2010	2	wet		
103-11.0	NW Chimon Island	12/13/2010	62	wet		
103-11.0	NW Chimon Island	12/16/2010	4	dry		
103-11.0	NW Chimon Island	4/19/2011	1	wet		
103-11.0	NW Chimon Island	4/26/2011	3	dry		
103-11.0	NW Chimon Island	5/23/2011	6	wet		
103-11.0	NW Chimon Island	5/26/2011	6	wet	3	NA
103-11.0	NW Chimon Island	6/20/2011	3	wet		
103-11.0	NW Chimon Island	6/27/2011	1	dry		
103-11.0	NW Chimon Island	7/20/2011	13	wet		
103-11.1	South Raymond Rocks	2/16/2000	2	wet		
103-11.1	South Raymond Rocks	5/15/2000	4	wet	2	NA
103-11.1	South Raymond Rocks	6/21/2000	2	dry		
103-11.1	South Raymond Rocks	9/13/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-11.1	South Raymond Rocks	1/23/2001	2	dry	5	6
103-11.1	South Raymond Rocks	2/2/2001	2	dry		
103-11.1	South Raymond Rocks	2/7/2001	2	wet		
103-11.1	South Raymond Rocks	8/15/2001	28	wet		
103-11.1	South Raymond Rocks	8/28/2001	51	wet		
103-11.1	South Raymond Rocks	8/30/2001	4	dry		
103-11.1	South Raymond Rocks	1/9/2002	4	dry	6	NA
103-11.1	South Raymond Rocks	10/28/2002	11	wet		
103-11.1	South Raymond Rocks	2/26/2003	2	wet	9	30
103-11.1	South Raymond Rocks	6/11/2003	4	dry		
103-11.1	South Raymond Rocks	6/17/2003	4	dry		
103-11.1	South Raymond Rocks	8/6/2003	51	wet		
103-11.1	South Raymond Rocks	8/19/2003	51	wet		
103-11.1	South Raymond Rocks	8/23/2004	50	wet	NA	90
103-11.1	South Raymond Rocks	8/16/2005	51	wet	NA	90
103-11.1	South Raymond Rocks	9/6/2006	5	dry	NA	NA
103-11.1	South Raymond Rocks	7/9/2007	1	dry	2	NA
103-11.1	South Raymond Rocks	9/13/2007	4	wet		
103-11.1	South Raymond Rocks	12/5/2007	1	wet		
103-11.1	South Raymond Rocks	1/15/2008	6	dry	5	4
103-11.1	South Raymond Rocks	2/20/2008	1	wet		
103-11.1	South Raymond Rocks	8/11/2008	1	dry		
103-11.1	South Raymond Rocks	9/10/2008	81	wet		
103-11.1	South Raymond Rocks	9/16/2008	6	wet		
103-11.1	South Raymond Rocks	12/15/2008	4	wet		
103-11.1	South Raymond Rocks	12/23/2008	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-11.1	South Raymond Rocks	4/2/2009	2	dry	3	NA
103-11.1	South Raymond Rocks	4/22/2009	4	wet		
103-11.1	South Raymond Rocks	6/10/2009	8	wet		
103-11.1	South Raymond Rocks	6/29/2009	14	dry		
103-11.1	South Raymond Rocks	8/3/2009	8	wet		
103-11.1	South Raymond Rocks	8/26/2009	1	dry		
103-11.1	South Raymond Rocks	8/31/2009	2	wet		
103-11.1	South Raymond Rocks	9/15/2009	1	dry		
103-11.1	South Raymond Rocks	10/28/2009	2	dry		
103-11.1	South Raymond Rocks	10/29/2009	16	wet		
103-11.1	South Raymond Rocks	11/16/2009	1	wet		
103-11.1	South Raymond Rocks	12/15/2009	4	wet		
103-11.1	South Raymond Rocks	3/2/2010	1	wet	7	3
103-11.1	South Raymond Rocks	3/17/2010	1	wet		
103-11.1	South Raymond Rocks	5/4/2010	29	wet		
103-11.1	South Raymond Rocks	5/19/2010	43	wet		
103-11.1	South Raymond Rocks	8/17/2010	21	wet		
103-11.1	South Raymond Rocks	8/25/2010	6	wet		
103-11.1	South Raymond Rocks	12/13/2010	53	wet		
103-11.1	South Raymond Rocks	12/16/2010	1	dry		
103-11.1	South Raymond Rocks	1/19/2011	6	wet	4	NA
103-11.1	South Raymond Rocks	4/19/2011	1	wet		
103-11.1	South Raymond Rocks	4/26/2011	16	dry		
103-11.1	South Raymond Rocks	5/23/2011	7	wet		
103-11.1	South Raymond Rocks	5/26/2011	6	wet		
103-11.1	South Raymond Rocks	6/20/2011	5	wet		
103-11.1	South Raymond Rocks	6/27/2011	1	dry		
103-11.1	South Raymond Rocks	7/20/2011	7	wet		
103-11.2	between Shea-Chimon Island	2/16/2000	4	wet	2	NA
103-11.2	between Shea-Chimon Island	5/15/2000	4	wet		
103-11.2	between Shea-Chimon Island	6/21/2000	2	dry		
103-11.2	between Shea-Chimon Island	9/13/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-11.2	between Shea-Chimon Island	1/23/2001	2	dry	4	7
103-11.2	between Shea-Chimon Island	2/2/2001	2	dry		
103-11.2	between Shea-Chimon Island	2/7/2001	2	wet		
103-11.2	between Shea-Chimon Island	8/15/2001	11	wet		
103-11.2	between Shea-Chimon Island	8/28/2001	51	wet		
103-11.2	between Shea-Chimon Island	8/30/2001	2	dry		
103-11.2	between Shea-Chimon Island	1/9/2002	18	dry	6	NA
103-11.2	between Shea-Chimon Island	10/28/2002	2	wet		
103-11.2	between Shea-Chimon Island	2/26/2003	2	wet	5	15
103-11.2	between Shea-Chimon Island	6/11/2003	2	dry		
103-11.2	between Shea-Chimon Island	8/6/2003	6	wet		
103-11.2	between Shea-Chimon Island	8/19/2003	36	wet		
103-11.2	between Shea-Chimon Island	8/23/2004	11	wet	NA	NA
103-11.2	between Shea-Chimon Island	8/16/2005	30	wet	NA	NA
103-11.2	between Shea-Chimon Island	9/6/2006	5	dry	NA	NA
103-11.2	between Shea-Chimon Island	7/9/2007	2	dry	1	
103-11.2	between Shea-Chimon Island	9/13/2007	1	wet		
103-11.2	between Shea-Chimon Island	12/5/2007	1	wet		
103-11.2	between Shea-Chimon Island	1/15/2008	8	dry	4	4
103-11.2	between Shea-Chimon Island	2/20/2008	1	wet		
103-11.2	between Shea-Chimon Island	8/11/2008	1	dry		
103-11.2	between Shea-Chimon Island	9/10/2008	55	wet		
103-11.2	between Shea-Chimon Island	9/16/2008	9	wet		
103-11.2	between Shea-Chimon Island	12/15/2008	1	wet		
103-11.2	between Shea-Chimon Island	12/23/2008	8	wet		
103-11.2	between Shea-Chimon Island	4/2/2009	1	dry	2	NA
103-11.2	between Shea-Chimon Island	6/29/2009	2	dry		
103-11.2	between Shea-Chimon Island	8/3/2009	2	wet		
103-11.2	between Shea-Chimon Island	8/26/2009	1	dry		
103-11.2	between Shea-Chimon Island	8/31/2009	1	wet		
103-11.2	between Shea-Chimon Island	9/15/2009	1	dry		
103-11.2	between Shea-Chimon Island	10/28/2009	2	dry		
103-11.2	between Shea-Chimon Island	11/16/2009	4	wet		
103-11.2	between Shea-Chimon Island	12/15/2009	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-11.2	between Shea-Chimon Island	3/2/2010	1	wet	4	3
103-11.2	between Shea-Chimon Island	3/17/2010	1	wet		
103-11.2	between Shea-Chimon Island	5/4/2010	9	wet		
103-11.2	between Shea-Chimon Island	5/19/2010	22	wet		
103-11.2	between Shea-Chimon Island	8/17/2010	1	wet		
103-11.2	between Shea-Chimon Island	8/25/2010	1	wet		
103-11.2	between Shea-Chimon Island	12/13/2010	81	wet		
103-11.2	between Shea-Chimon Island	12/16/2010	3	dry		
103-11.2	between Shea-Chimon Island	4/19/2011	1	wet	1	NA
103-11.2	between Shea-Chimon Island	4/26/2011	1	dry		
103-11.2	between Shea-Chimon Island	5/23/2011	4	wet		
103-11.2	between Shea-Chimon Island	6/20/2011	2	wet		
103-11.2	between Shea-Chimon Island	6/27/2011	1	dry		
103-11.2	between Shea-Chimon Island	7/20/2011	1	wet		
103-12.0	between Sheffield-Copps Island	4/24/2000	2	wet	5	NA
103-12.0	between Sheffield-Copps Island	5/25/2000	14	wet		
103-12.0	between Sheffield-Copps Island	6/21/2000	8	dry		
103-12.0	between Sheffield-Copps Island	7/18/2000	6	dry		
103-12.0	between Sheffield-Copps Island	7/19/2000	2	dry		
103-12.0	between Sheffield-Copps Island	9/14/2000	6	wet		
103-12.0	between Sheffield-Copps Island	2/2/2001	8	dry	3	NA
103-12.0	between Sheffield-Copps Island	4/2/2001	2	wet		
103-12.0	between Sheffield-Copps Island	5/29/2001	2	dry		
103-12.0	between Sheffield-Copps Island	6/20/2001	6	dry		
103-12.0	between Sheffield-Copps Island	8/14/2001	6	wet		
103-12.0	between Sheffield-Copps Island	8/30/2001	2	dry		
103-12.0	between Sheffield-Copps Island	9/24/2001	2	wet		
103-12.0	between Sheffield-Copps Island	5/22/2002	2	dry	4	4
103-12.0	between Sheffield-Copps Island	6/11/2002	2	wet		
103-12.0	between Sheffield-Copps Island	6/17/2002	4	dry		
103-12.0	between Sheffield-Copps Island	9/3/2002	51	wet		
103-12.0	between Sheffield-Copps Island	9/4/2002	11	wet		
103-12.0	between Sheffield-Copps Island	9/30/2002	2	dry		
103-12.0	between Sheffield-Copps Island	10/28/2002	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.0	between Sheffield-Copps Island	4/30/2003	2	dry	3	NA
103-12.0	between Sheffield-Copps Island	6/2/2003	11	wet		
103-12.0	between Sheffield-Copps Island	6/11/2003	2	dry		
103-12.0	between Sheffield-Copps Island	6/17/2003	14	dry		
103-12.0	between Sheffield-Copps Island	8/6/2003	2	wet		
103-12.0	between Sheffield-Copps Island	8/18/2003	2	wet		
103-12.0	between Sheffield-Copps Island	10/1/2003	2	dry		
103-12.0	between Sheffield-Copps Island	10/2/2003	2	dry		
103-12.0	between Sheffield-Copps Island	7/7/2004	2	wet	2	NA
103-12.0	between Sheffield-Copps Island	8/9/2004	2	dry		
103-12.0	between Sheffield-Copps Island	9/13/2004	2	wet		
103-12.0	between Sheffield-Copps Island	9/21/2004	8	wet		
103-12.0	between Sheffield-Copps Island	8/16/2005	18	wet	NA	NA
103-12.0	between Sheffield-Copps Island	7/17/2006	1	dry	2	4
103-12.0	between Sheffield-Copps Island	8/31/2006	43	wet		
103-12.0	between Sheffield-Copps Island	9/5/2006	2	wet		
103-12.0	between Sheffield-Copps Island	9/6/2006	2	dry		
103-12.0	between Sheffield-Copps Island	10/16/2006	1	dry		
103-12.0	between Sheffield-Copps Island	11/1/2006	2	wet		
103-12.0	between Sheffield-Copps Island	11/27/2006	1	dry		
103-12.0	between Sheffield-Copps Island	3/5/2007	1	wet	2	NA
103-12.0	between Sheffield-Copps Island	5/1/2007	1	wet		
103-12.0	between Sheffield-Copps Island	6/5/2007	40	wet		
103-12.0	between Sheffield-Copps Island	6/7/2007	2	wet		
103-12.0	between Sheffield-Copps Island	7/24/2007	1	wet		
103-12.0	between Sheffield-Copps Island	8/8/2007	1	wet		
103-12.0	between Sheffield-Copps Island	8/23/2007	2	wet		
103-12.0	between Sheffield-Copps Island	9/13/2007	2	wet		
103-12.0	between Sheffield-Copps Island	10/15/2007	4	wet		
103-12.0	between Sheffield-Copps Island	10/22/2007	1	wet		
103-12.0	between Sheffield-Copps Island	10/30/2007	1	wet		
103-12.0	between Sheffield-Copps Island	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.0	between Sheffield-Copps Island	2/4/2008	2	dry	3	7
103-12.0	between Sheffield-Copps Island	7/28/2008	1	dry		
103-12.0	between Sheffield-Copps Island	8/5/2008	1	dry		
103-12.0	between Sheffield-Copps Island	9/10/2008	32	wet		
103-12.0	between Sheffield-Copps Island	12/16/2008	2	wet		
103-12.0	between Sheffield-Copps Island	12/23/2008	7	wet		
103-12.0	between Sheffield-Copps Island	4/2/2009	1	dry	2	NA
103-12.0	between Sheffield-Copps Island	4/22/2009	2	wet		
103-12.0	between Sheffield-Copps Island	6/10/2009	5	wet		
103-12.0	between Sheffield-Copps Island	6/23/2009	10	wet		
103-12.0	between Sheffield-Copps Island	8/3/2009	2	wet		
103-12.0	between Sheffield-Copps Island	8/26/2009	1	dry		
103-12.0	between Sheffield-Copps Island	8/31/2009	1	wet		
103-12.0	between Sheffield-Copps Island	3/2/2010	1	wet	1	NA
103-12.0	between Sheffield-Copps Island	3/17/2010	1	wet		
103-12.0	between Sheffield-Copps Island	3/25/2010	1	wet		
103-12.0	between Sheffield-Copps Island	5/4/2010	1	wet		
103-12.0	between Sheffield-Copps Island	5/19/2010	2	wet		
103-12.0	between Sheffield-Copps Island	6/23/2010	5	wet		
103-12.0	between Sheffield-Copps Island	8/17/2010	1	wet		
103-12.0	between Sheffield-Copps Island	8/25/2010	2	wet		
103-12.0	between Sheffield-Copps Island	4/26/2011	1	dry	1	NA
103-12.0	between Sheffield-Copps Island	6/27/2011	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	4/24/2000	2	wet	2	NA
103-12.1	South Shea Island/East end Sheffield Island	5/25/2000	11	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/21/2000	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	7/18/2000	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	7/19/2000	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	9/14/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.1	South Shea Island/East end Sheffield Island	2/2/2001	9	dry		
103-12.1	South Shea Island/East end Sheffield Island	4/2/2001	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	5/29/2001	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	6/20/2001	2	dry	2	NA
103-12.1	South Shea Island/East end Sheffield Island	8/14/2001	6	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/30/2001	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	9/24/2001	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	5/22/2002	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	6/11/2002	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/17/2002	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	9/3/2002	50	wet	3	4
103-12.1	South Shea Island/East end Sheffield Island	9/4/2002	6	wet		
103-12.1	South Shea Island/East end Sheffield Island	9/30/2002	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	10/28/2002	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	4/30/2003	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	6/2/2003	18	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/11/2003	2	dry	3	NA
103-12.1	South Shea Island/East end Sheffield Island	6/17/2003	11	dry		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.1	South Shea Island/East end Sheffield Island	8/6/2003	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/18/2003	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	10/1/2003	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	10/2/2003	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	7/7/2004	2	wet	2	NA
103-12.1	South Shea Island/East end Sheffield Island	8/9/2004	2	dry		
103-12.1	South Shea Island/East end Sheffield Island	9/13/2004	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	9/21/2004	4	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/16/2005	10	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.1	South Shea Island/East end Sheffield Island	7/17/2006	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	8/31/2006	9	wet		
103-12.1	South Shea Island/East end Sheffield Island	9/5/2006	1	wet	2	NA
103-12.1	South Shea Island/East end Sheffield Island	9/6/2006	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	10/16/2006	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	11/1/2006	2	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.1	South Shea Island/East end Sheffield Island	11/27/2006	6	dry		
103-12.1	South Shea Island/East end Sheffield Island	3/5/2007	1	wet	2	NA
103-12.1	South Shea Island/East end Sheffield Island	5/1/2007	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/5/2007	81	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/7/2007	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	7/24/2007	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/8/2007	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/23/2007	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	9/13/2007	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	10/15/2007	8	wet		
103-12.1	South Shea Island/East end Sheffield Island	10/22/2007	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	10/30/2007	5	wet		
103-12.1	South Shea Island/East end Sheffield Island	12/5/2007	5	wet		
103-12.1	South Shea Island/East end Sheffield Island	2/4/2008	1	dry	2	NA
103-12.1	South Shea Island/East end Sheffield Island	7/28/2008	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	8/5/2008	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	9/10/2008	14	wet		
103-12.1	South Shea Island/East end Sheffield Island	12/16/2008	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	12/23/2008	3	wet		
103-12.1	South Shea Island/East end Sheffield Island	4/2/2009	1	dry	2	NA

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.1	South Shea Island/East end Sheffield Island	4/22/2009	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/10/2009	16	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/23/2009	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/3/2009	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/26/2009	1	dry		
103-12.1	South Shea Island/East end Sheffield Island	8/31/2009	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-12.1	South Shea Island/East end Sheffield Island	3/2/2010	1	wet	1	NA
103-12.1	South Shea Island/East end Sheffield Island	3/17/2010	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	3/25/2010	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	5/4/2010	3	wet		
103-12.1	South Shea Island/East end Sheffield Island	5/19/2010	2	wet		
103-12.1	South Shea Island/East end Sheffield Island	6/23/2010	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/17/2010	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	8/25/2010	1	wet		
103-12.1	South Shea Island/East end Sheffield Island	4/26/2011	1	dry	1	NA
103-12.1	South Shea Island/East end Sheffield Island	6/27/2011	1	dry		
103-14.0	between Betts and Grassy Island	2/16/2000	2	wet	3	NA
103-14.0	between Betts and Grassy Island	5/15/2000	2	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-14.0	between Betts and Grassy Island	6/21/2000	2	dry		
103-14.0	between Betts and Grassy Island	9/13/2000	14	wet		
103-14.0	between Betts and Grassy Island	1/23/2001	2	dry	4	7
103-14.0	between Betts and Grassy Island	2/2/2001	2	dry		
103-14.0	between Betts and Grassy Island	2/7/2001	4	wet		
103-14.0	between Betts and Grassy Island	8/14/2001	6	wet		
103-14.0	between Betts and Grassy Island	8/28/2001	51	wet		
103-14.0	between Betts and Grassy Island	8/30/2001	2	dry		
103-14.0	between Betts and Grassy Island	1/9/2002	6	dry	8	NA
103-14.0	between Betts and Grassy Island	10/28/2002	11	wet		
103-14.0	between Betts and Grassy Island	2/26/2003	2	wet	5	NA
103-14.0	between Betts and Grassy Island	6/11/2003	11	dry		
103-14.0	between Betts and Grassy Island	6/17/2003	6	dry		
103-14.0	between Betts and Grassy Island	8/6/2003	6	wet		
103-14.0	between Betts and Grassy Island	8/19/2003	6	wet		
103-14.0	between Betts and Grassy Island	8/23/2004	51	wet	NA	90
103-14.0	between Betts and Grassy Island	8/16/2005	47	wet	NA	90
103-14.0	between Betts and Grassy Island	9/6/2006	1	dry	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-14.0	between Betts and Grassy Island	7/9/2007	2	dry	2	NA
103-14.0	between Betts and Grassy Island	9/13/2007	5	wet		
103-14.0	between Betts and Grassy Island	10/30/2007	3	wet		
103-14.0	between Betts and Grassy Island	12/5/2007	1	wet		
103-14.0	between Betts and Grassy Island	1/15/2008	9	dry	4	4
103-14.0	between Betts and Grassy Island	2/20/2008	1	wet		
103-14.0	between Betts and Grassy Island	8/11/2008	1	dry		
103-14.0	between Betts and Grassy Island	9/10/2008	36	wet		
103-14.0	between Betts and Grassy Island	9/16/2008	5	wet		
103-14.0	between Betts and Grassy Island	12/15/2008	4	wet		
103-14.0	between Betts and Grassy Island	12/23/2008	2	wet		
103-14.0	between Betts and Grassy Island	4/2/2009	1	dry	2	NA
103-14.0	between Betts and Grassy Island	4/22/2009	1	wet		
103-14.0	between Betts and Grassy Island	6/10/2009	10	wet		
103-14.0	between Betts and Grassy Island	6/29/2009	1	dry		
103-14.0	between Betts and Grassy Island	8/3/2009	2	wet		
103-14.0	between Betts and Grassy Island	8/26/2009	1	dry		
103-14.0	between Betts and Grassy Island	8/31/2009	1	wet		
103-14.0	between Betts and Grassy Island	9/15/2009	1	dry		
103-14.0	between Betts and Grassy Island	10/28/2009	1	dry		
103-14.0	between Betts and Grassy Island	11/16/2009	1	wet		
103-14.0	between Betts and Grassy Island	12/15/2009	8	wet		
103-14.0	between Betts and Grassy Island	3/17/2010	1	wet	9	3
103-14.0	between Betts and Grassy Island	5/4/2010	19	wet		
103-14.0	between Betts and Grassy Island	5/19/2010	18	wet		
103-14.0	between Betts and Grassy Island	6/23/2010	11	wet		
103-14.0	between Betts and Grassy Island	8/17/2010	3	wet		
103-14.0	between Betts and Grassy Island	8/25/2010	6	wet		
103-14.0	between Betts and Grassy Island	12/13/2010	61	wet		
103-14.0	between Betts and Grassy Island	12/16/2010	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-14.0	between Betts and Grassy Island	4/19/2011	1	wet	2	NA
103-14.0	between Betts and Grassy Island	4/26/2011	1	dry		
103-14.0	between Betts and Grassy Island	5/23/2011	11	wet		
103-14.0	between Betts and Grassy Island	6/20/2011	4	wet		
103-14.0	between Betts and Grassy Island	6/20/2011	3	wet		
103-14.0	between Betts and Grassy Island	6/27/2011	1	dry		
103-14.0	between Betts and Grassy Island	7/20/2011	4	wet		
103-15.0	Grassy Hammock	2/16/2000	2	wet	4	NA
103-15.0	Grassy Hammock	5/15/2000	6	wet		
103-15.0	Grassy Hammock	6/21/2000	2	dry		
103-15.0	Grassy Hammock	9/13/2000	14	wet		
103-15.0	Grassy Hammock	1/23/2001	2	dry	7	4
103-15.0	Grassy Hammock	2/2/2001	4	dry		
103-15.0	Grassy Hammock	2/7/2001	2	wet		
103-15.0	Grassy Hammock	8/14/2001	22	wet		
103-15.0	Grassy Hammock	8/16/2001	6	dry		
103-15.0	Grassy Hammock	8/28/2001	51	wet		
103-15.0	Grassy Hammock	8/30/2001	11	dry		
103-15.0	Grassy Hammock	1/9/2002	11	dry	16	NA
103-15.0	Grassy Hammock	10/28/2002	22	wet		
103-15.0	Grassy Hammock	2/26/2003	2	wet	9	10
103-15.0	Grassy Hammock	6/11/2003	4	dry		
103-15.0	Grassy Hammock	6/17/2003	11	dry		
103-15.0	Grassy Hammock	8/6/2003	51	wet		
103-15.0	Grassy Hammock	8/19/2003	18	wet		
103-15.0	Grassy Hammock	8/23/2004	51	wet	NA	90
103-15.0	Grassy Hammock	8/16/2005	46	wet	NA	90
103-15.0	Grassy Hammock	9/6/2006	8	dry	NA	NA
103-15.0	Grassy Hammock	7/9/2007	1	dry	2	NA
103-15.0	Grassy Hammock	9/13/2007	4	wet		
103-15.0	Grassy Hammock	10/30/2007	6	wet		
103-15.0	Grassy Hammock	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.0	Grassy Hammock	1/15/2008	11	dry	5	3
103-15.0	Grassy Hammock	2/20/2008	1	wet		
103-15.0	Grassy Hammock	8/11/2008	1	dry		
103-15.0	Grassy Hammock	9/10/2008	32	wet		
103-15.0	Grassy Hammock	9/16/2008	5	wet		
103-15.0	Grassy Hammock	12/15/2008	2	wet		
103-15.0	Grassy Hammock	12/16/2008	12	wet		
103-15.0	Grassy Hammock	12/23/2008	6	wet		
103-15.0	Grassy Hammock	4/2/2009	1	dry	3	NA
103-15.0	Grassy Hammock	4/22/2009	8	wet		
103-15.0	Grassy Hammock	6/10/2009	4	wet		
103-15.0	Grassy Hammock	6/29/2009	4	dry		
103-15.0	Grassy Hammock	8/3/2009	11	wet		
103-15.0	Grassy Hammock	8/26/2009	1	dry		
103-15.0	Grassy Hammock	8/31/2009	5	wet		
103-15.0	Grassy Hammock	9/15/2009	1	dry		
103-15.0	Grassy Hammock	10/28/2009	1	dry		
103-15.0	Grassy Hammock	10/29/2009	7	wet		
103-15.0	Grassy Hammock	11/16/2009	2	wet		
103-15.0	Grassy Hammock	12/15/2009	8	wet		
103-15.0	Grassy Hammock	3/2/2010	1	wet	7	23
103-15.0	Grassy Hammock	3/17/2010	1	wet		
103-15.0	Grassy Hammock	5/4/2010	34	wet		
103-15.0	Grassy Hammock	5/19/2010	16	wet		
103-15.0	Grassy Hammock	6/23/2010	4	wet		
103-15.0	Grassy Hammock	8/17/2010	38	wet		
103-15.0	Grassy Hammock	8/25/2010	9	wet		
103-15.0	Grassy Hammock	12/13/2010	58	wet		
103-15.0	Grassy Hammock	12/16/2010	1	dry		
103-15.0	Grassy Hammock	4/19/2011	2	wet	3	NA
103-15.0	Grassy Hammock	4/26/2011	2	dry		
103-15.0	Grassy Hammock	5/23/2011	6	wet		
103-15.0	Grassy Hammock	6/20/2011	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.1	N. C"9" / W. Grassy Hammock	2/16/2000	2	wet	3	NA
103-15.1	N. C"9" / W. Grassy Hammock	5/15/2000	6	wet		
103-15.1	N. C"9" / W. Grassy Hammock	6/21/2000	2	dry		
103-15.1	N. C"9" / W. Grassy Hammock	1/23/2001	2	dry	5	15
103-15.1	N. C"9" / W. Grassy Hammock	2/7/2001	4	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/28/2001	51	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/30/2001	2	dry		
103-15.1	N. C"9" / W. Grassy Hammock	1/9/2002	14	dry	11	NA
103-15.1	N. C"9" / W. Grassy Hammock	10/28/2002	8	wet		
103-15.1	N. C"9" / W. Grassy Hammock	2/26/2003	2	wet	10	15
103-15.1	N. C"9" / W. Grassy Hammock	6/17/2003	8	dry		
103-15.1	N. C"9" / W. Grassy Hammock	8/6/2003	50	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/19/2003	18	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/23/2004	51	wet	NA	NA
103-15.1	N. C"9" / W. Grassy Hammock	8/16/2005	81	wet	9	**40**
103-15.1	N. C"9" / W. Grassy Hammock	11/21/2005	1	dry		
103-15.1	N. C"9" / W. Grassy Hammock	7/9/2007	3	dry	2	NA
103-15.1	N. C"9" / W. Grassy Hammock	9/13/2007	2	wet		
103-15.1	N. C"9" / W. Grassy Hammock	10/30/2007	4	wet		
103-15.1	N. C"9" / W. Grassy Hammock	12/5/2007	1	wet		
103-15.1	N. C"9" / W. Grassy Hammock	2/20/2008	1	wet	4	7
103-15.1	N. C"9" / W. Grassy Hammock	8/11/2008	1	dry		
103-15.1	N. C"9" / W. Grassy Hammock	9/10/2008	54	wet		
103-15.1	N. C"9" / W. Grassy Hammock	9/16/2008	4	wet		
103-15.1	N. C"9" / W. Grassy Hammock	12/15/2008	12	wet		
103-15.1	N. C"9" / W. Grassy Hammock	12/23/2008	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.1	N. C"9" / W. Grassy Hammock	4/2/2009	1	dry	4	NA
103-15.1	N. C"9" / W. Grassy Hammock	4/22/2009	9	wet		
103-15.1	N. C"9" / W. Grassy Hammock	6/10/2009	6	wet		
103-15.1	N. C"9" / W. Grassy Hammock	6/29/2009	6	dry		
103-15.1	N. C"9" / W. Grassy Hammock	8/3/2009	12	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/26/2009	1	dry		
103-15.1	N. C"9" / W. Grassy Hammock	8/31/2009	10	wet		
103-15.1	N. C"9" / W. Grassy Hammock	9/15/2009	1	dry		
103-15.1	N. C"9" / W. Grassy Hammock	11/16/2009	2	wet		
103-15.1	N. C"9" / W. Grassy Hammock	12/15/2009	10	wet		
103-15.1	N. C"9" / W. Grassy Hammock	3/17/2010	1	wet	13	19
103-15.1	N. C"9" / W. Grassy Hammock	5/4/2010	41	wet		
103-15.1	N. C"9" / W. Grassy Hammock	5/19/2010	21	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/17/2010	27	wet		
103-15.1	N. C"9" / W. Grassy Hammock	8/25/2010	9	wet		
103-15.1	N. C"9" / W. Grassy Hammock	12/13/2010	63	wet		
103-15.1	N. C"9" / W. Grassy Hammock	12/16/2010	4	dry		
103-15.1	N. C"9" / W. Grassy Hammock	1/19/2011	2	wet	4	NA
103-15.1	N. C"9" / W. Grassy Hammock	4/19/2011	4	wet		
103-15.1	N. C"9" / W. Grassy Hammock	4/26/2011	4	dry		
103-15.1	N. C"9" / W. Grassy Hammock	5/23/2011	8	wet		
103-15.1	N. C"9" / W. Grassy Hammock	6/20/2011	3	wet		
103-15.1	N. C"9" / W. Grassy Hammock	6/27/2011	3	dry		
103-15.1	N. C"9" / W. Grassy Hammock	7/20/2011	5	wet		
103-15.3	C"1" NE Raymond Rocks	2/16/2000	1.6	wet	3	NA
103-15.3	C"1" NE Raymond Rocks	5/15/2000	11	wet		
103-15.3	C"1" NE Raymond Rocks	6/21/2000	2	dry		
103-15.3	C"1" NE Raymond Rocks	1/23/2001	2	dry	9	15
103-15.3	C"1" NE Raymond Rocks	2/7/2001	4	wet		
103-15.3	C"1" NE Raymond Rocks	8/28/2001	51	wet		
103-15.3	C"1" NE Raymond Rocks	8/30/2001	18	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.3	C"1" NE Raymond Rocks	1/9/2002	8	dry	8	NA
103-15.3	C"1" NE Raymond Rocks	10/28/2002	8	wet		
103-15.3	C"1" NE Raymond Rocks	2/26/2003	8	wet	17	15
103-15.3	C"1" NE Raymond Rocks	6/17/2003	8	dry		
103-15.3	C"1" NE Raymond Rocks	8/6/2003	51	wet		
103-15.3	C"1" NE Raymond Rocks	8/19/2003	28	wet		
103-15.3	C"1" NE Raymond Rocks	8/23/2004	51	wet	NA	NA
103-15.3	C"1" NE Raymond Rocks	8/16/2005	81	wet	9	**40**
103-15.3	C"1" NE Raymond Rocks	11/21/2005	1	dry		
103-15.3	C"1" NE Raymond Rocks	7/9/2007	1	dry	5	NA
103-15.3	C"1" NE Raymond Rocks	9/13/2007	8	wet		
103-15.3	C"1" NE Raymond Rocks	10/30/2007	13	wet		
103-15.3	C"1" NE Raymond Rocks	12/5/2007	8	wet		
103-15.3	C"1" NE Raymond Rocks	1/15/2008	14	dry	9	19
103-15.3	C"1" NE Raymond Rocks	2/20/2008	1	wet		
103-15.3	C"1" NE Raymond Rocks	8/11/2008	13	dry		
103-15.3	C"1" NE Raymond Rocks	9/10/2008	81	wet		
103-15.3	C"1" NE Raymond Rocks	9/16/2008	7	wet		
103-15.3	C"1" NE Raymond Rocks	12/15/2008	1	wet		
103-15.3	C"1" NE Raymond Rocks	12/16/2008	34	wet		
103-15.3	C"1" NE Raymond Rocks	4/2/2009	1	dry	5	NA
103-15.3	C"1" NE Raymond Rocks	4/22/2009	12	wet		
103-15.3	C"1" NE Raymond Rocks	6/10/2009	12	wet		
103-15.3	C"1" NE Raymond Rocks	8/3/2009	6	wet		
103-15.3	C"1" NE Raymond Rocks	8/26/2009	1	dry		
103-15.3	C"1" NE Raymond Rocks	8/31/2009	6	wet		
103-15.3	C"1" NE Raymond Rocks	9/15/2009	4	dry		
103-15.3	C"1" NE Raymond Rocks	10/28/2009	2	dry		
103-15.3	C"1" NE Raymond Rocks	11/16/2009	1	wet		
103-15.3	C"1" NE Raymond Rocks	12/15/2009	92	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.3	C"1" NE Raymond Rocks	3/2/2010	1	wet	10	28
103-15.3	C"1" NE Raymond Rocks	3/17/2010	1	wet		
103-15.3	C"1" NE Raymond Rocks	5/4/2010	23	wet		
103-15.3	C"1" NE Raymond Rocks	5/19/2010	32	wet		
103-15.3	C"1" NE Raymond Rocks	8/17/2010	81	wet		
103-15.3	C"1" NE Raymond Rocks	8/25/2010	9	wet		
103-15.3	C"1" NE Raymond Rocks	12/13/2010	81	wet		
103-15.3	C"1" NE Raymond Rocks	12/16/2010	2	dry		
103-15.3	C"1" NE Raymond Rocks	1/19/2011	1	wet	3	NA
103-15.3	C"1" NE Raymond Rocks	4/19/2011	8	wet		
103-15.3	C"1" NE Raymond Rocks	4/26/2011	2	dry		
103-15.3	C"1" NE Raymond Rocks	5/23/2011	9	wet		
103-15.3	C"1" NE Raymond Rocks	6/20/2011	2	wet		
103-15.3	C"1" NE Raymond Rocks	6/27/2011	2	dry		
103-15.3	C"1" NE Raymond Rocks	7/20/2011	7	wet		
103-15.5	SW Calf Pasture Island	2/16/2000	2	wet	2	NA
103-15.5	SW Calf Pasture Island	5/15/2000	4	wet		
103-15.5	SW Calf Pasture Island	6/21/2000	2	dry		
103-15.5	SW Calf Pasture Island	1/23/2001	2	dry	8	23
103-15.5	SW Calf Pasture Island	8/28/2001	51	wet		
103-15.5	SW Calf Pasture Island	8/30/2001	6	dry		
103-15.5	SW Calf Pasture Island	1/9/2002	4	dry	9	NA
103-15.5	SW Calf Pasture Island	10/28/2002	22	wet		
103-15.5	SW Calf Pasture Island	2/26/2003	6	wet	14	15
103-15.5	SW Calf Pasture Island	6/17/2003	14	dry		
103-15.5	SW Calf Pasture Island	8/6/2003	51	wet		
103-15.5	SW Calf Pasture Island	8/19/2003	8	wet		
103-15.5	SW Calf Pasture Island	8/23/2004	51	wet	NA	90
103-15.5	SW Calf Pasture Island	8/16/2005	55	wet	NA	90
103-15.5	SW Calf Pasture Island	7/9/2007	2	dry	4	15
103-15.5	SW Calf Pasture Island	9/13/2007	2	wet		
103-15.5	SW Calf Pasture Island	10/30/2007	47	wet		
103-15.5	SW Calf Pasture Island	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
103-15.5	SW Calf Pasture Island	1/15/2008	3	dry	5	4
103-15.5	SW Calf Pasture Island	2/20/2008	1	wet		
103-15.5	SW Calf Pasture Island	8/11/2008	1	dry		
103-15.5	SW Calf Pasture Island	9/10/2008	67	wet		
103-15.5	SW Calf Pasture Island	9/16/2008	6	wet		
103-15.5	SW Calf Pasture Island	12/15/2008	10	wet		
103-15.5	SW Calf Pasture Island	12/23/2008	5	wet		
103-15.5	SW Calf Pasture Island	4/2/2009	1	dry	4	NA
103-15.5	SW Calf Pasture Island	4/22/2009	18	wet		
103-15.5	SW Calf Pasture Island	6/10/2009	5	wet		
103-15.5	SW Calf Pasture Island	8/3/2009	15	wet		
103-15.5	SW Calf Pasture Island	8/26/2009	4	dry		
103-15.5	SW Calf Pasture Island	8/31/2009	4	wet		
103-15.5	SW Calf Pasture Island	9/15/2009	1	dry		
103-15.5	SW Calf Pasture Island	11/16/2009	1	wet		
103-15.5	SW Calf Pasture Island	12/15/2009	30	wet		
103-15.5	SW Calf Pasture Island	3/2/2010	2	wet	8	NA
103-15.5	SW Calf Pasture Island	3/17/2010	1	wet		
103-15.5	SW Calf Pasture Island	5/4/2010	26	wet		
103-15.5	SW Calf Pasture Island	5/19/2010	23	wet		
103-15.5	SW Calf Pasture Island	8/17/2010	24	wet		
103-15.5	SW Calf Pasture Island	8/25/2010	9	wet		
103-15.5	SW Calf Pasture Island	12/13/2010	16	wet		
103-15.5	SW Calf Pasture Island	12/16/2010	6	dry		
103-15.5	SW Calf Pasture Island	1/19/2011	23	wet	4	NA
103-15.5	SW Calf Pasture Island	4/19/2011	4	wet		
103-15.5	SW Calf Pasture Island	4/26/2011	2	dry		
103-15.5	SW Calf Pasture Island	5/23/2011	3	wet		
103-15.5	SW Calf Pasture Island	5/26/2011	8	wet		
103-15.5	SW Calf Pasture Island	6/20/2011	1	wet		
103-15.5	SW Calf Pasture Island	6/27/2011	1	dry		
103-15.5	SW Calf Pasture Island	7/20/2011	8	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-02.0	G"5" near Pecks Ledge	2/16/2000	2	wet	2	NA
158-02.0	G"5" near Pecks Ledge	5/15/2000	2	wet		
158-02.0	G"5" near Pecks Ledge	6/21/2000	2	dry		
158-02.0	G"5" near Pecks Ledge	9/13/2000	4	wet		
158-02.0	G"5" near Pecks Ledge	1/23/2001	2	dry	6	4
158-02.0	G"5" near Pecks Ledge	2/2/2001	2	dry		
158-02.0	G"5" near Pecks Ledge	2/7/2001	8	wet		
158-02.0	G"5" near Pecks Ledge	8/14/2001	8	wet		
158-02.0	G"5" near Pecks Ledge	8/16/2001	8	dry		
158-02.0	G"5" near Pecks Ledge	8/28/2001	51	wet		
158-02.0	G"5" near Pecks Ledge	8/30/2001	4	dry		
158-02.0	G"5" near Pecks Ledge	1/9/2002	2	dry	2	NA
158-02.0	G"5" near Pecks Ledge	10/28/2002	2	wet		
158-02.0	G"5" near Pecks Ledge	2/26/2003	2	wet	10	19
158-02.0	G"5" near Pecks Ledge	4/30/2003	2	dry		
158-02.0	G"5" near Pecks Ledge	6/2/2003	28	wet		
158-02.0	G"5" near Pecks Ledge	6/11/2003	51	dry		
158-02.0	G"5" near Pecks Ledge	6/17/2003	18	dry		
158-02.0	G"5" near Pecks Ledge	8/6/2003	4	wet		
158-02.0	G"5" near Pecks Ledge	8/18/2003	36	wet		
158-02.0	G"5" near Pecks Ledge	8/23/2004	51	wet	NA	90
158-02.0	G"5" near Pecks Ledge	8/16/2005	45	wet	NA	90
158-02.0	G"5" near Pecks Ledge	9/6/2006	6	dry	NA	NA
158-02.0	G"5" near Pecks Ledge	6/18/2007	2	wet	2	NA
158-02.0	G"5" near Pecks Ledge	6/20/2007	4	dry		
158-02.0	G"5" near Pecks Ledge	7/9/2007	1	dry		
158-02.0	G"5" near Pecks Ledge	7/24/2007	1	wet		
158-02.0	G"5" near Pecks Ledge	9/13/2007	2	wet		
158-02.0	G"5" near Pecks Ledge	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-02.0	G"5" near Pecks Ledge	1/15/2008	2	dry	2	NA
158-02.0	G"5" near Pecks Ledge	2/20/2008	1	wet		
158-02.0	G"5" near Pecks Ledge	8/11/2008	1	dry		
158-02.0	G"5" near Pecks Ledge	9/10/2008	12	wet		
158-02.0	G"5" near Pecks Ledge	9/16/2008	3	wet		
158-02.0	G"5" near Pecks Ledge	12/15/2008	1	wet		
158-02.0	G"5" near Pecks Ledge	12/23/2008	2	wet		
158-02.0	G"5" near Pecks Ledge	4/2/2009	1	dry	2	NA
158-02.0	G"5" near Pecks Ledge	4/22/2009	3	wet		
158-02.0	G"5" near Pecks Ledge	6/10/2009	17	wet		
158-02.0	G"5" near Pecks Ledge	6/29/2009	2	dry		
158-02.0	G"5" near Pecks Ledge	7/28/2009	2	dry		
158-02.0	G"5" near Pecks Ledge	8/3/2009	1	wet		
158-02.0	G"5" near Pecks Ledge	8/26/2009	3	dry		
158-02.0	G"5" near Pecks Ledge	8/31/2009	1	wet		
158-02.0	G"5" near Pecks Ledge	9/15/2009	1	dry		
158-02.0	G"5" near Pecks Ledge	10/29/2009	1	wet		
158-02.0	G"5" near Pecks Ledge	11/16/2009	1	wet		
158-02.0	G"5" near Pecks Ledge	3/2/2010	1	wet	3	23
158-02.0	G"5" near Pecks Ledge	3/17/2010	1	wet		
158-02.0	G"5" near Pecks Ledge	5/4/2010	48	wet		
158-02.0	G"5" near Pecks Ledge	5/19/2010	14	wet		
158-02.0	G"5" near Pecks Ledge	8/17/2010	4	wet		
158-02.0	G"5" near Pecks Ledge	8/25/2010	1	wet		
158-02.0	G"5" near Pecks Ledge	9/16/2010	1	wet		
158-02.0	G"5" near Pecks Ledge	12/13/2010	17	wet		
158-02.0	G"5" near Pecks Ledge	12/16/2010	1	wet		
158-02.0	G"5" near Pecks Ledge	3/14/2011	1	dry	1	NA
158-02.0	G"5" near Pecks Ledge	4/26/2011	1	dry		
158-02.0	G"5" near Pecks Ledge	5/23/2011	5	wet		
158-02.0	G"5" near Pecks Ledge	6/27/2011	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-02.1	N. Pecks Ledge	2/16/2000	2	wet	5	15
158-02.1	N. Pecks Ledge	5/15/2000	4	wet		
158-02.1	N. Pecks Ledge	6/21/2000	2	dry		
158-02.1	N. Pecks Ledge	9/13/2000	50	wet		
158-02.1	N. Pecks Ledge	1/23/2001	2	dry	5	19
158-02.1	N. Pecks Ledge	2/2/2001	6	dry		
158-02.1	N. Pecks Ledge	2/7/2001	2	wet		
158-02.1	N. Pecks Ledge	8/14/2001	50	wet		
158-02.1	N. Pecks Ledge	8/16/2001	2	dry		
158-02.1	N. Pecks Ledge	8/28/2001	50	wet		
158-02.1	N. Pecks Ledge	8/30/2001	2	dry		
158-02.1	N. Pecks Ledge	1/9/2002	2	dry	3	NA
158-02.1	N. Pecks Ledge	10/28/2002	6	wet		
158-02.1	N. Pecks Ledge	2/26/2003	4	wet	4	NA
158-02.1	N. Pecks Ledge	2/26/2003	2	wet		
158-02.1	N. Pecks Ledge	4/29/2003	4	dry		
158-02.1	N. Pecks Ledge	6/11/2003	2	dry		
158-02.1	N. Pecks Ledge	8/6/2003	11	wet		
158-02.1	N. Pecks Ledge	8/19/2003	14	wet		
158-02.1	N. Pecks Ledge	8/23/2004	22	wet	NA	NA
158-02.1	N. Pecks Ledge	8/16/2005	16	wet	NA	NA
158-02.1	N. Pecks Ledge	9/6/2006	18	dry	NA	NA
158-02.1	N. Pecks Ledge	6/18/2007	5	wet	2	NA
158-02.1	N. Pecks Ledge	6/20/2007	2	dry		
158-02.1	N. Pecks Ledge	7/9/2007	1	dry		
158-02.1	N. Pecks Ledge	9/13/2007	2	wet		
158-02.1	N. Pecks Ledge	12/5/2007	4	wet		
158-02.1	N. Pecks Ledge	1/15/2008	1	dry	2	NA
158-02.1	N. Pecks Ledge	2/20/2008	2	wet		
158-02.1	N. Pecks Ledge	8/11/2008	1	dry		
158-02.1	N. Pecks Ledge	9/10/2008	11	wet		
158-02.1	N. Pecks Ledge	9/16/2008	2	wet		
158-02.1	N. Pecks Ledge	12/23/2008	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-02.1	N. Pecks Ledge	4/2/2009	1	dry	2	NA
158-02.1	N. Pecks Ledge	4/22/2009	4	wet		
158-02.1	N. Pecks Ledge	6/10/2009	1	wet		
158-02.1	N. Pecks Ledge	6/29/2009	5	dry		
158-02.1	N. Pecks Ledge	7/28/2009	1	dry		
158-02.1	N. Pecks Ledge	8/3/2009	5	wet		
158-02.1	N. Pecks Ledge	8/26/2009	1	dry		
158-02.1	N. Pecks Ledge	8/31/2009	1	wet		
158-02.1	N. Pecks Ledge	9/15/2009	1	dry		
158-02.1	N. Pecks Ledge	10/28/2009	2	dry		
158-02.1	N. Pecks Ledge	10/29/2009	3	wet		
158-02.1	N. Pecks Ledge	11/16/2009	1	wet		
158-02.1	N. Pecks Ledge	3/2/2010	1	wet	4	NA
158-02.1	N. Pecks Ledge	3/17/2010	1	wet		
158-02.1	N. Pecks Ledge	5/4/2010	29	wet		
158-02.1	N. Pecks Ledge	5/19/2010	9	wet		
158-02.1	N. Pecks Ledge	8/17/2010	5	wet		
158-02.1	N. Pecks Ledge	8/25/2010	12	wet		
158-02.1	N. Pecks Ledge	9/16/2010	1	wet		
158-02.1	N. Pecks Ledge	12/13/2010	11	wet		
158-02.1	N. Pecks Ledge	12/16/2010	1	wet		
158-02.2	SW Cockenoe Island N"4"	4/24/2000	2	wet	6	3
158-02.2	SW Cockenoe Island N"4"	5/25/2000	50	wet		
158-02.2	SW Cockenoe Island N"4"	6/20/2000	8	wet		
158-02.2	SW Cockenoe Island N"4"	6/21/2000	6	dry		
158-02.2	SW Cockenoe Island N"4"	7/18/2000	14	dry		
158-02.2	SW Cockenoe Island N"4"	7/19/2000	2	dry		
158-02.2	SW Cockenoe Island N"4"	9/14/2000	4	wet		
158-02.2	SW Cockenoe Island N"4"	11/13/2000	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-02.2	SW Cockenoe Island N"4"	2/2/2001	8	dry	4	NA
158-02.2	SW Cockenoe Island N"4"	4/2/2001	6	wet		
158-02.2	SW Cockenoe Island N"4"	5/29/2001	6	dry		
158-02.2	SW Cockenoe Island N"4"	6/20/2001	2	dry		
158-02.2	SW Cockenoe Island N"4"	8/14/2001	6	wet		
158-02.2	SW Cockenoe Island N"4"	8/16/2001	6	dry		
158-02.2	SW Cockenoe Island N"4"	8/30/2001	2	dry		
158-02.2	SW Cockenoe Island N"4"	9/24/2001	2	wet		
158-02.2	SW Cockenoe Island N"4"	5/22/2002	2	dry	4	NA
158-02.2	SW Cockenoe Island N"4"	6/11/2002	6	wet		
158-02.2	SW Cockenoe Island N"4"	6/17/2002	6	dry		
158-02.2	SW Cockenoe Island N"4"	9/4/2002	18	wet		
158-02.2	SW Cockenoe Island N"4"	9/30/2002	2	dry		
158-02.2	SW Cockenoe Island N"4"	10/28/2002	2	wet		
158-02.2	SW Cockenoe Island N"4"	4/30/2003	2	dry	8	19
158-02.2	SW Cockenoe Island N"4"	6/2/2003	50	wet		
158-02.2	SW Cockenoe Island N"4"	6/11/2003	22	dry		
158-02.2	SW Cockenoe Island N"4"	6/17/2003	50	dry		
158-02.2	SW Cockenoe Island N"4"	8/6/2003	4	wet		
158-02.2	SW Cockenoe Island N"4"	8/18/2003	2	wet		
158-02.2	SW Cockenoe Island N"4"	10/2/2003	4	dry		
158-02.2	SW Cockenoe Island N"4"	7/7/2004	6	wet	6	15
158-02.2	SW Cockenoe Island N"4"	8/9/2004	2	dry		
158-02.2	SW Cockenoe Island N"4"	9/13/2004	4	wet		
158-02.2	SW Cockenoe Island N"4"	9/21/2004	50	wet		
158-02.2	SW Cockenoe Island N"4"	8/16/2005	39	wet	NA	90
158-02.2	SW Cockenoe Island N"4"	7/17/2006	1	dry	4	4
158-02.2	SW Cockenoe Island N"4"	8/31/2006	45	wet		
158-02.2	SW Cockenoe Island N"4"	9/5/2006	4	wet		
158-02.2	SW Cockenoe Island N"4"	9/6/2006	4	dry		
158-02.2	SW Cockenoe Island N"4"	10/16/2006	1	dry		
158-02.2	SW Cockenoe Island N"4"	11/1/2006	2	wet		
158-02.2	SW Cockenoe Island N"4"	11/27/2006	11	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-02.2	SW Cockenoe Island N"4"	6/7/2007	1	wet	1	NA
158-02.2	SW Cockenoe Island N"4"	6/20/2007	1	dry		
158-02.2	SW Cockenoe Island N"4"	7/9/2007	1	dry		
158-02.2	SW Cockenoe Island N"4"	7/24/2007	1	wet		
158-02.2	SW Cockenoe Island N"4"	9/13/2007	1	wet		
158-02.2	SW Cockenoe Island N"4"	12/5/2007	1	wet		
158-02.2	SW Cockenoe Island N"4"	2/4/2008	1	dry	2	NA
158-02.2	SW Cockenoe Island N"4"	2/20/2008	1	wet		
158-02.2	SW Cockenoe Island N"4"	8/11/2008	1	dry		
158-02.2	SW Cockenoe Island N"4"	9/10/2008	8	wet		
158-02.2	SW Cockenoe Island N"4"	12/15/2008	1	wet		
158-02.2	SW Cockenoe Island N"4"	12/16/2008	1	wet		
158-02.2	SW Cockenoe Island N"4"	12/23/2008	4	wet		
158-02.2	SW Cockenoe Island N"4"	4/2/2009	1	dry	2	NA
158-02.2	SW Cockenoe Island N"4"	4/22/2009	1	wet		
158-02.2	SW Cockenoe Island N"4"	6/10/2009	20	wet		
158-02.2	SW Cockenoe Island N"4"	6/29/2009	1	dry		
158-02.2	SW Cockenoe Island N"4"	7/28/2009	1	dry		
158-02.2	SW Cockenoe Island N"4"	8/3/2009	4	wet		
158-02.2	SW Cockenoe Island N"4"	8/26/2009	1	dry		
158-02.2	SW Cockenoe Island N"4"	8/31/2009	1	wet		
158-02.2	SW Cockenoe Island N"4"	9/15/2009	1	dry		
158-02.2	SW Cockenoe Island N"4"	10/29/2009	4	wet		
158-02.2	SW Cockenoe Island N"4"	11/16/2009	1	wet		
158-02.2	SW Cockenoe Island N"4"	3/2/2010	1	wet	2	NA
158-02.2	SW Cockenoe Island N"4"	3/17/2010	1	wet		
158-02.2	SW Cockenoe Island N"4"	3/25/2010	2	wet		
158-02.2	SW Cockenoe Island N"4"	5/4/2010	16	wet		
158-02.2	SW Cockenoe Island N"4"	5/19/2010	5	wet		
158-02.2	SW Cockenoe Island N"4"	8/17/2010	2	wet		
158-02.2	SW Cockenoe Island N"4"	8/25/2010	1	wet		
158-02.2	SW Cockenoe Island N"4"	9/16/2010	1	wet		
158-02.2	SW Cockenoe Island N"4"	12/13/2010	7	wet		
158-02.2	SW Cockenoe Island N"4"	12/16/2010	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-04.0	SE Sprite Island	2/16/2000	2	wet	2	NA
158-04.0	SE Sprite Island	5/15/2000	2	wet		
158-04.0	SE Sprite Island	6/21/2000	2	dry		
158-04.0	SE Sprite Island	9/13/2000	4	wet		
158-04.0	SE Sprite Island	1/23/2001	4	dry	7	10
158-04.0	SE Sprite Island	2/7/2001	2	wet		
158-04.0	SE Sprite Island	8/14/2001	11	wet		
158-04.0	SE Sprite Island	8/28/2001	50	wet		
158-04.0	SE Sprite Island	8/30/2001	4	dry		
158-04.0	SE Sprite Island	1/9/2002	6	dry	3	5
158-04.0	SE Sprite Island	10/28/2002	2	wet		
158-04.0	SE Sprite Island	2/26/2003	2	wet	4	NA
158-04.0	SE Sprite Island	4/29/2003	2	dry		
158-04.0	SE Sprite Island	6/11/2003	28	dry		
158-04.0	SE Sprite Island	8/6/2003	6	wet		
158-04.0	SE Sprite Island	8/19/2003	4	wet		
158-04.0	SE Sprite Island	8/23/2004	8	wet	NA	NA
158-04.0	SE Sprite Island	8/16/2005	29	wet	NA	NA
158-04.0	SE Sprite Island	9/6/2006	11	dry	NA	NA
158-04.0	SE Sprite Island	6/18/2007	21	wet	3	NA
158-04.0	SE Sprite Island	6/20/2007	1	dry		
158-04.0	SE Sprite Island	7/9/2007	2	dry		
158-04.0	SE Sprite Island	9/13/2007	6	wet		
158-04.0	SE Sprite Island	10/30/2007	1	dry		
158-04.0	SE Sprite Island	12/5/2007	3	wet		
158-04.0	SE Sprite Island	1/15/2008	2	dry	2	NA
158-04.0	SE Sprite Island	2/20/2008	2	wet		
158-04.0	SE Sprite Island	8/11/2008	1	dry		
158-04.0	SE Sprite Island	9/10/2008	5	wet		
158-04.0	SE Sprite Island	9/16/2008	3	wet		
158-04.0	SE Sprite Island	12/15/2008	1	wet		
158-04.0	SE Sprite Island	12/23/2008	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-04.0	SE Sprite Island	4/2/2009	1	dry	2	NA
158-04.0	SE Sprite Island	4/22/2009	10	wet		
158-04.0	SE Sprite Island	6/11/2009	6	wet		
158-04.0	SE Sprite Island	6/29/2009	2	dry		
158-04.0	SE Sprite Island	7/28/2009	1	dry		
158-04.0	SE Sprite Island	8/3/2009	3	wet		
158-04.0	SE Sprite Island	8/26/2009	3	dry		
158-04.0	SE Sprite Island	8/31/2009	1	wet		
158-04.0	SE Sprite Island	9/15/2009	1	dry		
158-04.0	SE Sprite Island	11/16/2009	1	wet		
158-04.0	SE Sprite Island	3/2/2010	1	wet	4	NA
158-04.0	SE Sprite Island	3/17/2010	1	wet		
158-04.0	SE Sprite Island	5/4/2010	6	wet		
158-04.0	SE Sprite Island	5/19/2010	10	wet		
158-04.0	SE Sprite Island	6/23/2010	2	wet		
158-04.0	SE Sprite Island	8/17/2010	13	wet		
158-04.0	SE Sprite Island	8/25/2010	24	wet		
158-04.0	SE Sprite Island	9/16/2010	1	wet		
158-04.0	SE Sprite Island	12/13/2010	6	wet		
158-04.0	SE Sprite Island	12/16/2010	3	wet		
158-04.0	SE Sprite Island	3/14/2011	1	dry	2	NA
158-04.0	SE Sprite Island	4/19/2011	3	wet		
158-04.0	SE Sprite Island	4/26/2011	1	dry		
158-04.0	SE Sprite Island	5/23/2011	5	wet		
158-04.0	SE Sprite Island	6/20/2011	3	wet		
158-04.0	SE Sprite Island	6/27/2011	3	dry		
158-04.0	SE Sprite Island	7/20/2011	4	wet		
158-05.0	NW Cockenoe Island	2/16/2000	2	wet	2	NA
158-05.0	NW Cockenoe Island	5/15/2000	2	wet		
158-05.0	NW Cockenoe Island	6/21/2000	2	dry		
158-05.0	NW Cockenoe Island	9/13/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-05.0	NW Cockenoe Island	1/23/2001	2	dry	4	NA
158-05.0	NW Cockenoe Island	2/7/2001	2	wet		
158-05.0	NW Cockenoe Island	8/14/2001	6	wet		
158-05.0	NW Cockenoe Island	8/28/2001	6	wet		
158-05.0	NW Cockenoe Island	8/30/2001	6	dry		
158-05.0	NW Cockenoe Island	1/9/2002	4	dry	2	NA
158-05.0	NW Cockenoe Island	10/28/2002	2	wet		
158-05.0	NW Cockenoe Island	2/26/2003	2	wet	5	NA
158-05.0	NW Cockenoe Island	4/29/2003	2	dry		
158-05.0	NW Cockenoe Island	6/11/2003	18	dry		
158-05.0	NW Cockenoe Island	8/6/2003	11	wet		
158-05.0	NW Cockenoe Island	8/19/2003	8	wet		
158-05.0	NW Cockenoe Island	8/23/2004	18	wet	NA	NA
158-05.0	NW Cockenoe Island	8/16/2005	19	wet	NA	NA
158-05.0	NW Cockenoe Island	9/6/2006	1	dry	NA	NA
158-05.0	NW Cockenoe Island	6/18/2007	58	wet	3	7
158-05.0	NW Cockenoe Island	6/20/2007	1	dry		
158-05.0	NW Cockenoe Island	7/9/2007	2	dry		
158-05.0	NW Cockenoe Island	9/13/2007	1	wet		
158-05.0	NW Cockenoe Island	10/30/2007	2	dry		
158-05.0	NW Cockenoe Island	12/5/2007	3	wet		
158-05.0	NW Cockenoe Island	2/20/2008	1	wet	2	NA
158-05.0	NW Cockenoe Island	8/11/2008	1	dry		
158-05.0	NW Cockenoe Island	9/10/2008	8	wet		
158-05.0	NW Cockenoe Island	9/16/2008	1	wet		
158-05.0	NW Cockenoe Island	12/15/2008	2	wet		
158-05.0	NW Cockenoe Island	12/23/2008	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-05.0	NW Cockenoe Island	4/22/2009	6	wet	2	NA
158-05.0	NW Cockenoe Island	6/10/2009	25	wet		
158-05.0	NW Cockenoe Island	6/29/2009	1	dry		
158-05.0	NW Cockenoe Island	7/28/2009	1	dry		
158-05.0	NW Cockenoe Island	8/3/2009	12	wet		
158-05.0	NW Cockenoe Island	8/26/2009	1	dry		
158-05.0	NW Cockenoe Island	8/31/2009	1	wet		
158-05.0	NW Cockenoe Island	9/15/2009	1	dry		
158-05.0	NW Cockenoe Island	10/28/2009	1	dry		
158-05.0	NW Cockenoe Island	11/16/2009	1	wet		
158-05.0	NW Cockenoe Island	3/2/2010	1	wet	2	NA
158-05.0	NW Cockenoe Island	3/17/2010	1	wet		
158-05.0	NW Cockenoe Island	5/4/2010	1	wet		
158-05.0	NW Cockenoe Island	5/19/2010	2	wet		
158-05.0	NW Cockenoe Island	6/23/2010	1	wet		
158-05.0	NW Cockenoe Island	8/17/2010	4	wet		
158-05.0	NW Cockenoe Island	8/25/2010	10	wet		
158-05.0	NW Cockenoe Island	9/16/2010	1	wet		
158-05.0	NW Cockenoe Island	12/13/2010	5	wet		
158-05.0	NW Cockenoe Island	12/16/2010	3	wet		
158-05.0	NW Cockenoe Island	3/14/2011	1	dry	3	NA
158-05.0	NW Cockenoe Island	4/19/2011	2	wet		
158-05.0	NW Cockenoe Island	4/26/2011	1	dry		
158-05.0	NW Cockenoe Island	5/23/2011	14	wet		
158-05.0	NW Cockenoe Island	6/20/2011	6	wet		
158-05.0	NW Cockenoe Island	6/27/2011	5	dry		
158-05.0	NW Cockenoe Island	7/20/2011	1	wet		
158-06.0	Cockenoe Island Cove	2/16/2000	2	wet	3	NA
158-06.0	Cockenoe Island Cove	5/15/2000	9	wet		
158-06.0	Cockenoe Island Cove	6/21/2000	2	dry		
158-06.0	Cockenoe Island Cove	9/13/2000	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-06.0	Cockenoe Island Cove	1/23/2001	2	dry	5	NA
158-06.0	Cockenoe Island Cove	2/7/2001	2	wet		
158-06.0	Cockenoe Island Cove	8/14/2001	11	wet		
158-06.0	Cockenoe Island Cove	8/28/2001	28	wet		
158-06.0	Cockenoe Island Cove	8/30/2001	4	dry		
158-06.0	Cockenoe Island Cove	1/9/2002	2	dry	2	NA
158-06.0	Cockenoe Island Cove	10/28/2002	2	wet		
158-06.0	Cockenoe Island Cove	2/26/2003	2	wet	10	30
158-06.0	Cockenoe Island Cove	4/29/2003	2	dry		
158-06.0	Cockenoe Island Cove	6/11/2003	36	dry		
158-06.0	Cockenoe Island Cove	8/6/2003	50	wet		
158-06.0	Cockenoe Island Cove	8/19/2003	22	wet		
158-06.0	Cockenoe Island Cove	8/23/2004	11	wet	NA	NA
158-06.0	Cockenoe Island Cove	8/16/2005	71	wet	NA	90
158-06.0	Cockenoe Island Cove	9/6/2006	8	dry	NA	NA
158-06.0	Cockenoe Island Cove	6/18/2007	36	wet	5	10
158-06.0	Cockenoe Island Cove	6/20/2007	5	dry		
158-06.0	Cockenoe Island Cove	7/9/2007	4	dry		
158-06.0	Cockenoe Island Cove	9/13/2007	2	wet		
158-06.0	Cockenoe Island Cove	12/5/2007	2	wet		
158-06.0	Cockenoe Island Cove	2/20/2008	1	wet	2	NA
158-06.0	Cockenoe Island Cove	8/11/2008	1	dry		
158-06.0	Cockenoe Island Cove	9/10/2008	12	wet		
158-06.0	Cockenoe Island Cove	9/16/2008	2	wet		
158-06.0	Cockenoe Island Cove	12/23/2008	3	wet		
158-06.0	Cockenoe Island Cove	4/2/2009	1	dry	2	NA
158-06.0	Cockenoe Island Cove	4/22/2009	4	wet		
158-06.0	Cockenoe Island Cove	6/10/2009	64	wet		
158-06.0	Cockenoe Island Cove	6/29/2009	8	dry		
158-06.0	Cockenoe Island Cove	7/28/2009	1	dry		
158-06.0	Cockenoe Island Cove	8/3/2009	1	wet		
158-06.0	Cockenoe Island Cove	8/26/2009	2	dry		
158-06.0	Cockenoe Island Cove	8/31/2009	1	wet		
158-06.0	Cockenoe Island Cove	9/15/2009	1	dry		
158-06.0	Cockenoe Island Cove	11/16/2009	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-06.0	Cockenoe Island Cove	3/17/2010	1	wet	3	NA
158-06.0	Cockenoe Island Cove	5/4/2010	1	wet		
158-06.0	Cockenoe Island Cove	5/19/2010	1	wet		
158-06.0	Cockenoe Island Cove	6/23/2010	3	wet		
158-06.0	Cockenoe Island Cove	8/17/2010	5	wet		
158-06.0	Cockenoe Island Cove	8/25/2010	18	wet		
158-06.0	Cockenoe Island Cove	9/16/2010	1	wet		
158-06.0	Cockenoe Island Cove	12/13/2010	9	wet		
158-06.0	Cockenoe Island Cove	12/16/2010	3	wet		
158-06.0	Cockenoe Island Cove	3/14/2011	1	dry	2	NA
158-06.0	Cockenoe Island Cove	4/19/2011	7	wet		
158-06.0	Cockenoe Island Cove	4/26/2011	1	dry		
158-06.0	Cockenoe Island Cove	5/23/2011	6	wet		
158-06.0	Cockenoe Island Cove	6/20/2011	1	wet		
158-06.0	Cockenoe Island Cove	6/27/2011	4	dry		
158-06.0	Cockenoe Island Cove	7/20/2011	1	wet		
158-14.1	N. side Goose Island	2/16/2000	2	wet	4	NA
158-14.1	N. side Goose Island	5/15/2000	2	wet		
158-14.1	N. side Goose Island	6/21/2000	8	dry		
158-14.1	N. side Goose Island	9/13/2000	8	wet		
158-14.1	N. side Goose Island	1/23/2001	2	dry	2	NA
158-14.1	N. side Goose Island	2/2/2001	4	dry		
158-14.1	N. side Goose Island	2/7/2001	2	wet		
158-14.1	N. side Goose Island	8/14/2001	2	wet		
158-14.1	N. side Goose Island	8/30/2001	6	dry		
158-14.1	N. side Goose Island	1/9/2002	2	dry	3	NA
158-14.1	N. side Goose Island	10/28/2002	6	wet		
158-14.1	N. side Goose Island	2/26/2003	2	wet	5	NA
158-14.1	N. side Goose Island	8/6/2003	8	wet		
158-14.1	N. side Goose Island	8/19/2003	11	wet		
158-14.1	N. side Goose Island	10/2/2003	4	dry		
158-14.1	N. side Goose Island	7/7/2004	2	wet	9	40
158-14.1	N. side Goose Island	8/23/2004	51	wet		
158-14.1	N. side Goose Island	8/16/2005	44	wet	NA	90
158-14.1	N. side Goose Island	9/6/2006	4	dry	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-14.1	N. side Goose Island	6/18/2007	11	wet	2	NA
158-14.1	N. side Goose Island	6/20/2007	1	dry		
158-14.1	N. side Goose Island	7/9/2007	1	dry		
158-14.1	N. side Goose Island	9/13/2007	1	wet		
158-14.1	N. side Goose Island	12/5/2007	1	wet		
158-14.1	N. side Goose Island	1/15/2008	7	dry	3	4
158-14.1	N. side Goose Island	2/20/2008	1	wet		
158-14.1	N. side Goose Island	8/11/2008	3	dry		
158-14.1	N. side Goose Island	9/10/2008	38	wet		
158-14.1	N. side Goose Island	9/16/2008	1	wet		
158-14.1	N. side Goose Island	12/15/2008	2	wet		
158-14.1	N. side Goose Island	12/23/2008	4	wet		
158-14.1	N. side Goose Island	4/2/2009	1	dry	2	NA
158-14.1	N. side Goose Island	4/22/2009	3	wet		
158-14.1	N. side Goose Island	6/10/2009	27	wet		
158-14.1	N. side Goose Island	6/29/2009	3	dry		
158-14.1	N. side Goose Island	7/28/2009	1	dry		
158-14.1	N. side Goose Island	8/3/2009	1	wet		
158-14.1	N. side Goose Island	8/26/2009	1	dry		
158-14.1	N. side Goose Island	8/31/2009	1	wet		
158-14.1	N. side Goose Island	9/15/2009	1	dry		
158-14.1	N. side Goose Island	11/16/2009	1	wet		
158-14.1	N. side Goose Island	3/17/2010	1	wet	4	3
158-14.1	N. side Goose Island	5/4/2010	14	wet		
158-14.1	N. side Goose Island	5/19/2010	9	wet		
158-14.1	N. side Goose Island	8/17/2010	2	wet		
158-14.1	N. side Goose Island	8/25/2010	1	wet		
158-14.1	N. side Goose Island	9/16/2010	1	wet		
158-14.1	N. side Goose Island	12/13/2010	76	wet		
158-14.1	N. side Goose Island	12/16/2010	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-14.1	N. side Goose Island	3/14/2011	1	dry	2	NA
158-14.1	N. side Goose Island	4/19/2011	3	wet		
158-14.1	N. side Goose Island	4/26/2011	1	dry		
158-14.1	N. side Goose Island	5/23/2011	12	wet		
158-14.1	N. side Goose Island	6/20/2011	10	wet		
158-14.1	N. side Goose Island	6/27/2011	1	dry		
158-14.1	N. side Goose Island	6/27/2011	1	dry		
158-14.1	N. side Goose Island	7/20/2011	3	wet		
158-19.0	E. Sheep Rocks	2/16/2000	2	wet	2	NA
158-19.0	E. Sheep Rocks	5/15/2000	2	wet		
158-19.0	E. Sheep Rocks	6/21/2000	2	dry		
158-19.0	E. Sheep Rocks	9/13/2000	2	wet		
158-19.0	E. Sheep Rocks	1/23/2001	2	dry	6	10
158-19.0	E. Sheep Rocks	2/7/2001	4	wet		
158-19.0	E. Sheep Rocks	8/14/2001	8	wet		
158-19.0	E. Sheep Rocks	8/28/2001	36	wet		
158-19.0	E. Sheep Rocks	8/30/2001	4	dry		
158-19.0	E. Sheep Rocks	1/9/2002	6	dry	8	NA
158-19.0	E. Sheep Rocks	10/28/2002	11	wet		
158-19.0	E. Sheep Rocks	2/26/2003	2	wet	6	NA
158-19.0	E. Sheep Rocks	4/29/2003	2	dry		
158-19.0	E. Sheep Rocks	6/11/2003	14	dry		
158-19.0	E. Sheep Rocks	8/6/2003	8	wet		
158-19.0	E. Sheep Rocks	8/19/2003	18	wet		
158-19.0	E. Sheep Rocks	7/7/2004	2	wet	9	40
158-19.0	E. Sheep Rocks	8/23/2004	51	wet		
158-19.0	E. Sheep Rocks	8/16/2005	37	wet	NA	90
158-19.0	E. Sheep Rocks	9/6/2006	18	dry	NA	NA
158-19.0	E. Sheep Rocks	6/18/2007	3	wet	2	NA
158-19.0	E. Sheep Rocks	6/20/2007	3	dry		
158-19.0	E. Sheep Rocks	7/9/2007	1	dry		
158-19.0	E. Sheep Rocks	9/13/2007	1	wet		
158-19.0	E. Sheep Rocks	12/5/2007	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-19.0	E. Sheep Rocks	1/15/2008	2	dry	2	NA
158-19.0	E. Sheep Rocks	2/20/2008	1	wet		
158-19.0	E. Sheep Rocks	8/11/2008	1	dry		
158-19.0	E. Sheep Rocks	9/10/2008	2	wet		
158-19.0	E. Sheep Rocks	9/16/2008	2	wet		
158-19.0	E. Sheep Rocks	12/15/2008	4	wet		
158-19.0	E. Sheep Rocks	12/23/2008	5	wet		
158-19.0	E. Sheep Rocks	4/2/2009	1	dry	1	NA
158-19.0	E. Sheep Rocks	4/22/2009	1	wet		
158-19.0	E. Sheep Rocks	6/10/2009	4	wet		
158-19.0	E. Sheep Rocks	6/10/2009	3	wet		
158-19.0	E. Sheep Rocks	6/29/2009	2	dry		
158-19.0	E. Sheep Rocks	7/28/2009	3	dry		
158-19.0	E. Sheep Rocks	8/3/2009	1	wet		
158-19.0	E. Sheep Rocks	8/26/2009	1	dry		
158-19.0	E. Sheep Rocks	8/31/2009	1	wet		
158-19.0	E. Sheep Rocks	9/15/2009	1	dry		
158-19.0	E. Sheep Rocks	11/16/2009	1	wet		
158-19.0	E. Sheep Rocks	3/2/2010	1	wet	2	NA
158-19.0	E. Sheep Rocks	3/17/2010	1	wet		
158-19.0	E. Sheep Rocks	5/4/2010	8	wet		
158-19.0	E. Sheep Rocks	5/19/2010	1	wet		
158-19.0	E. Sheep Rocks	6/23/2010	1	wet		
158-19.0	E. Sheep Rocks	8/17/2010	5	wet		
158-19.0	E. Sheep Rocks	8/25/2010	32	wet		
158-19.0	E. Sheep Rocks	9/16/2010	1	wet		
158-19.0	E. Sheep Rocks	12/13/2010	6	wet		
158-19.0	E. Sheep Rocks	12/16/2010	1	wet		
158-19.0	E. Sheep Rocks	3/14/2011	1	dry	1	NA
158-19.0	E. Sheep Rocks	4/19/2011	1	wet		
158-19.0	E. Sheep Rocks	4/26/2011	1	dry		
158-19.0	E. Sheep Rocks	5/23/2011	4	wet		
158-19.0	E. Sheep Rocks	6/20/2011	1	wet		
158-19.0	E. Sheep Rocks	6/27/2011	1	dry		
158-19.0	E. Sheep Rocks	7/20/2011	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-20.0	W. Cockenoe Island	2/16/2000	2	wet	2	NA
158-20.0	W. Cockenoe Island	5/15/2000	2	wet		
158-20.0	W. Cockenoe Island	6/21/2000	2	dry		
158-20.0	W. Cockenoe Island	9/13/2000	2	wet		
158-20.0	W. Cockenoe Island	1/23/2001	2	dry	3	7
158-20.0	W. Cockenoe Island	2/2/2001	4	dry		
158-20.0	W. Cockenoe Island	2/7/2001	2	wet		
158-20.0	W. Cockenoe Island	8/14/2001	2	wet		
158-20.0	W. Cockenoe Island	8/28/2001	36	wet		
158-20.0	W. Cockenoe Island	8/30/2001	2	dry		
158-20.0	W. Cockenoe Island	1/9/2002	11	dry	4	NA
158-20.0	W. Cockenoe Island	10/28/2002	2	wet		
158-20.0	W. Cockenoe Island	2/26/2003	2	wet	3	NA
158-20.0	W. Cockenoe Island	4/30/2003	2	dry		
158-20.0	W. Cockenoe Island	6/11/2003	4	dry		
158-20.0	W. Cockenoe Island	8/6/2003	11	wet		
158-20.0	W. Cockenoe Island	8/19/2003	4	wet		
158-20.0	W. Cockenoe Island	7/7/2004	2	wet	8	40
158-20.0	W. Cockenoe Island	8/23/2004	36	wet		
158-20.0	W. Cockenoe Island	8/16/2005	21	wet	NA	NA
158-20.0	W. Cockenoe Island	9/6/2006	7	dry	NA	NA
158-20.0	W. Cockenoe Island	6/18/2007	1	wet	1	NA
158-20.0	W. Cockenoe Island	6/20/2007	1	dry		
158-20.0	W. Cockenoe Island	7/9/2007	1	dry		
158-20.0	W. Cockenoe Island	9/13/2007	1	wet		
158-20.0	W. Cockenoe Island	12/5/2007	2	wet		
158-20.0	W. Cockenoe Island	1/15/2008	1	dry	1	NA
158-20.0	W. Cockenoe Island	2/20/2008	1	wet		
158-20.0	W. Cockenoe Island	8/11/2008	1	dry		
158-20.0	W. Cockenoe Island	9/10/2008	5	wet		
158-20.0	W. Cockenoe Island	9/16/2008	1	wet		
158-20.0	W. Cockenoe Island	12/15/2008	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-20.0	W. Cockenoe Island	4/2/2009	1	dry	2	NA
158-20.0	W. Cockenoe Island	4/22/2009	4	wet		
158-20.0	W. Cockenoe Island	6/10/2009	9	wet		
158-20.0	W. Cockenoe Island	6/29/2009	1	dry		
158-20.0	W. Cockenoe Island	7/28/2009	1	dry		
158-20.0	W. Cockenoe Island	8/3/2009	1	wet		
158-20.0	W. Cockenoe Island	8/26/2009	1	dry		
158-20.0	W. Cockenoe Island	8/31/2009	1	wet		
158-20.0	W. Cockenoe Island	9/15/2009	1	dry		
158-20.0	W. Cockenoe Island	10/28/2009	4	dry		
158-20.0	W. Cockenoe Island	11/16/2009	1	wet		
158-20.0	W. Cockenoe Island	3/2/2010	1	wet	3	NA
158-20.0	W. Cockenoe Island	3/17/2010	1	wet		
158-20.0	W. Cockenoe Island	5/4/2010	7	wet		
158-20.0	W. Cockenoe Island	5/19/2010	4	wet		
158-20.0	W. Cockenoe Island	8/17/2010	1	wet		
158-20.0	W. Cockenoe Island	8/25/2010	18	wet		
158-20.0	W. Cockenoe Island	9/16/2010	1	wet		
158-20.0	W. Cockenoe Island	12/13/2010	13	wet		
158-20.0	W. Cockenoe Island	12/16/2010	2	wet		
158-20.0	W. Cockenoe Island	3/14/2011	1	dry	1	NA
158-20.0	W. Cockenoe Island	4/19/2011	1	wet		
158-20.0	W. Cockenoe Island	4/26/2011	1	dry		
158-20.0	W. Cockenoe Island	5/23/2011	1	wet		
158-20.0	W. Cockenoe Island	6/20/2011	1	wet		
158-20.0	W. Cockenoe Island	6/27/2011	1	dry		
158-20.0	W. Cockenoe Island	7/20/2011	2	wet		
158-21.0	E. Grassy Hammock	2/16/2000	2	wet	3	NA
158-21.0	E. Grassy Hammock	5/15/2000	11	wet		
158-21.0	E. Grassy Hammock	6/21/2000	4	dry		
158-21.0	E. Grassy Hammock	9/13/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-21.0	E. Grassy Hammock	1/23/2001	2	dry	8	7
158-21.0	E. Grassy Hammock	2/2/2001	8	dry		
158-21.0	E. Grassy Hammock	2/7/2001	2	wet		
158-21.0	E. Grassy Hammock	8/14/2001	22	wet		
158-21.0	E. Grassy Hammock	8/28/2001	51	wet		
158-21.0	E. Grassy Hammock	8/30/2001	11	dry		
158-21.0	E. Grassy Hammock	1/9/2002	11	dry	4	NA
158-21.0	E. Grassy Hammock	10/28/2002	2	wet		
158-21.0	E. Grassy Hammock	4/30/2003	2	dry	6	NA
158-21.0	E. Grassy Hammock	6/11/2003	4	dry		
158-21.0	E. Grassy Hammock	8/6/2003	14	wet		
158-21.0	E. Grassy Hammock	8/19/2003	14	wet		
158-21.0	E. Grassy Hammock	3/8/2004	15	wet	**28* (50%)**	40
158-21.0	E. Grassy Hammock	8/23/2004	51	wet		
158-21.0	E. Grassy Hammock	8/16/2005	29	wet	NA	NA
158-21.0	E. Grassy Hammock	9/6/2006	9	dry	NA	NA
158-21.0	E. Grassy Hammock	6/18/2007	12	wet	2	NA
158-21.0	E. Grassy Hammock	7/9/2007	1	dry		
158-21.0	E. Grassy Hammock	9/13/2007	3	wet		
158-21.0	E. Grassy Hammock	12/5/2007	1	wet		
158-21.0	E. Grassy Hammock	1/15/2008	5	dry	3	NA
158-21.0	E. Grassy Hammock	2/20/2008	2	wet		
158-21.0	E. Grassy Hammock	8/11/2008	1	dry		
158-21.0	E. Grassy Hammock	9/10/2008	30	wet		
158-21.0	E. Grassy Hammock	9/16/2008	4	wet		
158-21.0	E. Grassy Hammock	12/15/2008	2	wet		
158-21.0	E. Grassy Hammock	12/16/2008	4	wet		
158-21.0	E. Grassy Hammock	12/23/2008	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-21.0	E. Grassy Hammock	4/2/2009	1	dry	2	NA
158-21.0	E. Grassy Hammock	4/22/2009	3	wet		
158-21.0	E. Grassy Hammock	6/10/2009	12	wet		
158-21.0	E. Grassy Hammock	6/29/2009	5	dry		
158-21.0	E. Grassy Hammock	7/28/2009	1	dry		
158-21.0	E. Grassy Hammock	8/3/2009	2	wet		
158-21.0	E. Grassy Hammock	8/26/2009	3	dry		
158-21.0	E. Grassy Hammock	8/31/2009	1	wet		
158-21.0	E. Grassy Hammock	9/15/2009	1	dry		
158-21.0	E. Grassy Hammock	10/28/2009	1	dry		
158-21.0	E. Grassy Hammock	10/29/2009	4	wet		
158-21.0	E. Grassy Hammock	11/16/2009	1	wet		
158-21.0	E. Grassy Hammock	3/17/2010	1	wet	4	3
158-21.0	E. Grassy Hammock	5/4/2010	33	wet		
158-21.0	E. Grassy Hammock	5/19/2010	15	wet		
158-21.0	E. Grassy Hammock	8/17/2010	10	wet		
158-21.0	E. Grassy Hammock	8/25/2010	1	wet		
158-21.0	E. Grassy Hammock	9/16/2010	1	wet		
158-21.0	E. Grassy Hammock	12/13/2010	9	wet		
158-21.0	E. Grassy Hammock	12/16/2010	1	wet		
158-21.0	E. Grassy Hammock	3/14/2011	16	dry	2	NA
158-21.0	E. Grassy Hammock	4/19/2011	1	wet		
158-21.0	E. Grassy Hammock	4/26/2011	1	dry		
158-21.0	E. Grassy Hammock	5/23/2011	2	wet		
158-21.0	E. Grassy Hammock	6/20/2011	2	wet		
158-21.0	E. Grassy Hammock	6/27/2011	1	dry		
158-21.0	E. Grassy Hammock	7/20/2011	8	wet		

Shaded cells indicate an exceedance of water quality criteria

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 6: LIS WB-Midshore - Norwalk Islands (CT-W3_008-I)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
103-05.2	N. of Sheffield dock	2000 – 2011	38	20	2	2	2
103-08.1	between Tavern Island and Cedar Hammock	2000 – 2011	36	19	4	5	2
103-09.0	R"2"/C"3" channel	2000 – 2011	40	20	3	3	2
103-09.1	W. Dog Island	2000 – 2011	38	20	3	3	2
103-10.0	R"4"/C"5" channel	2000 – 2011	39	20	3	4	2
103-11.0	NW Chimon Island	2000 – 2011	38	19	5	6	3
103-11.1	S. Raymond Rocks	2000 – 2011	39	19	5	7	2
103-11.2	between Shea and Chimon Island	2000 – 2011	37	18	3	3	2
103-12.0	between Sheffield and Copps Island	2000 – 2011	48	28	3	3	2
103-12.1	S. Shea Is/E. end Sheffield Island	2000 – 2011	48	27	2	2	2
103-14.0	between Betts and Grassy Island	2000 – 2011	38	19	4	5	2
103-15.0	Grassy Hammock	2000 – 2011	39	19	5	7	3
103-15.1	N. C"9" / W. Grassy Hammock	2000 – 2011	35	15	5	8	2
103-15.3	C"1" NE Raymond Rocks	2000 – 2011	36	16	7	10	3
103-15.5	SW Calf Pasture Island	2000 – 2011	36	14	6	8	2
158-02.0	G"5" near Pecks Ledge	2000-2011	38	22	3	4	2
158-02.1	N. Pecks Ledge	2000-2010	35	19	3	5	2
158-02.2	SW Cockenoe Is. N"4"	2000-2010	46	29	3	4	3
158-04.0	SE Sprite Island	2000-2011	39	20	3	4	2
158-05.0	NW Cockenoe Island	2000-2011	39	19	3	3	2
158-06.0	Cockenoe Island Cove	2000-2011	37	18	4	4	2
158-14.1	N. side Goose Island	2000-2011	37	20	3	4	2
158-19.0	E. Sheep Rocks	2000-2011	41	19	3	3	2
158-20.0	W. Cockenoe Island	2000-2011	38	21	2	3	2
158-21.0	E. Grassy Hammock	2000-2011	39	20	4	5	3
Shaded cells indicate an exceedance of water quality criteria							

Table 19: Segment 7 LIS WB Inner Norwalk Harbor – Norwalk Harbor Bacteria Data

***Waterbody ID*:** CT-W1_012-SB

***Characteristics*:** Saltwater, Class SB, Commercial Shellfishing Harvesting, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

***Impairment*:** Commercial Shellfish Harvesting (fecal coliform bacteria)

***Water Quality Criteria for Fecal coliform*:**
Geometric Mean: 88 colonies/100 ml
90% of Samples Less Than: 260 colonies/100 ml

***Percent reduction to meet TMDL*:**
Geometric Mean: NA
90% of Samples Less Than: NA

Data: DA/BA sampling efforts, 2014 TMDL cycle. Single sample fecal coliform data (colonies/100mL) for three monitoring stations on Segment 7: LIS WB Inner Norwalk Harbor (CT-W1_012-SB) with annual geometric means and reduction goals for samples. Rainfall data listed in the table below as reported in Purchase, NY by Wunderground.com.

Station Name	Station Location	Date	Results	Wet/Dry	Geomean	Reduction of Exceeding Samples
103-10.2	Norwalk Harbor	1/31/12	1	Dry	2.33	
103-10.2	Norwalk Harbor	2/28/12	1	Dry		
103-10.2	Norwalk Harbor	3/5/12	1	Dry		
103-10.2	Norwalk Harbor	5/2/12	2	Wet		
103-10.2	Norwalk Harbor	6/4/12	27	Wet		
103-10.2	Norwalk Harbor	11/28/12	3	Dry		
103-10.2	Norwalk Harbor	4/15/13	2	Dry	1.82	NA
103-10.2	Norwalk Harbor	5/15/13	1	Dry		
103-10.2	Norwalk Harbor	6/5/13	3	Dry		
103-10.2	Norwalk Harbor	1/14/14	14	Wet	3.06	NA
103-10.2	Norwalk Harbor	3/24/14	1	Dry		
103-10.2	Norwalk Harbor	4/3/14	2	Dry		
103-10.2	Norwalk Harbor	4/9/14	1	Dry		

Station Name	Station Location	Date	Results	Wet/Dry	Geomean	Reduction of Exceeding Samples
103-10.2	Norwalk Harbor	5/20/14	15	Dry		
103-10.2	Norwalk Harbor	7/7/14	1	Dry		
103-10.2	Norwalk Harbor	11/3/14	6	Dry		
103-10.3	Norwalk Harbor	1/31/12	1	Dry		
103-10.3	Norwalk Harbor	2/28/12	4	Dry		
103-10.3	Norwalk Harbor	3/5/12	1	Dry	3.33	NA
103-10.3	Norwalk Harbor	5/2/12	2	Wet		
103-10.3	Norwalk Harbor	6/4/12	51	Wet		
103-10.3	Norwalk Harbor	2/19/13	1	Dry	2	NA
103-10.3	Norwalk Harbor	4/15/13	4	Dry		
103-10.3	Norwalk Harbor	1/14/14	50	Wet		
103-10.3	Norwalk Harbor	3/24/14	2	Dry		
103-10.3	Norwalk Harbor	4/3/14	14	Dry		
103-10.3	Norwalk Harbor	4/9/14	5	Dry	8.27	NA
103-10.3	Norwalk Harbor	5/20/14	14	Dry		
103-10.3	Norwalk Harbor	6/3/14	4	Dry		
103-10.3	Norwalk Harbor	7/7/14	14	Dry		
103-10.3	Norwalk Harbor	11/3/14	4	Dry		
103-10.8	Norwalk Harbor	1/31/12	2	Dry		
103-10.8	Norwalk Harbor	2/28/12	1	Dry		
103-10.8	Norwalk Harbor	3/5/12	1	Dry	2.05	NA
103-10.8	Norwalk Harbor	5/2/12	1	Wet		
103-10.8	Norwalk Harbor	6/4/12	18	Wet		
103-10.8	Norwalk Harbor	2/19/13	1	Dry	1	NA
103-10.8	Norwalk Harbor	4/15/13	1	Dry		
103-10.8	Norwalk Harbor	1/14/14	44	Wet	4.61	NA

Station Name	Station Location	Date	Results	Wet/Dry	Geomean	Reduction of Exceeding Samples
103-10.8	Norwalk Harbor	3/24/14	1	Dry		
103-10.8	Norwalk Harbor	4/3/14	8	Dry		
103-10.8	Norwalk Harbor	4/9/14	1	Dry		
103-10.8	Norwalk Harbor	5/20/14	8	Dry		
103-10.8	Norwalk Harbor	6/3/14	4	Dry		
103-10.8	Norwalk Harbor	7/7/14	6	Dry		
103-10.8	Norwalk Harbor	11/3/14	3	Dry		

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 7: LIS WB Inner Norwalk Harbor (CT-W1_012-SB)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
103-10.2	Norwalk Harbor	2012-2014	3	13	2.5	9.11	1.86
103-10.3	Norwalk Harbor	2012-2014	3	12	5.1	17.21	3.70
103-10.8	Norwalk Harbor	2012-2014	3	12	2.9	9.25	2.14
Shaded cells indicate an exceedance of water quality criteria							

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DOCUMENT REVISION HISTORY: ESTUARY 1-NORWALK TMDL

February 2019 Revision: Segment 7 LIS WB Inner Norwalk Harbor (CT-W1_012-SB) was added to the TMDL along with Connecticut Department of Agriculture/Bureau of Aquaculture fecal coliform data from Stations 103–10.2, 103–10.3, 103–10.8 listed in Table 19.

Fecal coliform data shows this area is meeting the bacteria requirements for shellfishing however, there is an administrative closure to shellfishing due to the presence of a Combined Sewer Overflow. This permitted and treated combination of stormwater and domestic sewage is located at the South Smith Street Waste Water Treatment Plant. All wet weather flows over 30 MGD receive full preliminary treatment, screening and grit removal as well as micro drum screening and chlorination.

The 2012 maps and the tables in this document were updated to reflect any changes and the addition of Segment 7.

There were a few typos in the original TMDL and I updated website information and DEEP program information where necessary and updated monitoring data where available.

Date	Segments covered: impaired designated use
September 2012	CT-W1_013-SB: Recreation CT-W2_011: Shellfishing CT-W2_012: Shellfishing CT-W2_013: Shellfishing CT-W2_014: Shellfishing CT-W3_008-I: Shellfishing
February 2019	ADDED CT-W1_012-SB: Shellfishing Remain the same: CT-W1_013-SB: Recreation CT-W2_011: Shellfishing CT-W2_012: Shellfishing CT-W2_013: Shellfishing CT-W2_014: Shellfishing CT-W3_008-I: Shellfishing

Estuary 2: Greenwich-Stamford

Watershed Summary

Watershed Description and Maps

The Greenwich-Stamford Estuary (Estuary 2) covers an area of approximately 9,518 acres in the southwestern corner of Connecticut. These impaired segments are located in the western portion of Long Island Sound (LIS). The impaired segments in this summary are located in the municipalities of Greenwich and Stamford, CT.

The Greenwich-Stamford Estuary includes thirteen segments impaired for commercial shellfish and two segments also impaired for recreation due to elevated bacteria levels. These segments were assessed by Connecticut Department of Energy and Environmental Protection (CT DEEP) and included in the CT 2016 303(d) list of impaired waterbodies. Some segments in the estuary are currently unassessed as of the writing of this document. This does not mean there are no potential issues on these segments, but indicates a lack of current data to evaluate the segments as part of the assessment process. An excerpt of the Integrated Water Quality Report is included in Table 1 (CT DEEP, 2016).

Impaired Segments

Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) is part of the western portion of LIS from the saltwater limit just above the US Route 1 crossing to the mouth of the Byram River, and extends out to the Connecticut-New York border in Greenwich, CT (Figure 1).

Segment 1 (CT-W1_022-SB) and Segment 13 (CT-W1_021-SB) of the Greenwich-Stamford Estuary has a water quality classification of SB. Designated uses include commercial shellfish harvesting, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. These segments

Impaired Segment Facts

Impaired Segments, Classifications, and Areas (square miles):

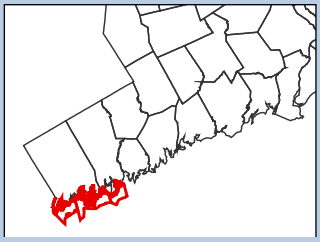
Segment 1: LIS WB Inner – Byram River (*CT-W1_022-SB*); SB; 0.04
Segment 2: LIS WB Shore – Westcott Cove (*CT-W2_018*); SA; 0.37
Segment 3: LIS WB Shore – Stamford Harbor (*CT-W2_019*); SA; 0.52
Segment 4: LIS WB Shore – Stamford Harbor (West) (*CT-W2_020*), SA; 0.54
Segment 5: LIS WB Shore – Greenwich Cove (*CT-W2_021*); SA; 1.24
Segment 6: LIS WB Shore – Cos Cob Harbor (*CT-W2_022*); SA; 0.70
Segment 7: LIS WB Shore – Byram Harbor (*CT-W2_024)*; SA; 0.34
Segment 8: LIS WB Shore – Byram Harbor (West) (*CT-W2_025)*; SA; 0.24
Segment 9: LIS WB Midshore – Outer Westcott Cove (*CT-W3_011)*; SA; 2.40
Segment 10: LIS WB Midshore – Outer Stamford Harbor (*CT-W3_012)*; SA; 2.10
Segment 11: LIS WB Midshore – Outer Cos Cob Harbor (*CT-W3_013)*; SA; 2.38
Segment 12: LIS WB Midshore – Captain Harbor (*CT-W3_015-I)*; SA; 3.42
Segment 13: LIS WB Inner-Greenwich Harbor (CT-W1_021-SB); SB; 0.104

Municipalities: Greenwich and Stamford

Designated Use Impairments: Shellfish, Recreation (W1_022-SB and W2_024)

MS4 Applicable? Yes

Applicable Season: Recreation Season (May 1 to September 30) Year Round for Shellfishing Uses



are impaired due to elevated bacteria concentrations, affecting the designated use of shellfishing.

Segments 2 – 12 extend from the shoreline to approximately 1,000 feet offshore in Greenwich and Stamford, CT. Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) is located in Stamford near the intersection of Hobson Street and Sea Beach Drive to Greenway Island area of outer Cove Harbor and includes West Beach, Cummings Beach, and Vincent Island. Segment 3: LIS WB Shore – Stamford Harbor (CT-W2_019) is located in Stamford near the intersection of Hobson Street and Sea Beach Drive to outer Stamford Harbor and includes Flathead Rocks, Davenport Point, and Shippan Point. Segment 4: LIS WB Shore – Stamford Harbor (West) (CTW2_020) is located in Stamford from Greenwich Point to Peck Point and includes Greenwich Point Beach. Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) is located in Greenwich from Todd Point to Greenwich Point and includes Elias Point, Greenwich Island, Pelican Island, Flat Neck Point, and Greenwich Cove. Segment 6: LIS WB Shore – Cos Cob Harbor (CT-W2_022) is located in Greenwich from Tweed Island to Todd Point and includes Horse Island, Goose Island, and Cos Cob Cove. Segment 7: LIS WB Shore – Byram Harbor (CT-W2_024) is located in Greenwich from just west of Shore Island to Field Point and includes Shore Island, Rich Island, Farwells Island, Game Cock Island, and Byram Harbor. Segment 8: LIS WB Shore – Byram Harbor (West) (CT-W2_025) is located in Greenwich from the Connecticut-New York border at the Byram River to just west of Shore Island and includes the mouth of the Byram River and Byram Point (Figure 1).

Segments 9 – 12 begin approximately 1,000 feet offshore, beyond Segments 2 – 8 (Figure 1). Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) in LIS extends from Shippan Point to Greenway Island out to the 50-foot contour in Stamford and includes outer Westcott Cove, Cove Harbor, Darien Cove, and Scott Cove areas. Segment 10: LIS WB Shore – Outer Stamford Harbor (CT-W3_012) extends from Greenwich Point to Shippan Point area out to the 50-foot contour in Greenwich and Stamford. Segment 11: LIS WB Shore – Outer Cos Cob Harbor (CT-W3_013) extends from Brush Island to Greenwich Point area out to the 50-foot contour in Greenwich. Segment 12: LIS WB Shore – Captain Harbor (CT-W3_015-I) extends from Byrant Point at the Connecticut-New York border to Brush Island out to just beyond Great Captain Island to Wee Captain Island in Greenwich (Figure 1).

Segment 13 (CT-W1_021-SB) is located in the Western portion of LIS, Inner Estuary, from SA/SB water quality line at mouth of Greenwich Harbor (Round Island to Smith Cove), US to saltwater limit just below I95 (mouth of Horseneck Brook), in Greenwich.

These impaired segments (Segments 2 – 12) of the Greenwich-Stamford Estuary have a water quality classification of SA. Designated uses include shellfish harvesting for direct human consumption, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of shellfishing. Segment 7 (CT-W2_024) is also a designated beach and the specific recreation impairment is for designated swimming and other water contact related activities.

Table 1: Impaired segments in the Greenwich-Stamford Estuary from the Connecticut 2016 Integrated Water Quality Report

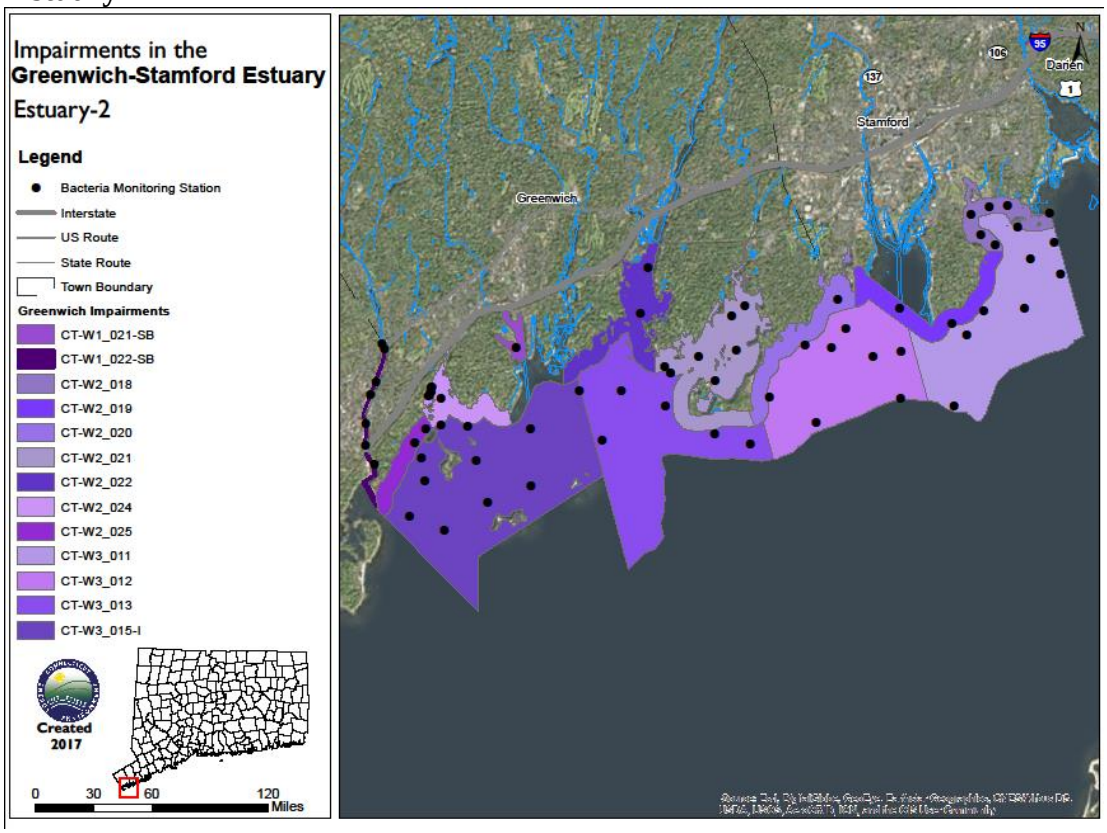
Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
CT-W1_015-SB+	LIS WB Inner - Cove Harbor, Stamford	Western portion of LIS, Inner Estuary, from SA/SB water quality line at mouth (Greenway Island to Pratt Island Two), to Holly Pond outlet at Brush Island (includes Quigley, East (Cove Island), and Weed Beaches), Stamford/Darien.	0.47	U	FULL	////	U	FULL
CT-W1_021-SB	LIS WB Inner - Greenwich Harbor, Greenwich	Western portion of LIS, Inner Estuary, from SA/SB water quality line at mouth of Greenwich Harbor (Round Island to Smith Cove), US to saltwater limit just below I95 (mouth of Horseneck Brook), Greenwich.	0.10	NOT	FULL	////	NOT*	FULL
CT-W1_022-SB	**LIS WB Inner - Byram River (CT), Greenwich**	**Western portion of LIS, Inner Estuary, from SA/SB water quality line at mouth of Byram River, US to saltwater limit just above Route 1 crossing, out to CT/NY border (includes CT half of River), I95 crosses river in segment, Greenwich.**	**0.04**	**U**	**NOT**	**////**	**NOT**	**FULL**
CT-W2_018	LIS WB Shore - Westcott Cove, Stamford	Western portion of LIS from near intersection of Hobson Street and Sea Beach Drive to Greenway Island area of outer Cove Harbor (includes West Beach, Cummings Beach, Vincent Island) out approximately 1000 ft offshore, Stamford.	0.37	U	FULL	NOT	////	FULL
CT-W2_019	LIS WB Shore - Stamford Harbor, Stamford	Western portion of LIS from Peck Point to near intersection of Hobson Street and Sea Beach Drive (includes Flathead Rocks, Davenport Point, Shippan Point, outer Stamford	0.52	U	U	NOT	////	FULL

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
		Harbor) out approximately 1000 ft offshore, Stamford.						
CT-W2_020	LIS WB Shore - Stamford Harbor (West), Greenwich	Western portion of LIS from Greenwich Point to Peck Point (includes Greenwich Point Beach, western portion of Stamford Harbor) out approximately 1000 ft offshore, Greenwich.	0.54	U	FULL	NOT	////	FULL
CT-W2_021	LIS WB Shore - Greenwich Cove, Greenwich	Western portion of LIS from Todd Point to Greenwich Point (includes Elias Point, Greenwich Island, Pelican Island, Flat Neck Point, Greenwich Cove) out approximately 1000 ft offshore, Greenwich.	1.24	U	FULL	NOT	////	FULL
CT-W2_022	LIS WB Shore - Cos Cob Harbor, Greenwich	Western portion of LIS from Tweed Island to Todd Point (includes Horse Island, Goose Island, Cos Cob Cove) out approximately 1000 ft offshore, Greenwich.	0.70	U	U	NOT	////	FULL
CT-W2_024	**LIS WB Shore - Byram Harbor, Greenwich**	**Western portion of LIS from just west of Shore Island to Field Point (includes Shore Island, Rich Island, Farwells Island, Game Cock Island, Byram Harbor) out approximately 1000 ft offshore, Greenwich.**	**0.34**	**U**	**NOT**	**NOT**	**////**	**FULL**
CT-W2_025	LIS WB Shore - Byram Harbor (West), Greenwich	Western portion of LIS from NY/CT border at Byram River to just west of Shore Island (includes mouth of Byram River, Byram Point) out approximately 1000 ft offshore, Greenwich.	0.24	U	U	NOT	////	FULL
CT-W3_011	LIS WB Midshore - Outer Westcott Cove, Stamford	Western portion of LIS from approximately 1000 ft offshore (Shippan Point to Greenway Island, outer Westcott Cove, Cove Harbor, Darien Cove, Scott	2.40	NOT	U	NOT	////	FULL

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
		Cove areas), out to 50 ft contour, Stamford.						
CT-W3_012	LIS WB Midshore - Outer Stamford Harbor, Greenwich	Western portion of LIS from approximately 1000 ft offshore (Greenwich Point to Shippan Point area), out to 50 ft contour, Greenwich/Stamford.	2.10	NOT	U	NOT	////	FULL
CT-W3_013	LIS WB Midshore - Outer Cos Cob Harbor, Greenwich	Western portion of LIS from approximately 1000 ft offshore (Brush Island to Greenwich Point area), out to 50 ft contour, Greenwich.	2.38	NOT	U	NOT	////	FULL
CT-W3_015-I	LIS WB Midshore - Captain Harbor, Greenwich	Western portion of LIS from approximately 1000 ft offshore (Byrant Point at Connecticut/New York state line, to Brush Island, Captain Harbor area), out to just beyond Great Captain Island to Wee Captain Island, Greenwich.	3.42	NOT	FULL	NOT	////	FULL

Shaded cells indicate segments addressed in this TMDL
Bolded cells indicate recreation impairment addressed in this TMDL
[+] this segment is no longer on our impaired waters list
***Bacteria data through 2012 shows attainment**
FULL = Designated Use Fully Supported
NOT = Designated Use Not Supported
U = Unassessed
/// = Not Applicable to Segment

Figure 1: GIS map featuring general information for impaired segments in the Greenwich-Stamford Estuary



Shellfish Bed Classifications, Closures, and Lease Locations

The Connecticut Department of Agriculture/Bureau of Aquaculture (CT DA/BA) is responsible for regulating shellfish harvesting (www.ct.gov/doag/cwp/view.asp?a=1369&Q=259170). A shellfish growing area is defined by CT DA/BA as any area that supports or could support the growth and/or propagation of molluscan shellstock. Shellfish are defined by CT DA/BA as oysters, clams, mussels, and scallops, either shucked or in the shell, fresh or frozen, whole or in part. All shellfish growing areas are classified by CT DA/BA in accordance with the Interstate Shellfish Sanitation Conference (ISSC) National Shellfish Sanitation Program Model Ordinance (NSSP-MO) and CT General Statutes Chapter 491, §26-192e. As summarized below, these classifications are established to minimize health risks and may restrict the take and use of shellfish from some areas. They are based on fecal coliform bacteria standards as provided in the NSSP-MO (Interstate Shellfish Sanitation Conference, 2007). Any shellfish area, regardless of classification, may be temporarily closed to all activities when a potential public health emergency exists as a result of a storm event, flooding, sewage, chemical, or petroleum discharges, or a hazardous algal bloom.

Shellfish harvesting has been divided into two designated uses as specified in the Connecticut Water Quality Standards (WQS): shellfish harvesting suitable for direct human consumption (Class SA waters), and shellfish harvesting suitable for commercial operations requiring depuration or relay (Class SB waters). The impaired segments in the Greenwich-Stamford Estuary include both Class SA and SB waters.

Shellfish Bed Classifications and Closures in the Greenwich-Stamford Estuary

Shellfish classification areas in the Greenwich-Stamford Estuary are shown in Figure 2. The following classifications for shellfish growing areas are defined by CT DA/BA for more detailed information and maps please see their website www.ct.gov/doag/cwp/view.asp?a=3768&q=478054:

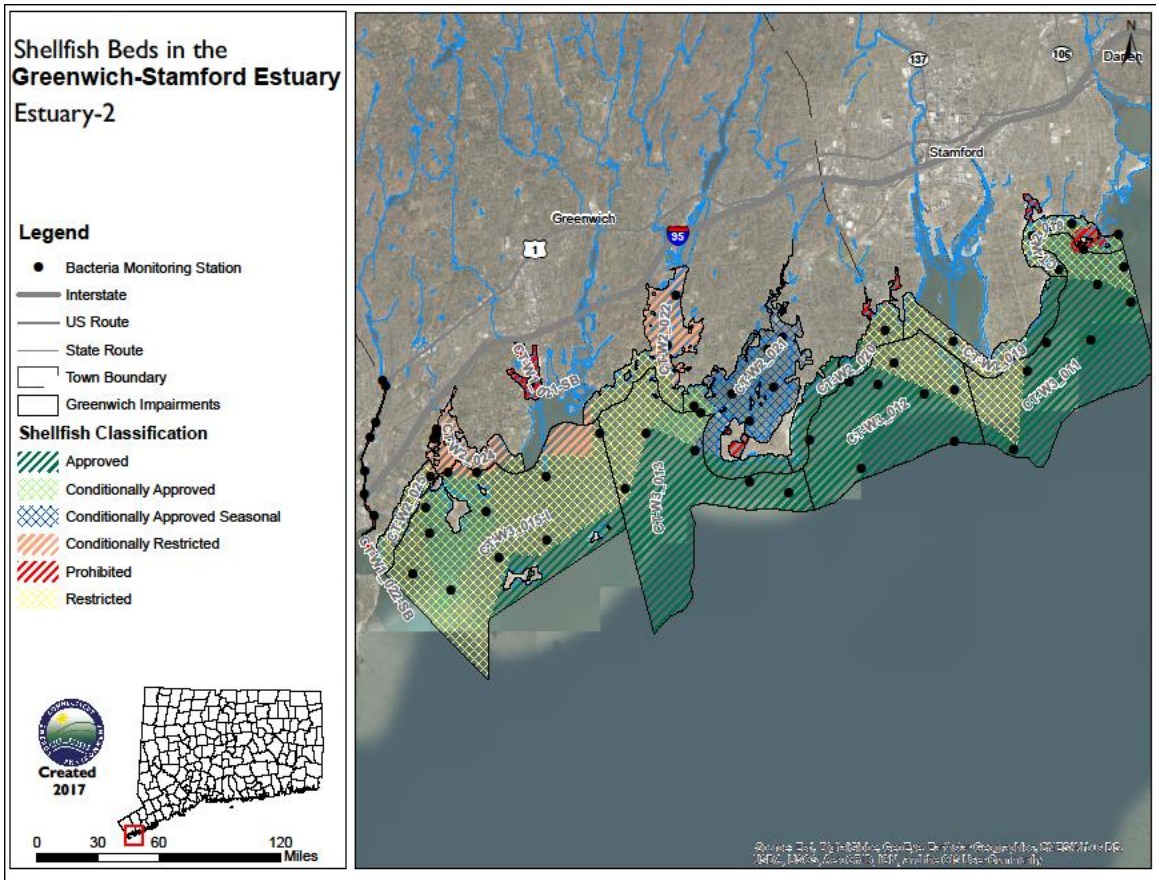
> **Approved Area**: A growing area that is safe for the direct marketing or consumption of shellfish. An area may be classified as "Approved" when a sanitary survey finds that there is no contamination from human or animal fecal matter at levels that present an actual or potential public health hazard, and is not contaminated by pathogenic organisms, poisonous or deleterious substances, or marine biotoxins, and has water quality that meets the bacteriological standards for an Approved growing area.
>
> **Conditionally Approved Area**: A growing area that, when open, shellfish may be harvested recreationally for consumption, or commercially for market. An area may be classified as "Conditionally Approved" when a sanitary survey finds that these areas can remain open for a reasonable period of time, and that factors impacting the area are known and predictable and do not preclude a reasonable management approach. The bacteriological water quality must correlate with the factors impacting the growing area. Each Conditionally Approved growing area must have a written management plan that is adhered to by all responsible parties.
>
> **CONDITIONALLY APPROVED SEASONAL AREA**: Conditionally Approved Seasonal areas are closed under certain seasonal conditions, either due to the operations of marinas or mooring fields, or because the area may be subject to elevated bacteria levels during certain times of the year.
>
> **Restricted**: A growing area in which the sanitary survey finds there are levels of fecal pollution, human pathogens, or poisonous or deleterious substances that can be reduced by relaying the shellstock to Approved or Conditionally Approved waters for natural cleansing or depuration. Shellfish from these areas may not be directly harvested for market or consumption.
>
> **Conditionally Restricted:** A growing area that the sanitary survey finds meets "Restricted" classification when the area is in the open status, and meets the "Prohibited" classification when the area is in the closed status. The management plan must designate whether harvested shellfish are relayed or depurated.
>
> **Prohibited**: A growing area where there has not been a sanitary survey conducted within the last 12 years must be classified as Prohibited. Any area with a sewage treatment plant outfall or other point source that could impact public health is classified as Prohibited. This classification prohibits the harvest of shellfish except for seed oystering or depletion of the area.

As discussed above and shown in Table 1, Segments 1 (CT-W1_022-SB) and 7 (CT-W2_024) do not meet their designated use for both shellfish harvesting and recreation due to bacteria. Shellfishing in Segment 1 (CT-W1_022-SB) is Prohibited, and Segment 7 (CT-W2_024) is Conditionally Restricted (Figure 2).

Segments 2 – 6, and 8 – 12 do not meet their designated use for shellfish harvesting for direct human consumption due to bacteria (Table 1). The majority of Segment 2 (CT-W2_018) is Conditionally Approved for shellfish harvesting. Segment 3 (CT-W2_019) is approved for shellfishing along Shippan Point to Westcott Cove and classified as Restricted in Stamford Harbor. The southern portion of Segment 4 (CT-W2_020) is approved for shellfishing and Restricted in northwest Stamford Harbor near Peck Point. Segment 5 (CT-W2_021) is Conditionally Approved Seasonal in the majority of Greenwich Cove,

Approved for shellfishing along the southern shore of Greenwich Point Park, and Prohibited from shellfishing in a small waterbody cutting through Greenwich Point Park. Shellfishing in Segment 6 (CT-W2_022) is classified as Restricted to the south and Conditionally Approved in the northern part of the segment. Segment 8 (CT-W2_025) is classified as Restricted. The majority of Segments 9 - 11 are Approved for shellfish harvesting for direct human consumption. Segment 9 (CT-W3_011) is classified as Restricted to the west by Shippan Point and Conditionally Approved for shellfishing to the north just before Westcott Cove. Segment 10 (CT-W3_012) classified as Restricted to the northeast. Segment 11 (CT-W3_013) classified as Restricted to the northwest and Conditionally Approved to the northeast. The majority of Segment 12 (CT-W3_015-I) is classified as Restricted with Conditionally Approved shellfishing around Shell and Calf Islands and Approved shellfishing around Great Captain Island (Figure 2). There is an administrative closure to Shellfish harvesting in Segment 13 (CT-W1_021-SB) due to the presence of a marina and the Water Pollution Control Facility outfall.

Figure 2: GIS map featuring shellfish bed classifications and closures for the impaired segments in the Greenwich-Stamford Estuary



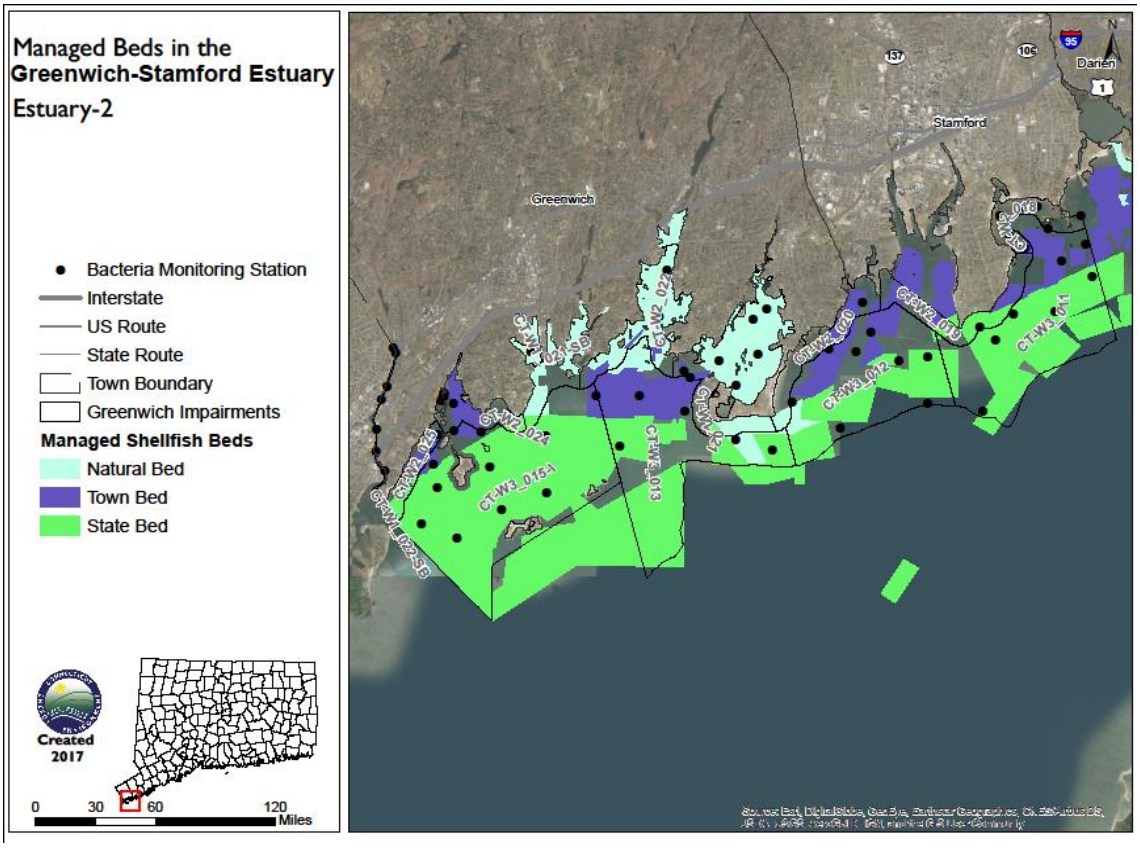
Shellfish Bed Lease Locations

Shellfish beds in the Greenwich-Stamford Estuary are also classified by their management (Figure 3). CT DA/BA defines these areas as follows:

> **State and Town Beds**: In 1881, a line, referred to as the Commissioner's Line, was established that divides the waters of the State into northern and southern sections. All beds south of this line are State beds and most beds north of this line are town beds. Town beds are leased, owned or managed through the local shellfish commission. However, CT DA/BA still controls all licensing and regulations for both state and town beds. For example, DA/BA issues licenses and determines when an area will be closed to shellfishing due to a change in water quality. Towns may require additional permits to work in waters under local jurisdiction. The beds north of the line in Westport, Milford, West Haven, and New Haven are exceptions to this as they are fully under State control.
>
> **State and Town Natural Beds**: Natural beds get their name from the fact that shellfish, especially oyster, naturally inhabited the area. These areas tend to be closer to shore, usually at the mouth of a river. Natural beds have specific regulations concerning their use, including licensing and harvesting methods. They are predominately seed beds that cannot be mechanically harvested. Use of natural beds requires a Relay/Transplant License I or II and/or Seed Oyster Harvesting License from CT DA/BA. Any person assisting in the harvesting of seed oysters must have a Helper's License. These beds cannot be leased or subdivided; they are to remain open to any properly licensed harvester. State natural beds are simply natural beds south of the Commissioner's Line. Descriptions of these beds can be found in §3295 of the Connecticut General Statutes (CGS), revision of 1918. Not all beds listed in §3295 were mapped, and many natural beds in State waters off Greenwich are managed through leases. Town natural beds were defined by law under §2326 of the CGS of 1888. Each town had the opportunity to map areas to be considered natural beds. The documents, written descriptions, and maps were submitted to the Superior Court with jurisdiction for that town. Several towns did not avail themselves to this opportunity, and some, such as Westport, have changed the delineation of their natural beds in recent court decisions. There are also areas that may have been declared natural beds, but are now leased.

Mostly natural beds are found in Segment 13 (CT-W1_021), Segment 6 (CT-W2_022) and Segment 5 (CT-W2_021). Segments 7 (CT-W2_024), Segment 3 (CT-W2_019), Segment 8 (CT-W2_025), and Segment 4 (CT-W2_020) are mostly Town-managed beds. Segments 9-12 (CT-W3_011), (CT-W3_012) (CT-W3_013) and (CT-W3_015-I) are mostly State-managed beds (Figure 3).

Figure 3: GIS map featuring shellfish bed lease locations for the impaired segments in the Greenwich-Stamford Estuary



WHY IS A TMDL NEEDED?

For saltwater segments, the indicator bacteria, fecal coliform, is used in the CT Water Quality Standards (WQS) to assess shellfish uses for Class SA and SB waters (CTDEEP, 2013). Enterococcus is the indicator bacteria used to assess recreational uses for Class SA and SB waters. All data are from CT DEEP, USGS, Bureau of Aquaculture, or volunteer monitoring efforts at stations located on the impaired segments.

Segment 1 (CT-W1_022-SB) is a Class SB saltwater waterbody. Its applicable designated uses include commercial shellfish harvesting, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Water quality analyses were conducted using data from seven sampling locations on Segment 1 (CT-W1_022-SB) (Table 2). The water quality criteria for enterococci and fecal coliform, along with bacteria sampling results from 2007 – 2012, are presented in Table 13.

Segment 1 (CT-W1_022-SB) is impaired due to elevated bacteria concentrations, affecting the designated use of both shellfish harvesting and recreation. As shown in Table 13, single sample values exceeded the recreation WQS for enterococci multiple years for Stations SBR11, SBR13, and SBR15 during the sampling period. The annual geometric mean was calculated for all stations and exceeded the recreation WQS for enterococci multiple times for all stations during the sampling period. Also shown in Table 13, geometric mean and 90% less than values exceeded the shellfish harvesting WQS for fecal coliform multiple times at all stations in Segment 1, except Stations SBR09 and SBR10 for 90% less than values, during the sampling period.

To aid in identifying possible bacteria sources, geometric means for data collected during the sampling period were also calculated for each station on Segment 1 (CT-W1_022-SB) using wet and dry-weather conditions, resulting in exceedance of recreation WQS for enterococci during wet and dry-weather for all stations, except Station SBR09, which only exceeded the WQS during wet-weather (Table 13). Geometric mean values during wet and dry-weather conditions also exceeded the shellfish harvesting WQS for fecal coliform for Stations SBR10, SBR 13, SBR14, and SBR15, while Stations SBR09 and SBR12 only exceeded the WQS during wet-weather and Station SBR11 only exceeded the WQS during dry-weather.

Segments 2 - 12 are Class SA saltwater waterbodies. Their applicable designated uses include shellfish harvesting for direct human consumption, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Water quality analyses were conducted using data from seven sampling locations on Segments 2 (CT-W2_018), 5 (CTW2_021), and 9 (CT-W3_011), two sampling locations on Segments 3 (CT-W2_019), 6 (CT-W2_022), and 8 (CT-W2_025), one sampling location on Segment 4 (CT-W2_020), and 7 (CT-W2_024 for shellfishing), three sampling locations on Segment 7 (CT-W2_024 for recreation), eight sampling locations on Segment 10 (CT-W3_012), five sampling locations on Segment 11 (CT-W2_013), and eleven sampling locations on Segment 12 (CT-W3_015-I) (Table 2). Water quality criteria for fecal coliform, along with bacteria sampling results from 2000 – 2011, for Segments 2 – 12 are presented in Tables 14 – 24. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of shellfishing.

Segment 2 (CT-W2_018): As shown in Table 14, 90% less than values exceeded the WQS for fecal coliform multiple times at Station 135-04.1 and once at Stations 135-05.0 and 135-04.0 in Segment 2 during the sampling period. Geometric mean values did not exceed the WQS for fecal coliform at any station during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of the WQS for fecal coliform.

Segment 3 (CT-W2_019): As shown in Table 15, 90% less than values exceeded the WQS for fecal coliform multiple times at Station 135-01.1 and once at Station 135-02.1 in Segment 3 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform only once at Station 135-01.1 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there was one geomean exceedance, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 4 (CTW2_020): As shown in Table 16, geometric mean and 90% less than values exceeded the WQS for fecal coliform multiple times at Station 135-01.9 in Segment 4 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 5 (CT-W2_021): As shown in Table 17, 90% less than values exceeded the WQS for fecal coliform multiple times at Stations 057-19.1 and once at Station 057-19.0 in Segment 5 during the sampling period. Geometric mean values did not exceed the WQS for fecal coliform at any station during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of the WQS for fecal coliform.

Segment 6 (CT-W2_022): As shown in Table 18, 90% less than values exceeded the WQS for fecal coliform multiple times at both stations in Segment 6 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform multiple times at Station 057-20.1 during the sampling period. Geometric

means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in exceedances at Station 057-20.1 during wet-weather.

Segment 7 (CT-W2_024): As shown in Table 19, 90% less than values exceeded the WQS for fecal coliform multiple times at the one station in Segment 7 during the sampling period. Geometric mean values did not exceed the WQS for fecal coliform at this station during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of the WQS for fecal coliform. Segment 7 is also a designated beach and the specific recreation impairment is for designated swimming and other water contact related activities. Single sample values exceeded the WQS for enterococci multiple times for all stations, and geometric mean values exceeded the WQS for enterococci once in 2007 at both Byram Beach Rosenwald and Byram Beach West. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in exceedances of the WQS for enterococci during wet-weather at all stations.

Segment 8 (CT-W2_025): As shown in Table 20, 90% less than values exceeded the WQS for fecal coliform once at both stations in Segment 8 during the sampling period. Geometric mean values did not exceed the WQS for fecal coliform at either station during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of the WQS for fecal coliform.

Segment 9 (CT-W3_011): As shown in Table 21, 90% less than values exceeded the WQS for fecal coliform at least once at all stations in Segment 9, except Station 135-12.0, during the sampling period. Geometric mean values exceeded the WQS for fecal coliform once at Stations 135-02.0, 135-03.0, and 135-03.1 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 10 (CT-W3_012): As shown in Table 22, 90% less than values exceeded the WQS for fecal coliform at least once at all stations in Segment 10, except Stations 057-17.2 and 057-17.6, during the sampling period. Geometric mean values exceeded the WQS for fecal coliform once at Stations 135-01.0, 135-01.4, 135-01.5, and 135-01.8 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 11 (CT-W3_013): As shown in Table 23, 90% less than values exceeded the WQS for fecal coliform once at Stations 057-10.2 and 057-21.0 in Segment 11 during the sampling period. Geometric mean values did not exceed the WQS for fecal coliform during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in no exceedance of the WQS for fecal coliform.

Segment 12 (CT-W3_015-I): As shown in Table 24, 90% less than values exceeded the WQS for fecal coliform at least once at all stations in Segment 12 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform multiple times only at Station 057-08.1 during the sampling period. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions. Although there were geomean exceedances in individual years, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 13 (CT-W1_021-SB): is a Class SB saltwater waterbody. Its applicable designated uses include commercial shellfish harvesting, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Water quality analyses was conducted using data from one sampling location (Table 2). The water quality criteria for fecal coliform, along with bacteria sampling results from 2010 – 2012, are presented in Table 25. As shown, this segment is meeting the water quality criteria for fecal coliform for class SB waters. This area has been administratively closed to Commercial Shellfishing by DA/BA due to the presence of marinas and the Waste Water Treatment Plant.

Due to the elevated bacteria measurements presented in Tables 13 – 24, these twelve impaired segments did not meet CT's bacteria WQS, were identified as impaired, and were placed on the CT List of Waterbodies Not Meeting Water Quality Standards, also known as the CT 303(d) Impaired Waters List. The Clean Water Act requires that all 303(d) listed waters undergo a TMDL assessment that describes the impairments and identifies the measures needed to restore water quality. The goal is for all waterbodies to comply with State WQS.

Table 2: Sampling station location and description for the impaired segments in the Greenwich-Stamford Estuary

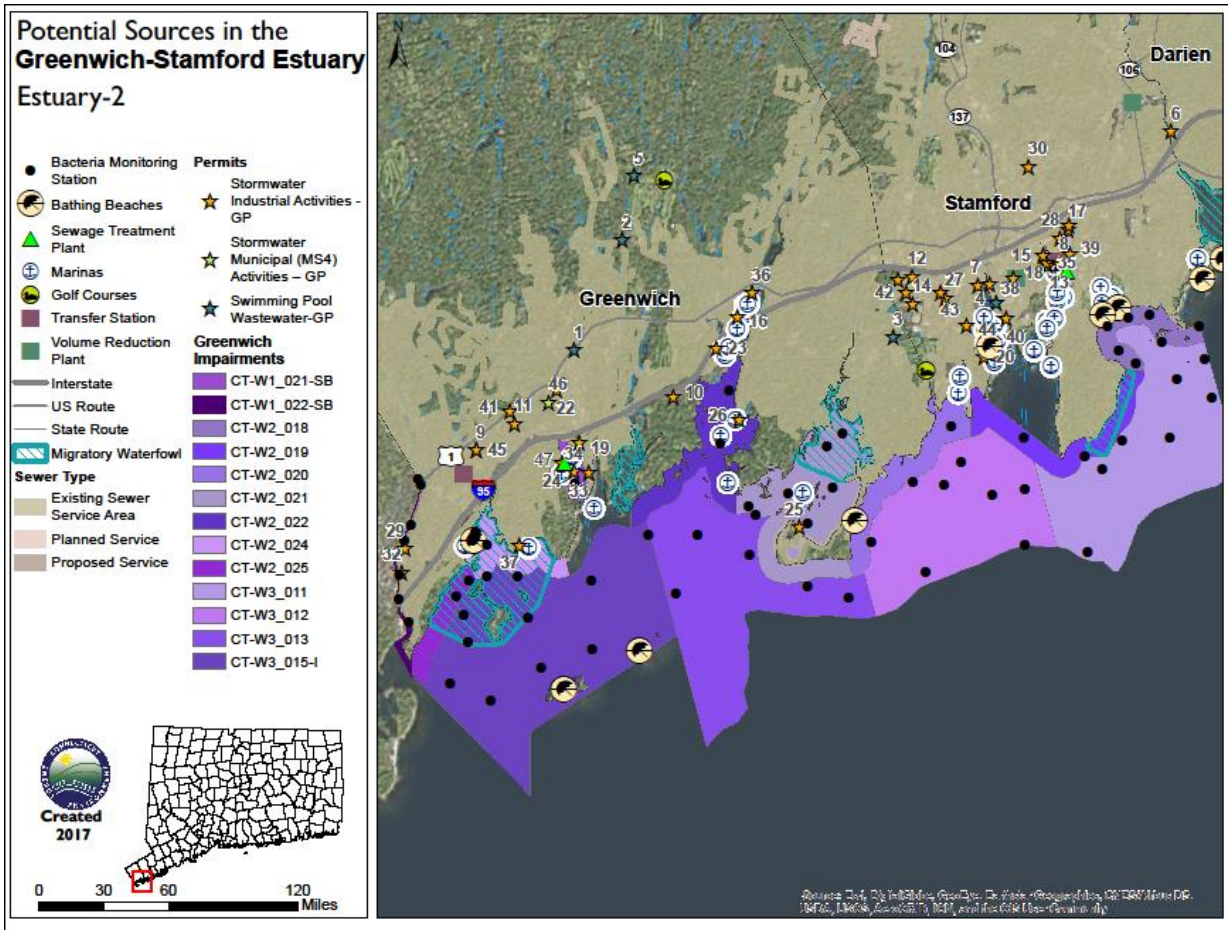
Waterbody ID	Waterbody Name	Station	Station Description	Municipality	Latitude	Longitude
Segment 1: CT-W1_022-SB	LIS WB Inner - Byram River (CT), Greenwich	SBR09	777 West Putnam Avenue	Greenwich	41.013	-73.656
		SBR10	Port Chester Pump Station	Port Chester, NY	41.012	-73.655
		SBR11	Cunningham's Auto Body	Greenwich	41.006	-73.657
		SBR12/ BR04	Mill Street Bridge	Greenwich	41.004	-73.658
		SBR13/ BR05	Greenwich Bay Marina	Greenwich	40.999	-73.659
		SBR14/ BR06	Rudy's Boat Yard	Greenwich	40.995	-73.659
		SBR15/ BR07	192 Byram Shore Road	Greenwich	40.992	-73.657
Segment 2: CT-W2_018	LIS WB Shore - Westcott Cove, Stamford	135-04.0	Westcott Cove C"3"	Stamford	41.031	-73.515
		135-04.1	Westcott Cove C"9"/N"10"	Stamford	41.036	-73.521
		135-04.2	N. Vincent Island	Stamford	41.038	-73.513
		135-04.3	Westcott Cove near demarcation Sign	Stamford	41.038	-73.517
		135-04.5	West Cove in channel near CA line	Stamford	41.033	-73.519
		135-05.0	S. Vincent Island	Stamford	41.034	-73.510
		135-06.0	E. Greenway Island	Stamford	41.037	-73.503
Segment 3: CT-W2_019	LIS WB Shore - Stamford Harbor, Stamford	135-01.1	harbor channel near N"6"	Stamford	41.020	-73.537
		135-02.1	end of Stamford Avenue	Stamford	41.017	-73.525
Segment 4: CT-W2_020	LIS WB Shore - Stamford Harbor (West), Greenwich	135-01.9	S. Dolphin Cove	Stamford	41.022	-73.551
Segment 5: CT-W2_021	LIS WB Shore - Greenwich Cove, Greenwich	057-18.0	Greenwich Pt. Dock	Greenwich	41.007	-73.579
		057-18.1	E. Greenwich Island	Greenwich	41.012	-73.574
		057-18.2	Cove Rock	Greenwich	41.008	-73.590
		057-19.0	Greenwich Cove	Greenwich	41.018	-73.576
		057-19.1	N. Greenwich Cove	Greenwich	41.020	-73.573
		057-22.0	Finch Rock	Greenwich	41.009	-73.591
		057-23.0	N. "2GP"/"1GP"	Greenwich	41.011	-73.583
Segment 6: CT-W2_022	LIS WB Shore - Cos Cob Harbor, Greenwich	057-20.0	Cos Cob N. C"7"	Greenwich	41.019	-73.597
		057-20.1	Cos Cob N"12" modified south	Greenwich	41.027	-73.595
Segment 7: CT-W2_024	LIS WB Shore - Byram Harbor, Greenwich	057-08.9	E. Rich Island	Greenwich	41.003	-73.642
		CT872506/ BBE	Byram Beach East	Greenwich	41.005	-73.645
		CT872506/ BBR	Byram Beach Rosenwald	Greenwich	41.005	-73.644

Waterbody ID	Waterbody Name	Station	Station Description	Municipality	Latitude	Longitude
		CT872506/ BBW	Byram Beach West	Greenwich	41.004	-73.645
Segment 8: CT-W2_025	LIS WB Shore - Byram Harbor (West), Greenwich	057-09.2	W. Shell Island	Greenwich	40.996	-73.648
		057-09.3	N. Shell Island	Greenwich	40.998	-73.646
Segment 9: CT-W3_011	LIS WB Midshore - Outer Westcott Cove, Stamford	135-01.6	R"32" bell	Stamford	41.003	-73.524
		135-02.0	N. of "The Cows"	Stamford	41.015	-73.522
		135-03.0	end of Shippan Avenue	Stamford	41.020	-73.518
		135-03.1	E. of station 3.0	Stamford	41.020	-73.508
		135-05.1	SW Cove Rocks near N"2"	Stamford	41.029	-73.507
		135-05.2	between Cove Rocks and Smith Reef	Stamford	41.026	-73.500
		135-12.0	E. Cove Rocks	Stamford	41.032	-73.502
Segment 10: CT-W3_012	LIS WB Midshore - Outer Stamford Harbor, Greenwich	135-01.0	entrance to harbor Gong "1"/N"2"	Stamford	41.012	-73.537
		135-01.4	west end of west breakwater monitors approved area	Stamford	41.016	-73.549
		135-01.5	W. Todd Rock	Stamford	41.013	-73.553
		135-01.7	S. channel - W. R"32"	Stamford	41.004	-73.537
		135-01.8	S. Harbor Ledge	Stamford	41.012	-73.543
		057-17.2	N. Woolsey Rock	Greenwich	41.004	-73.567
		057-17.4	S. Rocky Pt. YC	Greenwich	41.013	-73.559
		057-17.6	East Woolsey Rock	Greenwich	41.000	-73.556
Segment 11: CT-W3_013	LIS WB Midshore - Outer Cos Cob Harbor, Greenwich	057-10.2	Hen and Chickens	Greenwich	40.996	-73.605
		057-16.0	S. Flat Neck Pt. Pond outflow	Greenwich	40.998	-73.579
		057-17.0	S. Greenwich Pt.	Greenwich	40.996	-73.571
		057-21.0	Newfoundland Reef	Greenwich	41.005	-73.601
		057-22.1	R"2A" - W. Flat Neck Pt.	Greenwich	41.002	-73.591
Segment 12: CT-W3_015-I	LIS WB Midshore - Captain Harbor, Greenwich	057-08.1	Great Capt. Rocks	Greenwich	40.983	-73.649
		057-08.2	S. Bowers Island	Greenwich	40.993	-73.634
		057-08.3	between Jones Rock and Great Capt.	Greenwich	40.985	-73.631
		057-08.6	Four Foot Rocks	Greenwich	40.980	-73.641
		057-08.7	S. Grassy Rock	Greenwich	40.989	-73.646
		057-08.8	S. Otter Rocks	Greenwich	40.999	-73.636
		057-09.0	NE Shell Island	Greenwich	40.999	-73.642
		057-09.1	NE Grassy Rock	Greenwich	40.993	-73.647
		057-10.1	E. Cormorant Reef	Greenwich	40.988	-73.621
		057-11.0	N"2" Capt. Harbor	Greenwich	40.998	-73.622
		057-14.0	Red Rock	Greenwich	41.005	-73.611
Segment 13: CT-W1_021-SB	LIS WB Inner - Greenwich Harbor, Greenwich	057-12.0	South of Grass Island WPCF at outfall pipe	Greenwich	41 0.757	-73 37.505

POTENTIAL BACTERIA SOURCES

Potential sources of indicator bacteria in a watershed include point and non-point sources, such as stormwater runoff, agriculture, sanitary sewer overflows (collection system failures), illicit discharges, and inappropriate discharges to the waterbody. Potential sources that have been tentatively identified in the Greenwich-Stamford Estuary are presented in Table 3 and Figure 4. However, the list of potential sources is general in nature and should not be considered comprehensive. There may be other sources not listed here that contribute to the observed water quality impairment in the study segments. Further monitoring and investigation will confirm listed sources and discover additional ones. Some segments in this watershed are currently listed as unassessed by CT DEEP procedures. This does not mean that there are no data or impairments existing in the segments. There are data from permitted sources for some segments, and CT DEEP recommends that any elevated concentrations found from those permitted sources be addressed through voluntary reduction measures. More detailed evaluation of potential sources is expected to become available as activities are conducted to implement these TMDLs.

Figure 4: Potential bacteria sources to the impaired segments in the Greenwich-Stamford Estuary



The potential sources map for the impaired basin was developed after thorough analysis of available data sets. If information is not displayed in the map, then no sources were discovered during the analysis. The following is the list of potential sources that were evaluated: problems with migratory waterfowl, golf course locations, reservoirs, proposed and existing sewer service, cattle farms, poultry farms, permitted sources of bacteria loading (surface water discharge, MS4 permit, industrial stormwater, commercial stormwater, groundwater permits,), and leachate and discharge sources (agricultural waste Combined Sewer Overflows (CSO), failing septic systems, landfills, large septic tank leach fields, septage lagoons, sewage treatment plants, and water treatment or filter backwash).

Table 3: Potential bacteria sources to the impaired segments in the Greenwich-Stamford Estuary

Segment #	Impaired Segment	Permit Source	Illicit Discharge	CSO/SSO Issue	Failing Septic System	Marinas	Stormwater Runoff	Nuisance Wildlife/Pets	Other
1	LIS WB Inner – Byram River (CT), Greenwich CT-W1_022-SB	**x**	**x**		**x**		**x**	**x**	
2	LIS WB Shore – Westcott Cove, Stamford CT-W2_018	**x**	**x**		**x**	**x**	**x**	**x**	**x**
3	LIS WB Shore – Stamford Harbor, Stamford CT-W2_019	**x**	**x**		**x**	**x**	**x**	**x**	**x**
4	LIS WB Shore – Stamford Harbor (West), Greenwich CT-W2_020	**x**	**x**		**x**	**x**	**x**	**x**	**x**
5	LIS WB Shore – Greenwich Cove, Greenwich CT-W2_021		**x**		**x**		**x**	**x**	
6	LIS WB Shore – Cos Cob Harbor, Greenwich CT-W2_022	**x**	**x**		**x**	**x**	**x**	**x**	

Segment #	Impaired Segment	Permit Source	Illicit Discharge	CSO/SSO Issue	Failing Septic System	Marinas	Stormwater Runoff	Nuisance Wildlife/Pets	Other
7	LIS WB Shore – Byram Harbor, Greenwich CT-W2_024	**x**	**x**		**x**		**x**	**x**	**x**
8	LIS WB Shore – Byram Harbor (West), Greenwich CT-W2_025	**x**	**x**		**x**		**x**	**x**	
9	LIS WB Midshore – Outer Westcott Cove, Stamford CT-W3_011	**x**	**x**		**x**	**x**	**x**	**x**	**x**
10	LIS WB Midshore – Outer Stamford Harbor, Greenwich CT-W3_012	**x**	**x**		**x**	**x**	**x**	**x**	**x**
11	LIS WB Midshore – Outer Cos Cob Harbor, Greenwich CT-W3_013	**x**	**x**		**x**	**x**	**x**	**x**	
12	LIS WB Midshore – Captain Harbor, Greenwich CT-W3_015-I	**x**	**x**		**x**		**x**	**x**	**x**
13	LIS WB Inner - Greenwich Harbor, Greenwich CT-W1_021-SB	**x**	**x**		**x**	**x**	**x**	**x**	

Point Sources

Permitted sources within the watershed that could potentially contribute to the bacteria loading are identified in Table 4. This table includes permit types that may or may not be present in the impaired estuary. A list of active permits in municipalities that drain to the Greenwich-Stamford estuary is included in Table 5. Additional investigation and monitoring could reveal the presence of other discharges to the estuary.

Table 4: General categories list of permitted discharges

Permit Code	Permit Description Type	Number in Estuary
CT	Surface Water Discharges	3
GPL	Discharge of Swimming Pool Wastewater	5
GSC	Stormwater Discharge Associated with Commercial Activity	0
GSI	Stormwater Associated with Industrial Activity	40
GSM	Part B Municipal Stormwater MS4	1
LF	Groundwater Permit (Landfill)	0
UI	Underground Injection	0

Permitted Sources

As shown in Table 5, there are multiple permitted discharges in Greenwich and Stamford that could be contributing bacteria to the impaired segments. These facilities include the Greenwich Sewage Treatment Plant, Holly Hill Resource Recovery Facility, Stamford Water Pollution Control Facility (WPCF), Stamford Rail Yard, and multiple marinas throughout the watershed. According to the 2008 Greenwich and Stamford Estuary Reports, there are approximately 18 marinas in Greenwich and 19 marinas in Stamford, including Beacon Point Marine, Riverside Yacht Club, Byram Marina, Grass Island Marina, Brewer's Yacht Haven, and Ebb Tide Boat Rental. Fecal coliform data cannot be compared to the WQS as there is no single sample shellfish standard for fecal coliform, however, no more than 10% of the samples can exceed 31 cfu/100 mL for an SA waterbody and no more than 10% of the samples can exceed 260 cfu/100 mL for an SB waterbody (Table 6). O&G Industries, Stamford WPCF, Riverside Yacht Club, Belle Haven Club, Harbor Point Marina and Metro North all reported fecal coliform amounts in stormwater in excess of 1000 colonies/100 mL. Riverside Yacht Club, and Belle Haven Club both reported amounts of Enterococci in the stormwater higher than the Water Quality criteria of 500 colonies/ 100mL. These facilities may be contributing to the bacterial contamination of shellfish beds in the Greenwich-Stamford Estuary and should be monitored.

Since the Municipal Separate Storm Sewer Systems (MS4) permits are not targeted to a specific location, but rather the geographic area of the regulated municipality, there is no one accurate point on the map to display the location of these permits, therefore the MS4 permit will not be displayed as a dot on the Potential Sources Map. Using the municipal border as a guideline will show which areas of an affected watershed are covered by an MS4 permit.

Table 5: Permitted facilities in Greenwich and Stamford, CT that may be affecting the Greenwich-Stamford Estuary

Town	Client	Permit ID	Permit Type	Site Name	Address	Map #
Greenwich	Young Men's Christian Assoc. of Greenwich	GPL000186	Swimming Pool Wastewater	YMCA of Greenwich	50 E Putnam Ave	1
Greenwich	Greenwich Country Day School Inc.	GPL000234	Swimming Pool Wastewater	Greenwich Country Day School Inc.	401 Old Church Rd	2
Old Greenwich	The Innis Arden Golf Club Inc.	GPL000237	Swimming Pool Wastewater	Innis Arden Golf Club	120 Tomac Ave	3
Stamford	Three Harbor Point Square LLC	GPL000255	Swimming Pool Wastewater	3 Harbor Point Square Block S3 Pool	1 Harbor Point Rd	4
Greenwich	Greenwich Country Club	GPL000265	Swimming Pool Wastewater	Greenwich Country Club	19 Doubling Rd	5

Town	Client	Permit ID	Permit Type	Site Name	Address	Map #
Darien	State of Connecticut DOT	GSI000014	Industrial Stormwater	Darien Maintenance & Repair Facility	65 Brookside Dr	6
Stamford	O & G Industries, Inc.	GSI000591	Industrial Stormwater	72 Davenport Street	72 Davenport St	7
Stamford	H.N.S. Management Co.	GSI000775	Industrial Stormwater	CT Transit	26 Elm Ct	8
Greenwich	Town of Greenwich	GSI000785	Industrial Stormwater	Greenwich Transfer Station	99 Holly Hill Ln	9
Greenwich	Town of Greenwich	GSI000786	Industrial Stormwater	Greenwich Public Works	100 Indian Field Rd	10
Greenwich	Bimbo Bakeries USA, Inc.	GSI000920	Industrial Stormwater	Bimbo Bakeries USA, Inc.	10 Hamilton Ave	11
Stamford	Federal Express Corporation	GSI000970	Industrial Stormwater	Fedex - JSDA Facility	24 Ardmore Rd	12
Stamford	City of Stamford	GSI001017	Industrial Stormwater	Stamford WPCF	111 Harbor View Ave	13
Stamford	United States Postal Service	GSI001069	Industrial Stormwater	United States Postal Service VMF	450 West Ave	14
Stamford	Rubino Brothers, Inc.	GSI001143	Industrial Stormwater	560 Canal St.	560 Canal St	15
Cos Cob	Beacon Point Marine, Inc.	GSI001158	Industrial Stormwater	Beacon Point Marine, Inc	49 River Rd	16
Stamford	Metro-North Railroad	GSI001309	Industrial Stormwater	Stamford Rail Yard	18 Cherry St	17
Stamford	Southern Connecticut Recycling, Inc.	GSI001358	Industrial Stormwater	Southern Connecticut Recycling, Inc.	39 Woodland	18
Greenwich	Town of Greenwich	GSI001426	Industrial Stormwater	Arch Street	Arch Street	19
Stamford	O & G Industries, Inc.	GSI001563	Industrial Stormwater	Stamford Repair	69 Davenport	20
Stamford	O & G Industries, Inc.	GSI001564	Industrial Stormwater	O & G Industries, Inc.	686 Canal St	21
Greenwich	Town of Greenwich	GSI001574	Industrial Stormwater	Byram Marina	Byram Park	22
Cos Cob	Town of Greenwich	GSI001575	Industrial Stormwater	Cos Cob Marina	74 Strickland Rd	23
Greenwich	Town of Greenwich	GSI001576	Industrial Stormwater	Greenwich Sewage Treatment	Grass Island Road	24
Greenwich	Town of Greenwich	GSI001577	Industrial Stormwater	Greenwich Point Marina	Greenwich Point Park	25
Riverside	The Riverside Yacht Club, Incorporated	GSI001891	Industrial Stormwater	Riverside Yacht Club	102 Club Rd	26
Stamford	First Student, Inc.	GSI002147	Industrial Stormwater	First Student, Inc. #20684	124 Selleck St	27
Stamford	City of Stamford	GSI002177	Industrial Stormwater	Stamford Transfer Station	1 Harbor View Ave	28
Greenwich	J. Catalano & Sons, Inc.	GSI002247	Industrial Stormwater	J. Catalano And Sons, Inc.	34 S Water St	29
Stamford	City of Stamford	GSI002250	Industrial Stormwater	Stamford Police Department Garage	805 Bedford St	30
Stamford	First Student, Inc.	GSI002265	Industrial Stormwater	First Student Inc. #20605	11 Brown House Rd	31
Greenwich	Ebb Tide Boat Rental	GSI002294	Industrial Stormwater	Ebb Tide Boat Rental	112 S Water St	32
Greenwich	The Indian Harbor Yacht Club Inc.	GSI002367	Industrial Stormwater	Indian Harbor Yacht Club	710 Steamboat Rd	33
Greenwich	Town of Greenwich	GSI002430	Industrial Stormwater	Grass Island Marina	Grass Island Road	34
Stamford	Simsmetal East, LLC	GSI002438	Industrial Stormwater	Stamford Iron & Metal	640 Canal St	35

Town	Client	Permit ID	Permit Type	Site Name	Address	Map #
Greenwich	Drenckhahn Boat Basin, Incorporated	GSI002441	Industrial Stormwater	Drenckhahn Boat Basin, Inc.	105 River Run	36
Greenwich	The Belle Haven Club, Inc.	GSI002452	Industrial Stormwater	100 Harbor Drive	100 Harbor Dr	37
Stamford	Sprague Operating Resources LLC	GSI002495	Industrial Stormwater	Sprague Energy Corp.	10 Water St	38
Stamford	City of Stamford	GSI002499	Industrial Stormwater	Maintenance Garage, Hwy Facility & Recycling	90 Magee Ave	39
Stamford	The Strand/BRC Group, LLC	GSI002522	Industrial Stormwater	Harbor Point Marina, South	100 Bateman Way	40
Greenwich	Post Road Iron Works, Inc.	GSI002524	Industrial Stormwater	Post Road Iron Works	345 W Putnam Ave	41
Stamford	Student Transportation Of America, LLC	GSI002561	Industrial Stormwater	328 Selleck Street	328 Selleck St	42
Stamford	Wendon Company, Inc.	GSI002594	Industrial Stormwater	Wendon Company, Inc.	17 Irving Ave	43
Stamford	Polyone Designed Structures and Solutions LLC	GSI002634	Industrial Stormwater	Polyone Designed Structures And Solutions, LLC	69 Southfield Ave	44
Greenwich	City Carting & Recycling, Inc.	GSI002764	Industrial Stormwater	Greenwich Transfer Station	99 Holly Hill Ln	45
Greenwich	Town of Greenwich	CT0100234	Surface Water Permit	Greenwich Sewage Treatment Plant	Town Hall Box 2540	46
Stamford	City of Stamford	CT0101087	Surface Water Permit	Stamford Sewage Treatment Plant	1 Harbor View Ave	47
Stamford	City of Stamford	CT0030279	Municipal Stormwater (MS4)	-	City of Stamford	entire town
Greenwich	Town of Greenwich	GSM000084	Municipal Stormwater (MS4)	-	Town of Greenwich	entire town

Table 6: Industrial permits affecting the Greenwich-Stamford Estuary and available bacteria data (colonies/100mL). Fecal coliform results cannot be directly compared to the water quality standard as there is no single sample shellfish standard for fecal coliform.

Town	Location	Permit Number	Receiving Water	Sample Location	Sample Date	Fecal Coliform	Enterococcus
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN001	10/19/11	80	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	10/19/11	36	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN001	10/19/12	2	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN002	10/19/12	4	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	10/19/12	230	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN001	11/07/13	1,500	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	11/07/13	600	

Town	Location	Permit Number	Receiving Water	Sample Location	Sample Date	Fecal Coliform	Enterococcus
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN001	08/11/15	850	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN002	08/11/15	52	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	08/11/15	180	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN001	02/03/16	50	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN002	02/03/16	44	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	02/03/16	35	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN002	08/10/16	0	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	08/10/16	416	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN001	10/27/16	4,350	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN002	10/27/16	1,020	
Stamford	O&G Industries, Inc.	GSI000591	Long Island Sound	DSN003	10/27/16	2,060	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	03/12/13	175	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	08/01/13	135,000	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	11/12/13	5,800	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	04/15/14	4,000	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	09/04/15	8,664	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	12/22/15	7,270	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	08/10/16	23,000	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	10/27/16	228	
Stamford	Town of Stamford WPCA	GSI001017	Long Island Sound	DSN-002	04/25/17	7,727	
Stamford	USPS-Stamford Vehicle Maintenance	GSI001069	Long Island Sound	DSN 002	04/20/15	417	64

Town	Location	Permit Number	Receiving Water	Sample Location	Sample Date	Fecal Coliform	Enterococcus
Stamford	Metro-North RR	GSI001309	East Branch Canal to LIS	serial 1	03/12/13	192	
Stamford	Metro-North RR	GSI001309	East Branch Canal to LIS	serial 2	03/12/13	1,120	
Stamford	Metro-North RR	GSI001309	East Branch Canal to LIS	serial 3	03/12/13	1,600	
Stamford	Metro-North RR	GSI001309	East Branch Canal to LIS	serial 4	03/12/13	4	
Stamford	Metro-North RR	GSI001309	East branch canal to LIS	Outfall DS-2	03/12/14	5	
Stamford	Metro-North RR	GSI001309	East branch canal to LIS	Outfall DS-3	03/12/14	5	
Stamford	Metro-North RR	GSI001309	East branch canal to LIS	Outfall DS-4	03/12/14	5	
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #1	11/22/11	110	
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #2	11/22/11	112	
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #1	02/19/13	2	
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #2	02/19/13	3,210	
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #1	09/16/14	140	98
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #2	09/16/14	2,600	1,640
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #1	11/06/14	134	113
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #2	11/06/14	580	590
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #1	10/27/16	89	320
Greenwich	Riverside Yacht Club	GSI001891	Cos Cob Harbor	Outfall #2	10/27/16	318	>3,000
Greenwich	Indian Harbor Yacht Club	GSI002367	Greenwich Harbor	#1	11/22/11	TNTC	
Greenwich	Indian Harbor Yacht Club	GSI002367	Greenwich Harbor	#2	11/22/11	450	
Greenwich	Indian Harbor Yacht Club	GSI002367	Greenwich Harbor	#1	02/19/13	0	
Greenwich	Indian Harbor Yacht Club	GSI002367	Greenwich Harbor	#2	02/19/13	8	
Greenwich	The Belle Haven Club	GSI002452	Byram Harbor	BHC #1	11/22/11	73	
Greenwich	The Belle Haven Club	GSI002452	Byram Harbor	Catch Basin J	05/15/12		6
Greenwich	The Belle Haven Club	GSI002452	Byram Harbor	Belle Haven	02/19/13	2	
Greenwich	The Belle Haven Club	GSI002452	Byram Harbor	Catch Basin J	09/16/14	1,850	1,400
Greenwich	The Belle Haven Club	GSI002452	Byram Harbor	Catch Basin J	11/06/14	286	44
Greenwich	The Belle Haven Club	GSI002452	Byram Harbor	Catch Basin J	10/27/16	257	770

Town	Location	Permit Number	Receiving Water	Sample Location	Sample Date	Fecal Coliform	Enterococcus
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Outfall 001	02/19/13	100	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Outfall 003	02/19/13	800	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Outfall 001	05/08/13	50	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Outfall 003	05/08/13	5,000	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Upstream of Outfall 001	09/25/14	280	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Upstream of Outfall 003	09/25/14	16	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Outfall 001	08/11/15	6,700	
Stamford	Harbor Point Marina, South	GSI002522	Stamford Harbor	Outfall 003	08/11/15	>12,000	

Municipal Stormwater Permitted Sources

Per the EPA Phase II Stormwater rule all municipal storm sewer systems (MS4s) operators located within US Census Bureau Urbanized Areas (UAs) must be covered under MS4 permits regulated by the appropriate State agency. The Phase II Stormwater Rule also required coverage of state and federal institutions that it called "non-traditional" MS4s. State and federal prisons, colleges, hospitals and military facilities are covered by the general permit as non-traditional MS4s. There are 121 municipalities and 12 institutions currently regulated by CT DEEP's General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems, effective January 1, 2017 (MS4 permit). These municipalities and institutions are considered small MS4s as defined by EPA. Stormwater discharges from CT's only medium MS4, Stamford, as defined by EPA, are regulated by an individual permit.

The US Census Bureau defines a UA as a densely settled area that exceeds a population of 50,000 people and has a population density of at least 1,000 people per square mile. The UA will also include adjacent block groups and blocks with at least 500 people per square mile. A UA consists of all or part of one or more incorporated places and/or census designated places, and may include additional territory outside of any place. (67 FR 11663) Maps of UAs are published after each decennial census, the most recent maps reflect the results of the 2010 census. The current MS4 permit requires implementation of the six minimum control measures throughout the municipality with some additional or alternate measures within the UA portion of the MS4. These six minimum measures are explained later in this document.

The impaired segments in the Greenwich-Stamford Estuary are located within the City of Stamford and the Town of Greenwich, CT. As Connecticut's only municipality with a population greater than 100,000 and a municipal separate storm sewer, the City of Stamford's storm sewer discharges are regulated by an individual NPDES permit as required by EPA's Phase 1 regulations. For more information on activities being done in Stamford to improve stormwater quality and improve water quality in Stamford Harbor, please refer to the City of Stamford website (www.stamfordct.gov/harbor-management and www.stamfordct.gov/stormwater-management) and the Stamford Harbor Management Plan (www.stamfordct.gov/sites/stamfordct/files/u358/stamford_hr.pdf). Greenwich has a designated urban area, as defined by the U.S. Census Bureau and is required to comply with the General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems (MS4 permit) issued by CT DEEP (Figure 5). This general permit is only applicable to municipalities that are identified in Appendix A of the

MS4 permit that contain designated urban areas and discharge stormwater via a separate storm sewer system to surface waters of the State. The permit requires municipalities to develop a Stormwater Management Plan (SMP) to reduce the discharge of pollutants as well as protect water quality. The MS4 permit is discussed further in the "TMDL Implementation Guidance" section of the core TMDL document. Additional information regarding stormwater management and the MS4 permit can be obtained on CTDEEP's website www.ct.gov/deep/cwp/view.asp?a=2721&q=558562&DEEPNav_GID=1654.

There are multiple MS4 outfalls that have been sampled for *E. coli* bacteria and submitted by the Town of Greenwich for their MS4 permit (Table 7). Although the results cannot be compared to the water quality standard as *E. coli* is the wrong indicator species for saltwater segments, high counts of greater than 410 colonies/100 mL were reported at multiple outfall locations from 2006 – 2014.

Stormwater Monitoring data from 2015 and 2017 submitted by the City of Stamford for their MS4 permit (CT0030279) are listed in Table 10a including results for *E. coli*, fecal coliform and enterococci monitoring. *E. coli* is the wrong indicator species for saltwater segments, however 19 of the 21 samples reported *E. coli* amounts greater than 410 colonies/100mL and Enterococci amounts above 500 colonies/100mL. There is no single sample maximum for Fecal coliform however, no more than 10% of the samples can exceed 31 cfu/100 mL for an SA waterbody and no more than 10% of the samples can exceed 260 for an SB waterbody. Figure 7 is a map indicating where these outfalls are located.

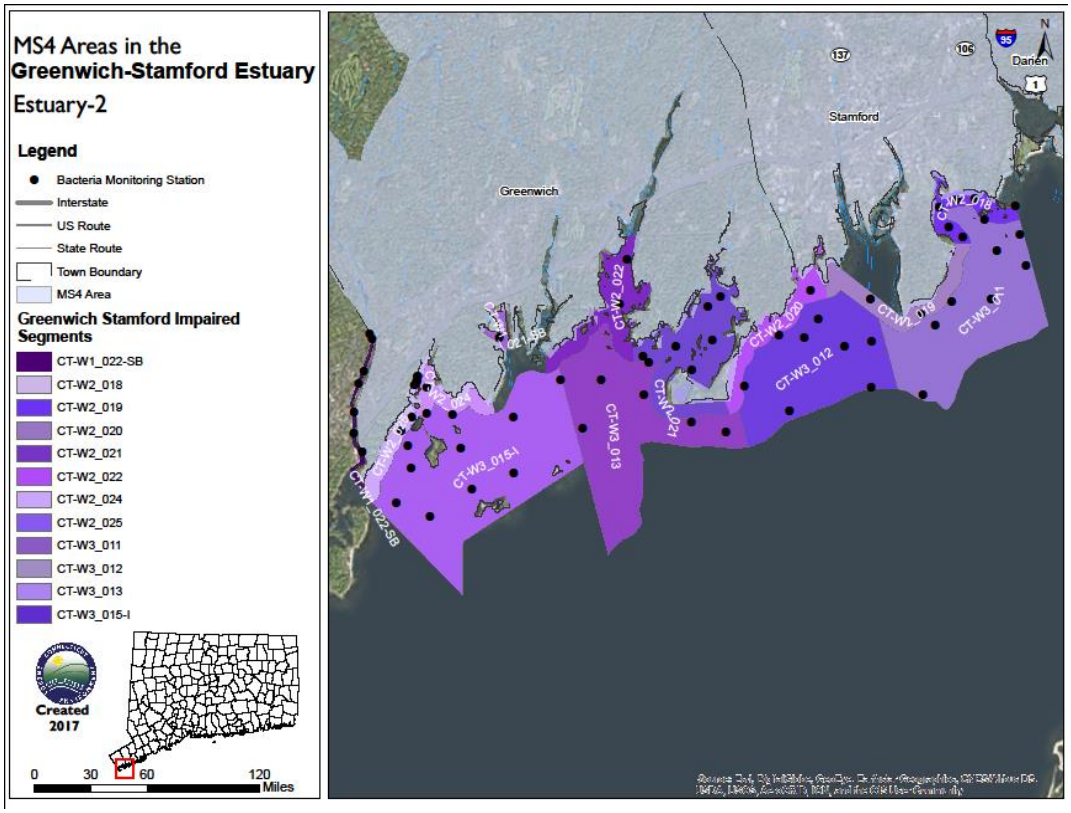
Table 7: List of MS4 sample locations and *E. coli* (colonies/100 mL) results reported by the Town of Greenwich (GSM000084). The results cannot be directly compared to the water quality standard as *E. coli* is the wrong indicator species for saltwater segments. However, elevated levels of bacteria in a single sample would contribute to exceedances of water quality criteria.

Town	Location	MS4 Type	Receiving Water	Sample Date	E. coli
Greenwich	C-1 Field Point Road @ Prospect Street	Commercial	Horseneck Brook	04/03/06	2
Greenwich	C-4A 18" RCP Shore Rd & Horseneck Rd	Commercial	LIS SW shoreline	04/03/06	1
Greenwich	I-1 12"RCP Grass Island Rd	Industrial	LIS SW shoreline	04/03/06	1
Greenwich	I-6 12"RCP Grass Island Rd	Industrial	LIS SW shoreline	04/22/06	3
Greenwich	R-3 12"RCP Richmond Hill Rd	Residential	east branch Byram River	04/22/06	77
Greenwich	R-2 John Street, 24" RCP	Residential	east branch Byram River	04/22/06	866
Greenwich	C-5 Sound Beach Ave	Commercial	SW Shoreline	09/29/06	210
Greenwich	C-6- Suburban Ave	Commercial	Mianus River	09/29/06	1,203
Greenwich	C-7 Ferris Dr	Commercial	SW Shoreline	09/29/06	1,986
Greenwich	I-7 South Water St	Industrial	Byram River	09/29/06	980
Greenwich	R-4 John St	Residential	Byram River	09/29/06	1,553
Greenwich	R-5 Doubling Rd	Residential	Greenwich Creek	09/29/06	411
Greenwich	C8 Arch Street	Commercial	SW Shoreline	08/21/07	1,011
Greenwich	C9 Newman St	Commercial	Mianus River	08/21/07	1,120
Greenwich	R6 Lockwood Rd	Residential	SW Shoreline	08/21/07	>2419.6
Greenwich	R7 Strickland Rd	Residential	Mianus River	08/21/07	>2419.6

Town	Location	MS4 Type	Receiving Water	Sample Date	E. coli
Greenwich	R8 Field Point Rd	Residential	Horseneck Brook	08/21/07	1,986
Greenwich	R9 Dale Drive	Residential	Byram River	08/21/07	691
Greenwich	Horseneck Brook @ field Point Rd	Commercial	SW Shoreline	07/23/08	3,973
Greenwich	East Branch Byram River @ Riverside Rd	Residential	SW Shoreline	07/23/08	4,839
Greenwich	Greenwich Creek (East Branch Brothers Brook) @ Brookridge Dr	Residential	SW Shoreline	07/23/08	>4839.2
Greenwich	Byram River @ Powell St	Residential	SW Shoreline	07/23/08	4,839
Greenwich	Strickland Brook @ Bible St	Residential	SW Shoreline	07/23/08	3,973
Greenwich	Binney Park Brook @ Soundbeach Ave	Residential	SW Shoreline	07/23/08	4,839
Greenwich	Horseneck Brook @ field Point Rd	Commercial	SW Shoreline	07/21/09	>2419.6
Greenwich	East Branch Byram River @ Riverside Rd	Residential	SW Shoreline	07/21/09	>2419.6
Greenwich	Greenwich Creek (East Branch Brothers Brook) @ Brookridge Dr	Residential	SW Shoreline	07/21/09	58
Greenwich	Byram River @ Powell St	Residential	SW Shoreline	07/21/09	1,733
Greenwich	Strickland Brook (Brothers Brook) @ Bible St	Residential	SW Shoreline	07/21/09	1,414
Greenwich	Binney Park Brook @ Soundbeach Ave	Residential	SW Shoreline	07/21/09	>2419.6
Greenwich	Horseneck Brook @ field Point Rd	Commercial	SW Shoreline	07/13/10	980
Greenwich	East Branch Byram River @ Riverside Rd	Residential	SW Shoreline	07/13/10	2,420
Greenwich	Greenwich Creek (East Branch Brothers Brook) @ Brookridge Dr	Residential	SW Shoreline	07/13/10	1,733
Greenwich	Byram River @ Deep Gorge Road	Residential	SW Shoreline	07/13/10	1,300
Greenwich	Strickland Creek (Brothers Brook) @ Pine Ridge Road	Residential	SW Shoreline	07/13/10	1,120
Greenwich	Binney Park Brook @ Mary Lane	Residential	SW Shoreline	07/13/10	1,300
Greenwich	Sound Beach Ave (GIS ID1477)	Commercial	SW Shoreline	08/25/11	179
Greenwich	10 Hamilton Ave 66"culvert GIS ID #NA	Commercial	SW Shoreline	08/25/11	>2419.6
Greenwich	84 Arch Street culvert GIS ID #1323	Commercial	SW Shoreline	08/25/11	>2419.6
Greenwich	10 Hamilton Ave 12" pkng area culvert GIS ID#1350	Industrial	SW Shoreline	08/25/11	>2419.6
Greenwich	Comley Ave 42" culvert GIS ID# 488	Residential	SW Shoreline	08/25/11	>2419.6

Town	Location	MS4 Type	Receiving Water	Sample Date	E. coli
Greenwich	48" Juniper Lane culvert GIS ID# 915	Residential	SW Shoreline	08/25/11	>2419.6
Greenwich	Rex Street GIS ID No. OUT_904	Commercial		05/28/13	>2419.6
Greenwich	Richard Road GIS ID No. OUT_1343	Commercial		05/28/13	>2419.6
Greenwich	Delwood Lane GIS ID No. OUT_891	Residential	SW Shoreline	05/28/13	>2419.6
Greenwich	Cotswood Road GIS ID No. OUT_151	Residential	SW Shoreline	05/28/13	980
Greenwich	Halsey Drive GIS ID No. OUT_923	Residential		05/28/13	488
Greenwich	Strickland Road GIS ID No. OUT_888	Residential		05/28/13	1,986
Greenwich	Rex Street GIS ID No. OUT_904	Commercial		10/07/13	>2419.6
Greenwich	Richard Road GIS ID No. OUT_1343	Commercial		10/07/13	5,172
Greenwich	Delwood Lane GIS ID No. OUT_891	Residential	SW Shoreline	10/07/13	>2419.6
Greenwich	Cotswood Road GIS ID No. OUT_151	Residential	SW Shoreline	10/07/13	>2419.6
Greenwich	Halsey Drive GIS ID No. OUT_923	Residential		10/07/13	>2419.6
Greenwich	Strickland Road GIS ID No. OUT_888	Residential		10/07/13	>2419.6
Greenwich	Sherwood Avenue GIS ID No. OUT_1396	Commercial	Sherwood Pond, Byram River	08/13/14	206,400
Greenwich	Nutmeg Drive GIS ID No. OUT_861	Commercial	Byram River	08/13/14	488,400
Greenwich	Davis Avenue GIS ID No. OUT_1312	Residential	Indian Harbor, Brothers Brook	08/13/14	83,300
Greenwich	Fairfield Road GIS ID No. OUT_157	Residential	West Branch Greenwich Creek, Brothers Brook	08/13/14	100
Greenwich	Halsey Drive GIS ID No. OUT_923	Residential	Mill Brook	08/13/14	86,500
Greenwich	Booth Place GIS ID No. OUT_910	Residential	Tom's Brook	08/13/14	27,500

Figure 5: MS4 areas near the Greenwich-Stamford Estuary



Publicly Owned Treatment Works

The Greenwich Water Pollution Control Facility (CT0100234) is located along Shore Road on Grass Island and has the potential to impact the shellfish growing waters in the Greenwich-Stamford Estuary (Greenwich, 2008). According to the 2008 Greenwich Estuary Report, the Interstate Environmental Commission (IEC) inspected the effluent from the plant in 2008 and one WQS exceedance was reported. The Stamford Water Pollution Control Facility (CT0101087) is located at 1 Harbor View Avenue on the East Branch of Stamford Harbor and also has the potential to impact the shellfish growing waters in the Greenwich-Stamford Estuary (Stamford, 2008). According to the 2008 Stamford Estuary Report, the IEC inspected the effluent from the plant from 2006-2008 and no exceedances were reported. Bacteria data from the effluent of the Greenwich and Stamford Water Pollution Control Facilities are included in Tables 8a and 8b. Neither WPCF reported violations of the fecal coliform limit during the time period listed below, however the Greenwich WPCF reported a violation of the max daily limit for Enterococci in February 2017.

Table 8a: Wastewater treatment plant fecal coliform (colonies/100 mL) data discharging to the Greenwich-Stamford Estuary

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	05/31/2016	4
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	06/30/2016	14
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	07/31/2016	9
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	08/31/2016	17
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	09/30/2016	14
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	10/31/2016	17
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	11/30/2016	9
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	12/31/2016	6
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	01/31/2017	7
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	02/28/2017	5
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	03/31/2017	18
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	04/30/2017	6
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	05/31/2017	6
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	06/30/2017	10
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	07/31/2017	22
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	08/31/2017	20
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	09/30/2017	13
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	10/31/2017	26
Greenwich WPCF	CT0100234	Greenwich Harbor/ LIS	11/30/2017	12
City of Stamford WPCF	CT0101087	Stamford Harbor	01/31/2015	5
City of Stamford WPCF	CT0101087	Stamford Harbor	02/28/2015	6
City of Stamford WPCF	CT0101087	Stamford Harbor	03/31/2015	3
City of Stamford WPCF	CT0101087	Stamford Harbor	04/30/2015	4
City of Stamford WPCF	CT0101087	Stamford Harbor	05/31/2015	4
City of Stamford WPCF	CT0101087	Stamford Harbor	06/30/2015	2
City of Stamford WPCF	CT0101087	Stamford Harbor	07/31/2015	3
City of Stamford WPCF	CT0101087	Stamford Harbor	08/31/2015	1
City of Stamford WPCF	CT0101087	Stamford Harbor	09/30/2015	3
City of Stamford WPCF	CT0101087	Stamford Harbor	10/31/2015	3
City of Stamford WPCF	CT0101087	Stamford Harbor	11/30/2015	2
City of Stamford WPCF	CT0101087	Stamford Harbor	12/31/2015	2

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean
City of Stamford WPCF	CT0101087	Stamford Harbor	01/31/2016	4
City of Stamford WPCF	CT0101087	Stamford Harbor	02/29/2016	3
City of Stamford WPCF	CT0101087	Stamford Harbor	03/31/2016	4
City of Stamford WPCF	CT0101087	Stamford Harbor	04/30/2016	3
City of Stamford WPCF	CT0101087	Stamford Harbor	05/31/2016	2
City of Stamford WPCF	CT0101087	Stamford Harbor	06/30/2016	2
City of Stamford WPCF	CT0101087	Stamford Harbor	07/31/2016	4
City of Stamford WPCF	CT0101087	Stamford Harbor	08/31/2016	5
City of Stamford WPCF	CT0101087	Stamford Harbor	09/30/2016	10
City of Stamford WPCF	CT0101087	Stamford Harbor	10/31/2016	3
City of Stamford WPCF	CT0101087	Stamford Harbor	11/30/2016	2
City of Stamford WPCF	CT0101087	Stamford Harbor	12/31/2016	3
City of Stamford WPCF	CT0101087	Stamford Harbor	01/31/2017	3
City of Stamford WPCF	CT0101087	Stamford Harbor	02/28/2017	6
City of Stamford WPCF	CT0101087	Stamford Harbor	03/31/2017	9
City of Stamford WPCF	CT0101087	Stamford Harbor	04/30/2017	3
City of Stamford WPCF	CT0101087	Stamford Harbor	05/31/2017	4
City of Stamford WPCF	CT0101087	Stamford Harbor	06/30/2017	3
City of Stamford WPCF	CT0101087	Stamford Harbor	07/31/2017	2
City of Stamford WPCF	CT0101087	Stamford Harbor	08/31/2017	2
30-Day Geometric Mean Permit Limit = 88 colonies/100 mL				

Table 8b: City of Stamford WPCF and Greenwich (WPCF) Enterococci data (colonies/100 mL) discharging to the Greenwich Estuary

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean	Maximum
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	05/31/2016	3	21
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	06/30/2016	8	54
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	07/31/2016	3	10
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	08/31/2016	3	51
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	09/30/2016	4	51
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	10/31/2016	5	57
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	11/30/2016	5	18
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	12/31/2016	6	39
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	01/31/2017	7	39
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	02/28/2017	9	1400
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	04/30/2017	11	410
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	05/31/2017	6	60
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	06/30/2017	5	26
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	07/31/2017	6	100
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	08/31/2017	5	20
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	09/30/2017	6	33
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	10/31/2017	8	44
Greenwich WPCF	CT0100234	Greenwich Harbor/LIS	11/30/2017	10	53
Stamford WPCF	CT0101087	Stamford Harbor	01/31/2015	17	37
Stamford WPCF	CT0101087	Stamford Harbor	02/28/2015	13	24
Stamford WPCF	CT0101087	Stamford Harbor	03/31/2015	4	24
Stamford WPCF	CT0101087	Stamford Harbor	04/30/2015	5	18
Stamford WPCF	CT0101087	Stamford Harbor	05/31/2015	4	14
Stamford WPCF	CT0101087	Stamford Harbor	06/30/2015	3	8
Stamford WPCF	CT0101087	Stamford Harbor	07/31/2015	3	5
Stamford WPCF	CT0101087	Stamford Harbor	08/31/2015	1	3
Stamford WPCF	CT0101087	Stamford Harbor	09/30/2015	5	17
Stamford WPCF	CT0101087	Stamford Harbor	10/31/2015	6	9
Stamford WPCF	CT0101087	Stamford Harbor	11/30/2015	7	18
Stamford WPCF	CT0101087	Stamford Harbor	12/31/2015	4	14
Stamford WPCF	CT0101087	Stamford Harbor	01/31/2016	8	12
Stamford WPCF	CT0101087	Stamford Harbor	02/29/2016	8	16
Stamford WPCF	CT0101087	Stamford Harbor	03/31/2016	7	41
Stamford WPCF	CT0101087	Stamford Harbor	04/30/2016	4	9
Stamford WPCF	CT0101087	Stamford Harbor	05/31/2016	2	10
Stamford WPCF	CT0101087	Stamford Harbor	06/30/2016	2	5
Stamford WPCF	CT0101087	Stamford Harbor	07/31/2016	4	11
Stamford WPCF	CT0101087	Stamford Harbor	08/31/2016	2	4
Stamford WPCF	CT0101087	Stamford Harbor	09/30/2016	3	25
Stamford WPCF	CT0101087	Stamford Harbor	10/31/2016	3	9
Stamford WPCF	CT0101087	Stamford Harbor	11/30/2016	2	4
Stamford WPCF	CT0101087	Stamford Harbor	12/31/2016	3	5

Permittee	Permit Number	Receiving Water	Date	30-Day Geometric Mean	Maximum
Stamford WPCF	CT0101087	Stamford Harbor	01/31/2017	5	11
Stamford WPCF	CT0101087	Stamford Harbor	02/28/2017	4	14
Stamford WPCF	CT0101087	Stamford Harbor	03/31/2017	6	16
Stamford WPCF	CT0101087	Stamford Harbor	04/30/2017	4	11
Stamford WPCF	CT0101087	Stamford Harbor	05/31/2017	4	12
Stamford WPCF	CT0101087	Stamford Harbor	06/30/2017	3	9
Stamford WPCF	CT0101087	Stamford Harbor	07/31/2017	1	3
Stamford WPCF	CT0101087	Stamford Harbor	08/31/2017	1	2
30-Day Geometric Mean Permit Limit = 35 colonies/100 mL					
Maximum Daily Permit Limit = 500 colonies/100 mL					

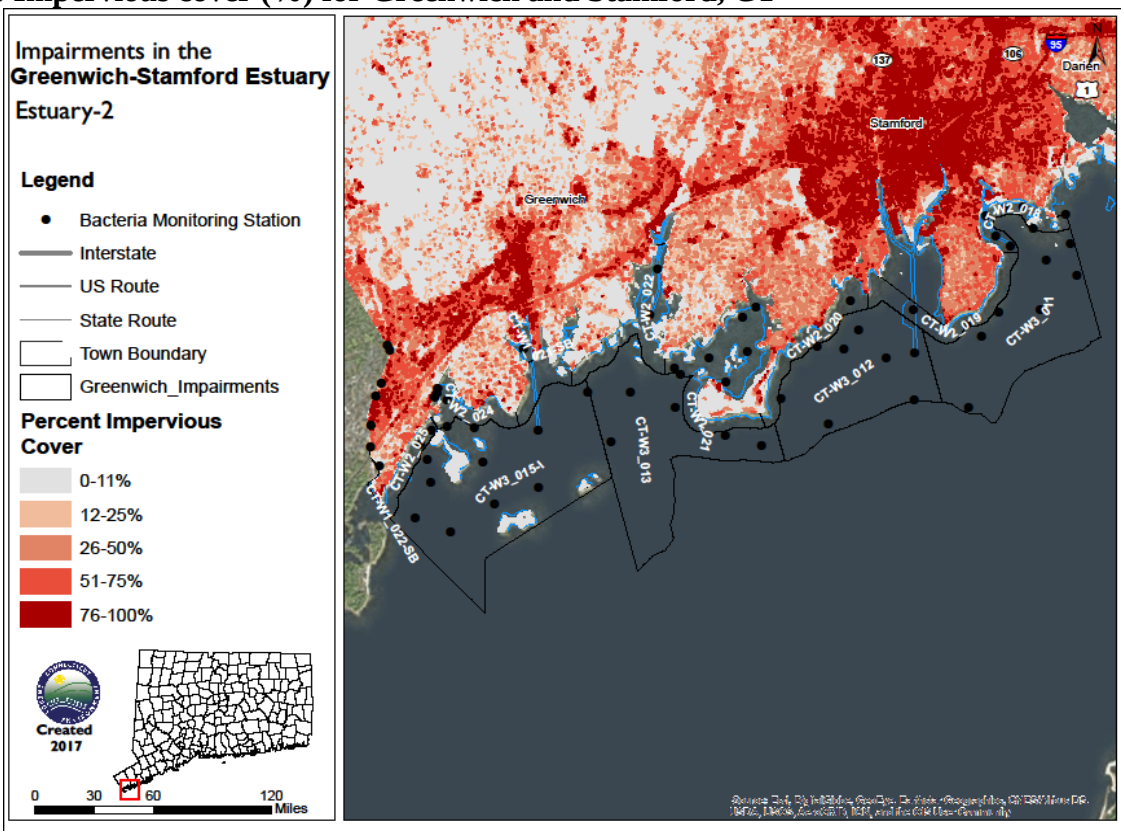
Non-point Sources

Non-point source (NPS) pollution comes from many diffuse sources and is more difficult to identify and control. NPS pollution is often associated with certain land-use practices. Examples of NPS that can contribute bacteria to surface waters include stormwater runoff, illicit discharges, insufficient septic systems, pet and wildlife waste, agriculture, and contact recreation (swimming or wading). With the waters of the Greenwich-Stamford Estuary being tidally influenced, many bacterial sources downstream of impaired segments may be also affecting water quality in upstream segments. Potential sources of NPS to the impaired segments in the Greenwich-Stamford Estuary are described below.

Stormwater Runoff from Developed Areas

The Town of Greenwich and the City of Stamford are heavily developed. Developed areas are often characterized by impervious surfaces, or surface areas such as roofs and roads that force water to run off land surfaces rather than infiltrate soil. Studies have shown a link between the amount of impervious area in a watershed and water quality conditions (CWP, 2003). In one study, researchers correlated the amount of fecal coliform to the percentage of land with impervious cover in a watershed (Mallin *et al.*, 2000). While all levels of IC can contribute stormwater to streams, it is important to note that land with greater than 12% IC is likely to be contributing enough stormwater to streams to have a negative impact on water quality (CWP, 2003). Towns should aim to make stormwater improvements in areas with IC greater than 12% in an effort to reduce the amount of stormwater pollution reaching surface waters which will protect and improve water quality. For more information please refer to the town factsheets on our web site, scroll down to access the map or pulldown list (www.ct.gov/deep/cwp/view.asp?A=2719&Q=567336). According to the 2008 Greenwich and Stamford Estuary Reports, commercial and residential land use has increased total impervious cover along coastal regions of Greenwich and Stamford, which has increased stormwater runoff to the estuary. Much of the coastal land bordering the Greenwich-Stamford Estuary in Stamford and Greenwich has >26% impervious cover (Figure 6).

Figure 6: Impervious cover (%) for Greenwich and Stamford, CT



Illicit Discharges and Insufficient Septic Systems

As shown in Figure 4, the majority of Greenwich and Stamford relies on a municipal sanitary sewer system. Sewer system leaks and other illicit discharges can contribute bacteria to nearby surface waters. Although there are no Combined Sewer Overflows (CSO) in the Town of Greenwich, sewer manholes in certain areas have been known to surcharge after heavy rain events (Greenwich, 2008).

A portion of the watershed, particularly near Segments 1 and 5 - 8, also relies on onsite wastewater treatment systems, such as septic systems. The Greenwich Estuary Report (2008) stated that the Town of Greenwich is mostly sewered, except Belle Haven, Smith Cove, Indian Harbor, southern Cos Cob Harbor, and northwest Greenwich Cove. Seventeen sewage pumping stations with no overflow discharge capabilities were also identified, three of which are near Approved shellfish growing areas (Greenwich, 2008). There were four collection system bypasses recorded in 2008, two of which resulted in the closure of growing waters from a 28 million gallon discharge of raw sewage to Cos Cob Harbor (Greenwich, 2008). Properly managed septic systems and leach fields have the ability to effectively remove bacteria from waste. If systems are not maintained, waste will not be adequately treated and may result in bacteria reaching nearby surface and ground water. In Connecticut, local health directors or health districts are responsible for investigating and issuing orders to abate insufficient or failing septic systems within their jurisdiction. The Town of Greenwich has a full-time health director (www.greenwichct.org/HealthDept/HealthDept.asp). The City of Stamford also has a full-time health director (www.cityofstamford.org/content/25/52/140/214/364/default.aspx).

Wildlife and Domestic Animal Waste

Wildlife and domestic animals within the municipalities of Greenwich and Stamford, including those present in the estuary, represent another potential source of bacteria to the impaired waterbodies. Elevated bacteria levels that are due solely to a natural population of wildlife are not subject to the WQS. However, any exacerbation of wildlife population sizes or residency times influenced by human activities is subject to the CT WQS and TMDL provisions. Multiple locations of concentrated migratory waterfowl have been identified throughout the Greenwich-Stamford Estuary, including within Segments 3 (CT-W2_019), 5 (CT-W2_021), 7 (CT-W2_024), 8 (CT-W2_025), and 12 (CT-W3_015-I) along the shoreline (Figure 4). The Stamford Estuary Report (2008) noted large flocks of geese in Holly Pond, which discharges to Prohibited growing waters, and seals along Smith Reef in Approved growing waters. With the construction of roads and drainage systems, wastes from these waterfowl may no longer be retained on the landscape, but instead may be conveyed via stormwater to the nearest surface waterbody. As such, physical land alterations can exacerbate the impact of these natural sources on water quality (USEPA, 2001).

Innis Arden Golf Club is located in the City of Stamford near Segment 4 (CT-W2_020). Geese and other waterfowl are known to congregate in open areas, including recreational fields, agricultural crop fields, and golf courses. In addition to creating a nuisance, large numbers of geese can create unsanitary conditions on the grassed areas and cause water quality problems due to bacterial contamination associated with their droppings. Large populations of geese can also lead to habitat destruction as a result of overgrazing on wetland and riparian plants.

As indicated previously, portions of Greenwich and Stamford near the estuary are heavily developed with commercial and residential properties. As such, waste from domestic animals, such as dogs, may also be contributing to bacteria concentrations in these impaired segments of the Greenwich-Stamford Estuary.

Marinas

As noted previously, multiple marinas are located within the Greenwich-Stamford Estuary (Figure 4 and Table 5). Marinas are located at the water's edge, and if no measures are taken to reduce pollutants, including buffering, pollutants can be transported via runoff from parking lots and hull maintenance areas directly into the marina basin. Common pollutants from marinas include bacteria and nutrients from stormwater runoff, solid and liquid materials used in boat maintenance and cleaning, fuel and oil, sewage from public restrooms and boat pump-outs, fish waste, and turbidity from boating activities. The CT DEEP has information on regional pump-out boats and facilities at its website, www.ct.gov/deep/pumpoutdirectory. There are several boats operating specifically in the Greenwich-Stamford region. The service is free and eliminates the possibility of vessels dumping raw wastes into Long Island Sound, which is prohibited by CT Water Quality Standards Number 24, "the discharge of sewage from any vessel to any water is prohibited."

All Connecticut coastal waters are designated "No Discharge Areas" (NDAs) prohibiting the discharge of sewage, treated or untreated. Eliminating the release of all sewage from boats, will result in further reductions of human fecal waste discharge and, therefore, reductions in nutrient loading and potential human exposure to bacterial and viral pathogens in swimming areas, shellfish beds and other environmentally sensitive aquatic habitats. For more information please see our web site www.ct.gov/deep/cwp/view.asp?a=2705&q=399328&deepNav_GID=1620.

Recreation

People coming in direct contact with surface water presents another potential source of bacterial contamination. Microbial source tracking (MST) surveys conducted in New Hampshire have shown humans to be a source of bacterial contamination at beaches (Jones, 2008). Since there is a designated beach within Segment 7 (CT-W2_024) in Byram Harbor, it is probable that some bacterial contamination can be attributed to human activities at Byram Park beach.

Additional Sources

As shown in Figure 4, there is one landfill located inland in Greenwich, CT, and five landfills located in Stamford, CT, four of which are near the shoreline. A sewage treatment plant is located at the shore of West Branch Greenwich Harbor (Segment CT-W1_021-SB), and discharges into a Prohibited shellfish growing area. In addition, two water permits through the National Pollutant Discharge Elimination System (NPDES) program, which regulates the type and nature of discharges to waterbodies, were identified in Greenwich and one in Stamford. The individual NPDES permit issued to Stamford is required by EPA's Phase I regulations as the City has a municipal sewer system and a population greater than 100,000.

There may be other sources not listed here or identified in Figure 4 that contribute to the observed water quality impairments in the Greenwich-Stamford Estuary. Further monitoring and investigation will confirm the listed sources and discover additional ones. More detailed evaluation of potential sources is expected to become available as activities are conducted to implement this TMDL.

CURRENT MANAGEMENT ACTIVITIES

The Town of Greenwich and the City of Stamford have developed and implemented programs to protect water quality from bacterial contamination. In addition, the National Shellfish Sanitation Program (NSSP) has multiple requirements for the protection and evaluation of shellfish growing areas. More information about this program is provided below and available online: www.fda.gov/food/guidanceregulation/federalstatefoodprograms/ucm2006754.htm

The NSSP requires the completion of a sanitary survey to determine acceptable and unacceptable growing areas, and to accurately classify a growing area as Approved, Conditionally Approved, Restricted, Conditionally Restricted, or Prohibited. A sanitary survey is an in-depth evaluation of all environmental factors impacting water quality in a shellfish growing area. Environmental factors include both actual and potential pollutant sources, whether natural or man-made, along with meteorological and hydrographic characteristics of the growing area. The principal components of a sanitary survey are: (1) identification and evaluation of pollutant sources, (2) evaluation of meteorological factors, (3) evaluation of hydrographic factors affecting the distribution of pollutants, and (4) assessment of water quality.

The sanitary survey includes data and results from the following:

1. Shoreline survey;
2. Survey of the bacteriological quality of the water;
3. Evaluation of meteorological, hydrodynamic, and geographic characteristics of the growing area;
4. Analysis of shoreline survey, bacteriological water quality, and meteorological, hydrodynamic, and geographic characteristics; and
5. Determination of the appropriate growing area classification

Maintaining updated sanitary survey records consists primarily of routinely evaluating major pollutant sources, collecting water quality data from sampling stations under the selected NSSP water quality

monitoring strategy, and analyzing the data to ensure that the classification continues to represent current sanitary conditions in the growing area. The entire sanitary survey process must be repeated every 12 years. In the interim, the sanitary quality of each growing area must be reviewed as often as necessary to ensure appropriate classification. Certain sanitary survey components are required by the Model Ordinance to be updated annually and triennially.

The growing area classification and supporting data from the sanitary survey shall be reviewed at least every three years. As required by the NSSP, this triennial re-evaluation shall include:

1. A review of water quality sampling results;
2. Documentation of any new pollutant sources and evaluation of their impact on the growing area;
3. Re-evaluation of all pollutant sources, including sources previously identified in the sanitary survey, as necessary to fully evaluate any changes in the sanitary conditions of the growing area. Re-evaluation may or may not include a site visit;
4. A comprehensive report analyzing the sanitary survey data and determining whether the existing growing area classification is accurate or requires revision; and
5. Reclassification of the growing area if re-evaluation determines that conditions for classification have changed based on data collected during the triennial review

NSSP also requires that the sanitary survey be updated annually to reflect changes in conditions in the growing area. The annual re-evaluation shall include:

1. Field observation of pollutant sources during drive-through surveys, sample collections, or other information sources;
2. Addition and review of current year's water quality sampling results to a database collected in accordance with the bacteriological standards and sample collection required;
3. Review of available inspection reports and effluent samples collected from pollutant sources;
4. Review of available performance standards for various types of discharges impacting the growing area; and
5. A brief report documenting annual re-evaluation findings.

The most recent annual re-evaluation for the Shellfish Growing Waters in the Town of Greenwich was published in 2008 (Greenwich, 2008). According to this report, Stations 057-8.3 and 057-11.0 are currently in Restricted growing areas, but may be upgraded to Conditionally Approved. All other stations in the Town of Greenwich are properly classified based on pollution source re-evaluation and fecal coliform data.

The most recent triennial re-evaluation for the Shellfish Growing Waters in the City of Stamford was published in 2008 (Stamford, 2008). According to this report, several growing areas were candidates for re-classification and changes became effective on 9/2/2010. The following classification changes were based on marina dilution calculations where harbor buffers were not adequate to achieve dilution for the number of slips in the marina: the outer portion of Stamford Harbor was reclassified as Conditionally Restricted; a portion of Westcott Cove was reclassified as Conditionally Restricted; and a portion of Cove Harbor was reclassified as Prohibited. Dolphin Cove was also changed from Restricted to Prohibited due to the impact from nearby marinas. In 2006, Station 135-4.0 was changed from Conditionally Approved to Approved, and Station 135-9.0 was changed from Prohibited to Conditionally Approved. Station 135-2.0 did not meet NSSP criteria due to stormwater pollution from Westcott Cove and Stamford Harbor, the section was closed, and new stations will be added to establish a new classification line. The report also notes remediation efforts initiated by the City of Stamford. In 2006, the Stamford WPCF underwent a $105 million upgrade to its facilities, and the city plans to expand its sewer system (Stamford, 2008).

Other efforts have been taken by Greenwich and Stamford to reduce bacteria to its surface waters. As indicated previously, Greenwich and Stamford are regulated under the MS4 program. The MS4 General Permit is required for any municipality with urbanized areas that initiates, creates, originates or maintains any discharge of stormwater from a storm sewer system to waters of the State. The MS4 permit requires towns to design a Stormwater Management Plan (SMP) that reduces the discharge of stormwater pollutants to improve water quality. The plan must address the following six minimum measures:

1. Public Education and Outreach.
2. Public Involvement/Participation.
3. Illicit discharge detection and elimination.
4. Construction site stormwater runoff control.
5. Post-construction stormwater management in the new development and redevelopment.
6. Pollution prevention/good housekeeping for municipal operations.

Each municipality is also required to submit an annual update outlining steps taken to meet the six minimum measures. The most recent updates that address stormwater contamination in the watershed are summarized in Tables 9 and 10.

Table 9: Summary of MS4 requirement updates from Greenwich, CT (Permit # GSM000084)

Minimum Measure	Greenwich Annual Report (2016)
Public Outreach and Education	• Town website has links to all types of environmental issues Website will also obtain the annual reports from previous years • 16 public meetings for applications reviews and included public hearings and an invitation for the public to comment on applications which did not receive hearings
Public Involvement and Participation	• Leaf composting program- geared towards leaf recycling has been expanded to target the entire spectrum of organic waste produced by schools and property owners • Harbor watch – water quality monitoring-establishing monitoring in the future • Annual Earth Day Celebration Month-environmental events all month such as walks, talks, and workshops • "Experience the Sound"- day-long event focusing on fisheries and the resources in LIS • Glenville and Pemberwick Neighborhood Plan- stormwater management practices and floodplain management including tree preservation
Illicit Discharge Detection and Elimination	• All outfalls mapped in 2005, will continue to update. • The town continues to monitor for illicit discharge through the routine system maintenance. The Town also continues its internal training program for storm-water management and pollution prevention practices"
Construction Site Stormwater Runoff Control	• Adoption of the new drainage manual. Task of reviewing the "exemption requests" for all applicants are to be reviewed in Planning and Zoning before being issued a permit

Minimum Measure	Greenwich Annual Report (2016)
	• The City will continue to emphasis the required construction Phasing Plans to ensure that proper soil and erosion control measures are used throughout the construction period
Post Construction Stormwater Management	• Engineering staff continues to investigate post-construction complaints any violations are reported to the appropriate agency • Continue to education their staff on the post-construction requirements and guidelines
Pollution Prevention and Good Housekeeping	• DPW uses a Computer Maintenance Management System to allow the collection of detailed maintenance information with a goal to clean catch basins annually. • Continued street sweeping program so all town streets are swept at least twice per year and downtown areas are swept weekly • Minimized use of sand on roads in winter, sand is only used during an emergency situation.

Table 10: Summary of MS4 requirement updates related to the reduction of bacterial contamination from Stamford, CT (Permit # CT0030279)

Minimum Measure	City of Stamford 2015-2016 Annual Report
Public Outreach and Education	1) Town website has information, they have bilingual pamphlets available and a stormwater management flyer was sent to taxpayers with the tax bills 2) Distributes a dog waste management brochure to dog owners with annual license renewal, also installed dog waste bag dispensers 3) English and Spanish catch basin medallions purchased 4) The City provide tours of the sewage treatment plant and has outreach to students in middle school.
Public Involvement and Participation	There are annual town clean-ups, and multiple volunteer organizations do watershed improvements and provide educational programs to students
Illicit Discharge Detection and Elimination	1) Stamford purchased a camera truck in 2014 that is used for inspections. They also use sewage sniffing dogs and smoke tests to identify areas of concern that will receive priority for further investigation 2) The City is currently working with its Legal Department to identify the best course of action to remove illegal connections to its MS4
Construction Site Stormwater Runoff Control	City is currently developing a program, city staff performs site visits at locations near wetlands
Post Construction Stormwater Management	City is currently developing a program

Minimum Measure	City of Stamford 2015-2016 Annual Report
Pollution Prevention and Good Housekeeping	Continued to conduct street sweeping (9,086 miles) and catch basin cleaning (2,048 basins cleaned) and 115 catch basins repaired.

Figure 7: Map showing monitoring locations for the Stamford MS4 Permit (CT0030279) that have the potential to contribute pollutants into this impaired estuary.

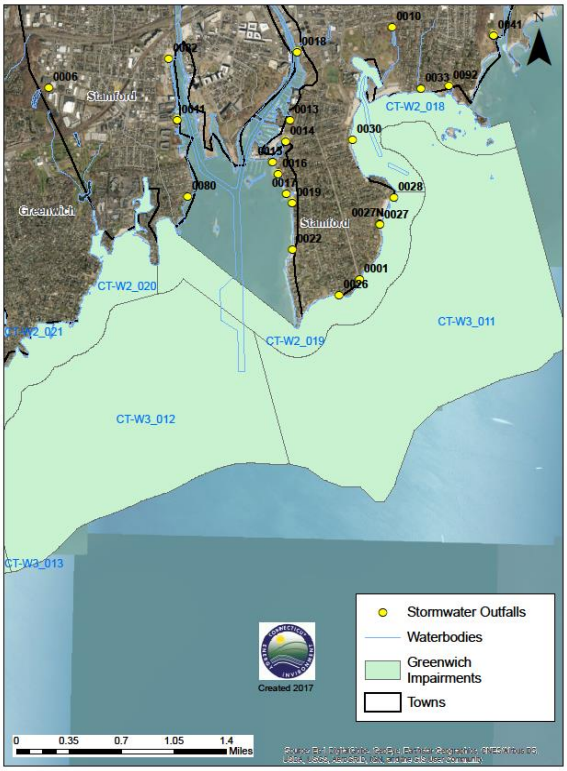


Table 10a: Bacteria data reported by the City of Stamford for the Stamford MS4 Permit (CT0030279) from outfalls within the area of this TMDL that could contribute to the bacterial contamination in the Greenwich-Stamford Estuary. Results are reported as #colonies/100mL. Fecal coliform and *E. coli* results cannot be directly compared to the water quality standard however, elevated levels of bacteria in a single sample would contribute to exceedances of water quality criteria.

DSN	Description	Receiving Stream	Date of sample	Escherichia Coli	Enterococci	Fecal Coliforms
0001	Shippan Avenue- end of street	Long Island Sound	6/1/2015	19,860	>24200	>2000
0014	Mitchell Street- end of street	Stamford Harbor/LIS	6/1/2015	3,870	>24200	>2000
0015	Downs Avenue- behind 135 Downs Ave.	Stamford Harbor/LIS	6/1/2015	840	6,490	>2000
0016	Undeveloped parcel north of 1 Ralsey Rd. South	Stamford Harbor/LIS	6/1/2015	5,170	15,530	>2000
0027	Ocean View Drive-end of street adjacent to beach	Long Island Sound	6/1/2015	1,400	1,530	>2000
0041	Cove Island Park- adjacent to S. end of parking lot	Cove Harbor/LIS	6/1/2015	19,860	>24200	>2000
0006	Sellect Street- behind 328 Sellect (in manhole)	Long Island Sound	6/15/2015	310	70	>2000
0011	Southfield Avenue- behind 112 Southfield Avenue	Stamford Harbor/LIS	6/15/2015	>24200	1,340	>2000
0033	Soundview Drive	Westcitt Cove/LIS	6/15/2015	24,200	>24200	>2000
0010	Cummings Park- adjacent to East Avenue.	Westcott Cove/LIS	12/2/2015	>24,200	>24,200	>2,000
0018	East side of East Branch- adjacent to facilities Mgt.	Stamford Harbor/LIS	12/2/2015	1,220	1,990	1,070
0022	Fairview Avenue-end of street	Stamford Harbor/LIS	12/2/2015	>24,200	>24,200	>2,000
0026	Stamford Avenue- end of street	LIS	12/2/2015	>24200	>24200	>2000
0027N	Ocean View Drive- end of street, north outfall	LIS	12/2/2015	6,870	1,660	>2000
0028	Hobson Street-end of street	LIS	12/2/2015	>24,200	>24,200	>2,000
0013	Harbor Drive- Located in Schooner Cove Condos	Stamford Harbor / LIS	3/31/2017	345	369	440

DSN	Description	Receiving Stream	Date of sample	Escherichia Coli	Enterococci	Fecal Coliforms
0017	Ralsey Road South, north side of Stamford Yacht Club	Stamford Harbor / LIS	3/31/2017	959	1,300	1,110
0019	Ocean Drive West, south side of Stamford Yacht Club	Stamford Harbor / LIS	3/31/2017	862	1,970	1,330
0080	Davenport Drive	Stamford Harbor / Long Island Sound	5/5/2017	11,200	5,170	>2,000
0082	Davenport Street – O & G	Stamford Harbor / Long Island Sound	5/5/2017	12,000	7,270	>2,000
0092	Kenilworth Drive East	Westcott Cove / Long Island Sound	5/5/2017	13,000	6,490	>2,000

RECOMMENDED NEXT STEPS

Greenwich and Stamford have developed and implemented programs to protect water quality from bacterial contamination. Future mitigation activities are necessary to ensure the long-term protection of Segments 1 – 12 in the Greenwich-Stamford Estuary and have been prioritized below.

1) Continue monitoring of permitted sources.

There are well over fifty permitted sources in the Greenwich-Stamford Estuary, some of which have shown historically high bacteria concentrations. Further monitoring will provide information essential to better locate, understand, and reduce pollution sources. If any current monitoring is not done with appropriate bacterial indicator based on the receiving water, then a recommended change during the next permit reissuance is to include the appropriate indicator species. If facility monitoring indicates elevated bacteria, then implementation of permit is required, and any voluntary measures to identify and reduce sources of bacterial contamination at the facility are also recommended. Regular monitoring should be established for all permitted sources to ensure compliance with permit requirements and to determine if current requirements are adequate or if additional measures are necessary for water quality protection.

The General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 permit), effective July 1, 2017 requires some additional control measures for outfalls that discharge into impaired waters with or without a TMDL. In addition, waterbodies that are subject to an approved TMDL should be given priority when investigating illicit discharges. Section 6(k) of the MS4 Permit requires a municipality that discharges stormwater into impaired waters with or without a TMDL to perform monitoring based on the pollutant of concern. The sample shall be analyzed for the pollutants identified as the cause of the impairment. If phosphorus, nitrogen, bacteria or mercury are the stormwater pollutants of concern, control measures and outfall monitoring is required to investigate and target potential sources of these pollutants. Additional BMPs may be required to address areas with sample results showing elevated levels of the pollutant(s) of concern. In the case of bacteria related impairments municipal BMPs could include: implementation or improvement to existing nuisance wildlife programs, septic system monitoring programs, any additional measures that can be added to the required illicit discharge detection and elimination (IDDE) programs, and increased street sweeping above basic permit

requirements. Any non-MS4 municipalities can implement these same types of initiatives in effort to reduce bacteria source loading to impaired waterways. For all other impairments Section 6(i)(1)C requires monitoring for turbidity at the outfall and immediately upstream of the outfall. Implementation of control measures is required if the turbidity at the outfall is 5 or more NTUs greater than the turbidity upstream. The permittee shall implement BMPs as necessary to achieve the Waste Load Allocation, Load Allocation or Water Quality Targets specified within the TMDL. Please see the current MS4 permit for information www.ct.gov/deep/municipalstormwater.

Any facilities regulated by CTDEEP that discharge non-MS4 regulated stormwater should update their Pollution Prevention Plan to reflect BMPs that can reduce bacteria loading to the receiving waterway. These BMPs could include nuisance wildlife control programs and any installations that increase surface infiltration to reduce overall stormwater volumes.

Tables 11 and 12 detail the appropriate bacteria criteria for use as waste load allocations established by this TMDL for use as water quality targets by permittees as permits are renewed and updated, within the Greenwich-Stamford Estuary.

Table 11. Bacteria (Enterococci) TMDLs, WLAs, and LAs for Recreational Uses.

		Instantaneous Enterococcus (#/100mL)				Geometric Mean Enterococcus (#/100mL)	
Class	**Bacteria Source**	**WLA[6]**		**LA[6]**		**WLA[6]**	**LA[6]**
	Recreational Use	**1**	**2**	**1**	**3**	**All**	**All**
SA[5]	Illicit sewer connection	0	0			0	
	Leaking sewer lines	0	0			0	
	Stormwater (MS4s)	104[7]	500[7]			35[7]	
	Stormwater (non-MS4)			104[7]	500[7]		35[7]
	Wildlife direct discharge			104[7]	500[7]		35[7]
	Human or domestic animal direct discharge[3]			104	500		35
		Instantaneous Enterococcus (#/100mL)				**Geometric Mean Enterococcus (#/100mL)**	
Class	**Bacteria Source**	**WLA[6]**		**LA[6]**		**WLA[6]**	**LA[6]**
	Recreational Use	**1**	**2**	**1**	**3**	**All**	**All**
SB[5]	Non-Stormwater NPDES	104	500			35	
	CSOs	104	500			35	
	SSOs	0	0			0	
	OBDs[4]	0	0			0	
	Illicit sewer connection	0	0			0	
	Leaking sewer lines	0	0			0	
	Stormwater (MS4s)	104[7]	500[7]			35[7]	
	Stormwater (non-MS4)			104[7]	500[7]		35[7]
	Wildlife direct discharge			104[7]	500[7]		35[7]
	Human or domestic animal direct discharge[3]			104	500		35

(1) **Designated Swimming.** 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 Protections and the Department of Public Health. May 1989. Revised April 2003 and updated December 2008.

(2) **Non-Designated Swimming.** 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.

(3) **All Other Recreational Uses.**

(4) 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. (Class B surface waters located north of Interstate Highway I-95 and downstream of a sewage treatment plant providing seasonal disinfection May 1 through October 1, as authorized by the Commissioner.)

(5) Human direct discharge = swimmers

(6) Unless otherwise required by statute or regulation, compliance with this TMDL will be based on ambient concentrations and not end-of-pipe bacteria concentrations

(7) Replace numeric value with “natural levels” if only source is naturally occurring wildlife. Natural is defined as the biological, chemical and physical conditions and communities that occur within the environment which are unaffected or minimally affected by human influences (CT DEEP 2011). Sections 2.2.2 and 6.2.7 of this Core Document deal with BMPs and delineating type of wildlife inputs.

Table 12: Bacteria (Fecal Coliform) TMDLs, WLAs, and LAs for Shellfish Harvesting Areas.

		Geometric Mean Fecal coliform (#/100mL)[4]		90% less than Statistical measure Fecal Coliform (#/100mL)[4]	
Class	**Bacteria Source[1]**	**WLA[5]**	**LA[5]**	**WLA[5]**	**LA[5]**
SA Direct Consumption	CSOs	14		31	
	SSOs	0		0	
	OBDs[3]	0		0	
	Illicit sewer connection	0		0	
	Leaking sewer lines	0		0	
	Stormwater (MS4s)	14[6]		31[6]	
	Stormwater (non-MS4)		14[6]		31[6]
	Wildlife direct discharge		14[6]		31[6]
	Human or domestic animal direct discharge[2]		14		31
SB Indirect Consumption	Non-Stormwater NPDES	88		260	
	CSOs	88		260	
	SSOs	0		0	
	OBDs[3]	0		0	
	Illicit sewer connection	0		0	
	Leaking sewer lines	0		0	
	Stormwater (MS4s)	88[6]		260[6]	
	Stormwater (non-MS4)		88[6]		260[6]
	Wildlife direct discharge		88[6]		260[6]
	Human or domestic animal direct discharge[2]		88		260

(1) Criteria are based on utilizing the mTec method as specified in the U.S. Food and Drug Administration National Shellfish Sanitation Program-Model Ordinance (NSSP-MO) document *Guide for the Control of Molluscan Shellfish 2007.*

(2) Human direct discharge = swimmers

(3) All coastal and inland waters in Connecticut are designated as No Discharge Areas for Overboard Discharges (OBDs) from marine vessels with Marine Sanitation Devices.

(4) Adverse Condition Allocations apply to areas affected by Point Sources. Adverse Condition or Random Sampling Allocations apply to areas affected by Nonpoint Sources. Adverse condition is defined as "... a State or situation caused by meteorological, hydrological or seasonal events or point source discharges that has historically resulted in elevated [bacteria] levels in the particular growing area." USFDA 2005

(5) Unless otherwise required by statute or regulation, compliance with this TMDL will be based on ambient concentrations and not end-of-pipe bacteria concentrations

(6) Replace numeric value with "natural levels" if only source is naturally occurring wildlife. Natural is defined as the biological, chemical and physical conditions and communities that occur within the environment which are unaffected or minimally affected by human influences (CT DEEP 2011). Sections 2.2.2 and 6.2.7 of this Core Document deal with BMPs and delineating type of wildlife inputs.

2) Identify areas in Greenwich and Stamford to implement Best Management Practices (BMPs) to control stormwater runoff.

As noted previously, most of Greenwich and Stamford near the Greenwich-Stamford Estuary have 12-16% impervious cover and are urban areas regulated under the MS4 and NPDES permit programs. As such, stormwater runoff is likely contributing bacteria to the Greenwich-Stamford Estuary. To identify areas that are contributing bacteria to the impaired segments, municipalities should conduct wet-weather sampling at stormwater outfalls that discharge directly to the impaired segments in Greenwich-Stamford Estuary. To treat stormwater runoff, the towns should identify areas along the developed sections of the impaired segments to install BMPs designed to encourage stormwater to infiltrate the ground before entering the waterbodies. These BMPs would disconnect impervious areas and reduce pollutant loads to the estuary. More detailed information and BMP recommendations can be found in the core TMDL document.

3) Implement a program to evaluate the sanitary sewer system.

Most of Greenwich and Stamford near the estuary rely on a municipal sewer system (Figure 4). It is important for Greenwich and Stamford to have in place a program to evaluate its sanitary sewer system to reduce leaks and overflows. This program should include periodic inspections of the sewer line.

4) Develop a system to monitor septic systems.

Although the majority of residents near the Greenwich-Stamford Estuary rely on the municipal sanitary sewer system, some rely on septic systems, particularly for segments in Greenwich, CT. If not already in place, Greenwich and Stamford should establish a program to ensure that existing septic systems are properly operated and maintained. For instance, communities can create an inventory of existing septic systems through mandatory inspections. Inspections help encourage proper maintenance and identify failed and sub-standard systems. Policies that govern the eventual replacement of the sub-standard systems within a reasonable timeframe could be adopted. Municipalities can also develop programs to assist citizens with the replacement and repair of older and failing systems.

5) Evaluate municipal education and outreach programs regarding animal waste.

Any education and outreach program should highlight the importance of not feeding waterfowl and wildlife and managing waste from horses, dogs, and other pets. Municipalities and residents can take measures to minimize waterfowl-related impacts by allowing tall, coarse vegetation to grow in riparian areas of impaired segments frequented by waterfowl. Waterfowl, especially grazers like geese, prefer easy access to water. Maintaining an uncut vegetated buffer along the shore will make the habitat less desirable to geese and encourage migration. In addition, any educational program should emphasize that feeding waterfowl, such as ducks, geese, and swans, may contribute to water quality impairments in the Greenwich-Stamford Estuary and can harm human health and the environment. Animal wastes should be disposed of away from any waterbody or storm drain system. BMPs effective at reducing the impact of animal waste on water quality include installing signage, providing pet waste receptacles in high-use areas, enacting ordinances requiring the clean-up of pet waste, and targeting educational and outreach programs in problem areas.

6) Improve education and outreach programs regarding boats and marinas.

Marinas must comply with permit requirements that limit bacteria contribution to the Greenwich-Stamford Estuary. Other programs, such as Connecticut's Clean Marina Program, may be adopted by marinas in the estuary to reduce bacteria contribution from non-point source pollution from marinas (www.ct.gov/deep/cleanmarina). The Clean Marina Program is a voluntary program that encourages inland and coastal marina operators to minimize pollution, and recognizes Connecticut marinas, boatyards, and

yacht clubs that go above and beyond regulatory compliance as "Certified Clean Marinas." While the Clean Marina Program is not currently accepting new pledges or conducting recertifications, educational materials are provided on the CT DEEP website. Marinas are encouraged to review and apply these recommendations at their facility, as appropriate, to minimize pollution from their site. All previously certified marinas receive a weatherproof Clean Marina Flag to fly at their facility and authorization to use the Clean Marina Program logo on company publications. CT DEEP recognized certified Clean Marinas through press releases, on its web page, and at public events. As a companion to the Clean Marina Program, the Clean Boater Program (www.ct.gov/deep/cwp/view.asp?a=2705&q=323526) encourages boaters to use clean boating techniques when operating and maintaining their boats.

BACTERIA DATA AND PERCENT REDUCTIONS TO MEET THE TMDL

Table 13: Segment 1: LIS WB Inner – Byram River Bacteria Data

Waterbody ID: CT-W1_022-SB

Characteristics: Saltwater, Class SB, Commercial Shellfishing Harvesting, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Recreation (*enterococci bacteria)* and Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for enterococci:

Geometric Mean: 35 colonies/100 mL

Single Sample: 500 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **93%**

Single Sample: **75%**

Water Quality Criteria for fecal coliform:

Geometric Mean: 88 colonies/100 mL

90th of samples less than: 260 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **70%**

90th of samples less than: **56%**

Data: 2007 - 2012 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means calculated

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
SBR09	777 West Putnam Avenue	3/12/07	120	wet	98
SBR09	777 West Putnam Avenue	11/19/07	80	dry**	
SBR09	777 West Putnam Avenue	3/17/08	1‡	dry**	17
SBR09	777 West Putnam Avenue	11/24/08	300	dry**	
SBR09	777 West Putnam Avenue	3/24/09	1‡	dry**	6
SBR09	777 West Putnam Avenue	11/24/09	31	wet**	
SBR09	777 West Putnam Avenue	3/9/10	50	dry	7
SBR09	777 West Putnam Avenue	11/30/10	1‡	dry**	
SBR09	777 West Putnam Avenue	3/9/11	220	unknown	175
SBR09	777 West Putnam Avenue	11/16/11	140	unknown	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
SBR10	Port Chester Pump Station	3/12/07	140	wet	99
SBR10	Port Chester Pump Station	11/19/07	70	dry**	
SBR10	Port Chester Pump Station	3/17/08	20	dry**	NA
SBR10	Port Chester Pump Station	3/24/09	10	dry**	18
SBR10	Port Chester Pump Station	11/24/09	31	wet**	
SBR10	Port Chester Pump Station	3/9/10	160	dry	196
SBR10	Port Chester Pump Station	11/30/10	240	dry**	
SBR10	Port Chester Pump Station	3/9/11	1‡	unknown	3
SBR10	Port Chester Pump Station	11/16/11	10	unknown	
SBR11	Cunningham's Auto Body	3/12/07	30	wet	73
SBR11	Cunningham's Auto Body	11/19/07	180	dry**	
SBR11	Cunningham's Auto Body	3/17/08	1‡	dry**	11
SBR11	Cunningham's Auto Body	11/24/08	120	dry**	
SBR11	Cunningham's Auto Body	3/24/09	180	dry**	**510* (93%)**
SBR11	Cunningham's Auto Body	11/24/09	1445	wet**	
SBR11	Cunningham's Auto Body	3/9/10	130	dry	130
SBR11	Cunningham's Auto Body	11/30/10	130	dry**	
SBR11	Cunningham's Auto Body	3/9/11	110	unknown	94
SBR11	Cunningham's Auto Body	11/16/11	80	unknown	
SBR12/BR04	Mill Street Bridge	1/30/07	40	dry**	122
SBR12/BR04	Mill Street Bridge	3/12/07	110	wet	
SBR12/BR04	Mill Street Bridge	4/30/07	80	wet	
SBR12/BR04	Mill Street Bridge	7/9/07	140	dry	
SBR12/BR04	Mill Street Bridge	10/15/07	420	dry**	
SBR12/BR04	Mill Street Bridge	11/19/07	160	dry**	
SBR12/BR04	Mill Street Bridge	1/22/08	40	dry**	132
SBR12/BR04	Mill Street Bridge	3/17/08	40	dry**	
SBR12/BR04	Mill Street Bridge	4/29/08	200	wet**	
SBR12/BR04	Mill Street Bridge	7/22/08	700	wet**	
SBR12/BR04	Mill Street Bridge	10/27/08	180	dry**	
SBR12/BR04	Mill Street Bridge	11/24/08	130	wet**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
SBR12/BR04	Mill Street Bridge	1/27/09	1‡	dry**	46
SBR12/BR04	Mill Street Bridge	3/24/09	1‡	dry**	
SBR12/BR04	Mill Street Bridge	4/20/09	200	wet**	
SBR12/BR04	Mill Street Bridge	7/14/09	100	dry**	
SBR12/BR04	Mill Street Bridge	10/19/09	230	wet**	
SBR12/BR04	Mill Street Bridge	11/24/09	2000	wet**	
SBR12/BR04	Mill Street Bridge	1/27/10	460	dry	256
SBR12/BR04	Mill Street Bridge	3/9/10	160	dry	
SBR12/BR04	Mill Street Bridge	4/19/10	100	dry	
SBR12/BR04	Mill Street Bridge	7/26/10	320	dry**	
SBR12/BR04	Mill Street Bridge	10/27/10	400	wet**	
SBR12/BR04	Mill Street Bridge	11/30/10	300	dry**	
SBR12/BR04	Mill Street Bridge	3/9/11	280	unknown	123
SBR12/BR04	Mill Street Bridge	4/11/11	110	unknown	
SBR12/BR04	Mill Street Bridge	7/25/11	70	unknown	
SBR12/BR04	Mill Street Bridge	10/25/11	60	unknown	
SBR12/BR04	Mill Street Bridge	11/16/11	220	unknown	
SBR12/BR04	Mill Street Bridge	1/3/12	200	unknown	NA
SBR13/BR05	Greenwich Bay Marina	1/30/07	150	dry**	98
SBR13/BR05	Greenwich Bay Marina	3/12/07	10	wet	
SBR13/BR05	Greenwich Bay Marina	4/30/07	80	wet	
SBR13/BR05	Greenwich Bay Marina	7/9/07	180	dry	
SBR13/BR05	Greenwich Bay Marina	10/15/07	420	dry**	
SBR13/BR05	Greenwich Bay Marina	11/19/07	100	dry**	
SBR13/BR05	Greenwich Bay Marina	3/17/08	40	dry**	138
SBR13/BR05	Greenwich Bay Marina	4/29/08	160	wet**	
SBR13/BR05	Greenwich Bay Marina	7/22/08	130	wet**	
SBR13/BR05	Greenwich Bay Marina	10/27/08	260	dry**	
SBR13/BR05	Greenwich Bay Marina	11/24/08	230	wet**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
SBR13/BR05	Greenwich Bay Marina	1/27/09	20	dry**	70
SBR13/BR05	Greenwich Bay Marina	3/24/09	1‡	dry**	
SBR13/BR05	Greenwich Bay Marina	4/20/09	260	wet**	
SBR13/BR05	Greenwich Bay Marina	7/14/09	100	dry**	
SBR13/BR05	Greenwich Bay Marina	10/19/09	480	wet**	
SBR13/BR05	Greenwich Bay Marina	11/24/09	453	wet**	
SBR13/BR05	Greenwich Bay Marina	1/27/10	610	dry	246
SBR13/BR05	Greenwich Bay Marina	3/9/10	120	dry	
SBR13/BR05	Greenwich Bay Marina	4/19/10	200	dry	
SBR13/BR05	Greenwich Bay Marina	7/26/10	390	dry**	
SBR13/BR05	Greenwich Bay Marina	10/27/10	300	wet**	
SBR13/BR05	Greenwich Bay Marina	11/30/10	130	dry**	
SBR13/BR05	Greenwich Bay Marina	3/9/11	230	unknown	117
SBR13/BR05	Greenwich Bay Marina	4/11/11	150	unknown	
SBR13/BR05	Greenwich Bay Marina	7/25/11	50	unknown	
SBR13/BR05	Greenwich Bay Marina	10/25/11	90	unknown	
SBR13/BR05	Greenwich Bay Marina	11/16/11	140	unknown	
SBR13/BR05	Greenwich Bay Marina	1/3/12	200	unknown	NA
SBR14/BR06	Rudy's Boat Yard	1/30/07	100	dry**	172
SBR14/BR06	Rudy's Boat Yard	3/12/07	110	wet	
SBR14/BR06	Rudy's Boat Yard	4/30/07	90	wet	
SBR14/BR06	Rudy's Boat Yard	7/9/07	440	dry	
SBR14/BR06	Rudy's Boat Yard	10/15/07	300	dry**	
SBR14/BR06	Rudy's Boat Yard	11/19/07	200	dry**	
SBR14/BR06	Rudy's Boat Yard	3/17/08	80	dry**	99
SBR14/BR06	Rudy's Boat Yard	4/29/08	320	wet**	
SBR14/BR06	Rudy's Boat Yard	7/22/08	**2040* (75%)**	wet**	
SBR14/BR06	Rudy's Boat Yard	10/27/08	180	dry**	
SBR14/BR06	Rudy's Boat Yard	11/24/08	1‡	wet**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
SBR14/BR06	Rudy's Boat Yard	3/24/09	20	dry**	161
SBR14/BR06	Rudy's Boat Yard	4/20/09	280	wet**	
SBR14/BR06	Rudy's Boat Yard	7/14/09	100	dry**	
SBR14/BR06	Rudy's Boat Yard	10/19/09	260	wet**	
SBR14/BR06	Rudy's Boat Yard	11/24/09	738	wet**	
SBR14/BR06	Rudy's Boat Yard	1/27/10	490	dry	217
SBR14/BR06	Rudy's Boat Yard	3/9/10	60	dry	
SBR14/BR06	Rudy's Boat Yard	4/19/10	120	dry	
SBR14/BR06	Rudy's Boat Yard	7/26/10	420	dry**	
SBR14/BR06	Rudy's Boat Yard	10/27/10	500	wet**	
SBR14/BR06	Rudy's Boat Yard	11/30/10	140	dry**	
SBR14/BR06	Rudy's Boat Yard	3/9/11	420	unknown	172
SBR14/BR06	Rudy's Boat Yard	4/11/11	250	unknown	
SBR14/BR06	Rudy's Boat Yard	7/25/11	50	unknown	
SBR14/BR06	Rudy's Boat Yard	10/25/11	190	unknown	
SBR14/BR06	Rudy's Boat Yard	11/16/11	150	unknown	
SBR14/BR06	Rudy's Boat Yard	1/3/12	150	unknown	N/A
SBR15/BR07	192 Byram Shore Road	1/30/07	30	dry**	152
SBR15/BR07	192 Byram Shore Road	4/30/07	60	wet	
SBR15/BR07	192 Byram Shore Road	7/9/07	80	dry	
SBR15/BR07	192 Byram Shore Road	10/15/07	280	dry**	
SBR15/BR07	192 Byram Shore Road	11/19/07	2000	dry**	
SBR15/BR07	192 Byram Shore Road	3/17/08	40	dry**	74
SBR15/BR07	192 Byram Shore Road	4/29/08	20	wet**	
SBR15/BR07	192 Byram Shore Road	7/22/08	30	wet**	
SBR15/BR07	192 Byram Shore Road	10/27/08	300	dry**	
SBR15/BR07	192 Byram Shore Road	11/24/08	300	wet**	
SBR15/BR07	192 Byram Shore Road	3/24/09	260	dry**	294
SBR15/BR07	192 Byram Shore Road	4/20/09	280	wet**	
SBR15/BR07	192 Byram Shore Road	7/14/09	100	dry**	
SBR15/BR07	192 Byram Shore Road	10/19/09	410	wet**	
SBR15/BR07	192 Byram Shore Road	11/24/09	738	wet**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
SBR15/BR07	192 Byram Shore Road	1/27/10	610	dry	258
SBR15/BR07	192 Byram Shore Road	3/9/10	60	dry	
SBR15/BR07	192 Byram Shore Road	4/19/10	300	dry	
SBR15/BR07	192 Byram Shore Road	7/26/10	290	dry**	
SBR15/BR07	192 Byram Shore Road	10/27/10	400	wet**	
SBR15/BR07	192 Byram Shore Road	11/30/10	230	dry**	
SBR15/BR07	192 Byram Shore Road	3/9/11	160	unknown	150
SBR15/BR07	192 Byram Shore Road	7/25/11	110	unknown	
SBR15/BR07	192 Byram Shore Road	10/25/11	110	unknown	
SBR15/BR07	192 Byram Shore Road	11/16/11	260	unknown	
SBR15/BR07	192 Byram Shore Road	1/3/12	180	unknown	N/A

Shaded cells indicate an exceedance of water quality criteria

‡Zero value replaced with 1 for inclusion in geomean calculation (www.buzzardsbay.org/geomean.htm)

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather geometric mean values for recreation for all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
SBR09	777 West Putnam Avenue	2007-2011	2	6	16	61	10
SBR10	Port Chester Pump Station	2007-2011	2	5	59	66	56
SBR11	Cunningham's Auto Body	2007-2011	2	6	86	208	64
SBR12/BR04	Mill Street Bridge	2007-2012	9	15	117	262	72
SBR13/BR05	Greenwich Bay Marina	2007-2012	9	14	123	159	104
SBR14/BR06	Rudy's Boat Yard	2007-2012	9	13	159	177	148
SBR15/BR07	192 Byram Shore Road	2007-2012	8	13	174	157	186

Shaded cells indicate an exceedance of water quality criteria

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means and reduction goals for samples.

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
SBR09	777 West Putnam Avenue	3/12/07	200	wet	110	NA
SBR09	777 West Putnam Avenue	11/19/07	60	dry**		
SBR09	777 West Putnam Avenue	3/17/08	20	dry**	68	NA
SBR09	777 West Putnam Avenue	11/24/08	230	dry**		
SBR09	777 West Putnam Avenue	3/24/09	120	dry**	139	NA
SBR09	777 West Putnam Avenue	11/24/09	160	wet**		
SBR09	777 West Putnam Avenue	3/9/10	60	dry	8	NA
SBR09	777 West Putnam Avenue	11/30/10	1‡	dry**		
SBR09	777 West Putnam Avenue	3/9/11	220	unknown	199	NA
SBR09	777 West Putnam Avenue	11/16/11	180	unknown		
SBR10	Port Chester Pump Station	3/12/07	150	wet	145	NA
SBR10	Port Chester Pump Station	11/19/07	140	dry**		
SBR10	Port Chester Pump Station	3/17/08	60	dry**	NA	NA
SBR10	Port Chester Pump Station	3/24/09	150	dry**	177	NA
SBR10	Port Chester Pump Station	11/24/09	210	wet**		
SBR10	Port Chester Pump Station	3/9/10	260	dry	250	40
SBR10	Port Chester Pump Station	11/30/10	240	dry**		
SBR10	Port Chester Pump Station	3/9/11	10	unknown	14	NA
SBR10	Port Chester Pump Station	11/16/11	20	unknown		
SBR11	Cunningham's Auto Body	3/12/07	10	wet	20	NA
SBR11	Cunningham's Auto Body	11/19/07	40	dry**		
SBR11	Cunningham's Auto Body	3/17/08	20	dry**	71	NA
SBR11	Cunningham's Auto Body	11/24/08	250	dry**		
SBR11	Cunningham's Auto Body	3/24/09	140	dry**	259	40
SBR11	Cunningham's Auto Body	11/24/09	480	wet**		
SBR11	Cunningham's Auto Body	3/9/10	220	dry	193	NA
SBR11	Cunningham's Auto Body	11/30/10	170	dry**		
SBR11	Cunningham's Auto Body	3/9/11	380	unknown	**289* (70%)**	40
SBR11	Cunningham's Auto Body	11/16/11	220	unknown		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
SBR12/BR04	Mill Street Bridge	1/30/07	90	dry**	81	7
SBR12/BR04	Mill Street Bridge	3/12/07	200	wet		
SBR12/BR04	Mill Street Bridge	4/30/07	250	wet		
SBR12/BR04	Mill Street Bridge	7/9/07	1‡	dry		
SBR12/BR04	Mill Street Bridge	10/15/07	250	dry**		
SBR12/BR04	Mill Street Bridge	11/19/07	260	dry**		
SBR12/BR04	Mill Street Bridge	1/22/08	240	dry**	165	7
SBR12/BR04	Mill Street Bridge	3/17/08	40	dry**		
SBR12/BR04	Mill Street Bridge	4/29/08	200	wet**		
SBR12/BR04	Mill Street Bridge	7/22/08	210	wet**		
SBR12/BR04	Mill Street Bridge	10/27/08	180	dry**		
SBR12/BR04	Mill Street Bridge	11/24/08	280	wet**		
SBR12/BR04	Mill Street Bridge	1/27/09	10	dry**	85	40
SBR12/BR04	Mill Street Bridge	3/24/09	1‡	dry**		
SBR12/BR04	Mill Street Bridge	4/20/09	370	wet**		
SBR12/BR04	Mill Street Bridge	7/14/09	1800	dry**		
SBR12/BR04	Mill Street Bridge	10/19/09	120	wet**		
SBR12/BR04	Mill Street Bridge	11/24/09	480	wet**		
SBR12/BR04	Mill Street Bridge	1/27/10	1‡	dry	109	40
SBR12/BR04	Mill Street Bridge	3/9/10	480	dry		
SBR12/BR04	Mill Street Bridge	4/19/10	40	dry		
SBR12/BR04	Mill Street Bridge	7/26/10	110	dry**		
SBR12/BR04	Mill Street Bridge	10/27/10	3000	wet**		
SBR12/BR04	Mill Street Bridge	11/30/10	260	dry**		
SBR12/BR04	Mill Street Bridge	3/9/11	300	unknown	197	30
SBR12/BR04	Mill Street Bridge	4/11/11	100	unknown		
SBR12/BR04	Mill Street Bridge	7/25/11	210	unknown		
SBR12/BR04	Mill Street Bridge	10/25/11	90	unknown		
SBR12/BR04	Mill Street Bridge	11/16/11	520	unknown		
SBR12/BR04	Mill Street Bridge	1/3/12	90	unknown	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
SBR13/BR05	Greenwich Bay Marina	1/30/07	80	dry**	184	40
SBR13/BR05	Greenwich Bay Marina	3/12/07	350	wet		
SBR13/BR05	Greenwich Bay Marina	4/30/07	60	wet		
SBR13/BR05	Greenwich Bay Marina	7/9/07	390	dry		
SBR13/BR05	Greenwich Bay Marina	10/15/07	300	dry**		
SBR13/BR05	Greenwich Bay Marina	11/19/07	200	dry**		
SBR13/BR05	Greenwich Bay Marina	3/17/08	10	dry**	119	10
SBR13/BR05	Greenwich Bay Marina	4/29/08	160	wet**		
SBR13/BR05	Greenwich Bay Marina	7/22/08	200	wet**		
SBR13/BR05	Greenwich Bay Marina	10/27/08	200	dry**		
SBR13/BR05	Greenwich Bay Marina	11/24/08	380	wet**		
SBR13/BR05	Greenwich Bay Marina	1/27/09	500	dry**	125	**56**
SBR13/BR05	Greenwich Bay Marina	3/24/09	1‡	dry**		
SBR13/BR05	Greenwich Bay Marina	4/20/09	380	wet**		
SBR13/BR05	Greenwich Bay Marina	7/14/09	1300	dry**		
SBR13/BR05	Greenwich Bay Marina	10/19/09	60	wet**		
SBR13/BR05	Greenwich Bay Marina	11/24/09	260	wet**		
SBR13/BR05	Greenwich Bay Marina	1/27/10	540	dry	376	**56**
SBR13/BR05	Greenwich Bay Marina	3/9/10	140	dry		
SBR13/BR05	Greenwich Bay Marina	4/19/10	500	dry		
SBR13/BR05	Greenwich Bay Marina	7/26/10	60	dry**		
SBR13/BR05	Greenwich Bay Marina	10/27/10	2000	wet**		
SBR13/BR05	Greenwich Bay Marina	11/30/10	620	dry**		
SBR13/BR05	Greenwich Bay Marina	3/9/11	140	unknown	71	10
SBR13/BR05	Greenwich Bay Marina	4/11/11	130	unknown		
SBR13/BR05	Greenwich Bay Marina	7/25/11	1‡	unknown		
SBR13/BR05	Greenwich Bay Marina	10/25/11	170	unknown		
SBR13/BR05	Greenwich Bay Marina	11/16/11	580	unknown		
SBR13/BR05	Greenwich Bay Marina	1/3/12	20	unknown	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
SBR14/BR06	Rudy's Boat Yard	1/30/07	70	dry**	131	7
SBR14/BR06	Rudy's Boat Yard	3/12/07	150	wet		
SBR14/BR06	Rudy's Boat Yard	4/30/07	140	wet		
SBR14/BR06	Rudy's Boat Yard	7/9/07	40	dry		
SBR14/BR06	Rudy's Boat Yard	10/15/07	280	dry**		
SBR14/BR06	Rudy's Boat Yard	11/19/07	310	dry**		
SBR14/BR06	Rudy's Boat Yard	3/17/08	40	dry**	56	30
SBR14/BR06	Rudy's Boat Yard	4/29/08	260	wet**		
SBR14/BR06	Rudy's Boat Yard	7/22/08	210	wet**		
SBR14/BR06	Rudy's Boat Yard	10/27/08	260	dry**		
SBR14/BR06	Rudy's Boat Yard	11/24/08	1‡	wet**		
SBR14/BR06	Rudy's Boat Yard	3/24/09	1‡	dry**	96	30
SBR14/BR06	Rudy's Boat Yard	4/20/09	240	wet**		
SBR14/BR06	Rudy's Boat Yard	7/14/09	1600	dry**		
SBR14/BR06	Rudy's Boat Yard	10/19/09	60	wet**		
SBR14/BR06	Rudy's Boat Yard	11/24/09	360	wet**		
SBR14/BR06	Rudy's Boat Yard	1/27/10	650	dry	185	**56**
SBR14/BR06	Rudy's Boat Yard	3/9/10	180	dry		
SBR14/BR06	Rudy's Boat Yard	4/19/10	360	dry		
SBR14/BR06	Rudy's Boat Yard	7/26/10	1‡	dry**		
SBR14/BR06	Rudy's Boat Yard	10/27/10	2000	wet**		
SBR14/BR06	Rudy's Boat Yard	11/30/10	480	dry**		
SBR14/BR06	Rudy's Boat Yard	3/9/11	340	unknown	104	50
SBR14/BR06	Rudy's Boat Yard	4/11/11	120	unknown		
SBR14/BR06	Rudy's Boat Yard	7/25/11	1‡	unknown		
SBR14/BR06	Rudy's Boat Yard	10/25/11	800	unknown		
SBR14/BR06	Rudy's Boat Yard	11/16/11	380	unknown		
SBR14/BR06	Rudy's Boat Yard	1/3/12	120	unknown	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
SBR15/BR07	192 Byram Shore Road	1/30/07	220	dry**	76	30
SBR15/BR07	192 Byram Shore Road	4/30/07	100	wet		
SBR15/BR07	192 Byram Shore Road	7/9/07	1‡	dry		
SBR15/BR07	192 Byram Shore Road	10/15/07	340	dry**		
SBR15/BR07	192 Byram Shore Road	11/19/07	340	dry**		
SBR15/BR07	192 Byram Shore Road	3/17/08	40	dry**	195	30
SBR15/BR07	192 Byram Shore Road	4/29/08	180	wet**		
SBR15/BR07	192 Byram Shore Road	7/22/08	430	wet**		
SBR15/BR07	192 Byram Shore Road	10/27/08	240	dry**		
SBR15/BR07	192 Byram Shore Road	11/24/08	380	wet**		
SBR15/BR07	192 Byram Shore Road	3/24/09	1‡	dry**	103	50
SBR15/BR07	192 Byram Shore Road	4/20/09	380	wet**		
SBR15/BR07	192 Byram Shore Road	7/14/09	800	dry**		
SBR15/BR07	192 Byram Shore Road	10/19/09	100	wet**		
SBR15/BR07	192 Byram Shore Road	11/24/09	380	wet**		
SBR15/BR07	192 Byram Shore Road	1/27/10	490	dry	181	7
SBR15/BR07	192 Byram Shore Road	3/9/10	120	dry		
SBR15/BR07	192 Byram Shore Road	4/19/10	240	dry		
SBR15/BR07	192 Byram Shore Road	7/26/10	210	dry**		
SBR15/BR07	192 Byram Shore Road	10/27/10	150	wet**		
SBR15/BR07	192 Byram Shore Road	11/30/10	80	dry**		
SBR15/BR07	192 Byram Shore Road	3/9/11	120	unknown	67	40
SBR15/BR07	192 Byram Shore Road	7/25/11	1‡	unknown		
SBR15/BR07	192 Byram Shore Road	10/25/11	410	unknown		
SBR15/BR07	192 Byram Shore Road	11/16/11	420	unknown		
SBR15/BR07	192 Byram Shore Road	1/3/12	50	unknown	N/A	N/A

Shaded cells indicate an exceedance of water quality criteria

‡Zero value replaced with 1 for inclusion in geomean calculation (www.buzzardsbay.org/geomean.htm)

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather geometric mean values for shellfish harvesting for all monitoring stations on Segment 1: LIS WB Inner – Byram River (CT-W1_022-SB)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
SBR09	777 West Putnam Avenue	2007-2011	6	17	90	130	79
SBR10	Port Chester Pump Station	2007-2011	2	5	158	178	151
SBR11	Cunningham's Auto Body	2007-2011	2	6	92	69	101
SBR12/BR04	Mill Street Bridge	2007-2012	9	15	106	322	54
SBR13/BR05	Greenwich Bay Marina	2007-2012	9	14	183	244	152
SBR14/BR06	Rudy's Boat Yard	2007-2012	9	13	111	132	99
SBR15/BR07	192 Byram Shore Road	2007-2012	8	13	131	224	94
Shaded cells indicate an exceedance of water quality criteria							

Table 14: Segment 2: LIS WB Shore – Westcott Cove Bacteria Data

Waterbody ID: CT-W2_018

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **40%**

Data: 2000 – 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-04.0	Westcott Cove C"3"	2/3/00	11	dry	4	10
135-04.0	Westcott Cove C"3"	2/23/00	2	dry		
135-04.0	Westcott Cove C"3"	5/30/01	2	dry	5	10
135-04.0	Westcott Cove C"3"	6/20/01	51	wet		
135-04.0	Westcott Cove C"3"	6/26/01	2	dry		
135-04.0	Westcott Cove C"3"	6/26/01	2	dry		
135-04.0	Westcott Cove C"3"	10/4/01	8	dry		
135-04.0	Westcott Cove C"3"	1/10/02	11	dry	4	NA
135-04.0	Westcott Cove C"3"	1/23/02	2	wet		
135-04.0	Westcott Cove C"3"	8/18/03	2	wet	NA	NA
135-04.0	Westcott Cove C"3"	3/2/04	4	wet	2	NA
135-04.0	Westcott Cove C"3"	9/13/04	2	wet		
135-04.0	Westcott Cove C"3"	8/16/05	53	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-04.0	Westcott Cove C"3"	2/23/06	2	wet	2	NA
135-04.0	Westcott Cove C"3"	7/17/06	2	dry		
135-04.0	Westcott Cove C"3"	7/26/06	1	dry		
135-04.0	Westcott Cove C"3"	10/11/06	19	wet		
135-04.0	Westcott Cove C"3"	10/16/06	1	dry		
135-04.0	Westcott Cove C"3"	1/3/07	3	wet	1	NA
135-04.0	Westcott Cove C"3"	5/1/07	1	wet		
135-04.0	Westcott Cove C"3"	6/7/07	1	wet		
135-04.0	Westcott Cove C"3"	9/12/07	1	wet		
135-04.0	Westcott Cove C"3"	10/22/07	1	wet		
135-04.0	Westcott Cove C"3"	10/31/07	2	dry		
135-04.0	Westcott Cove C"3"	5/27/08	2	wet	2	4
135-04.0	Westcott Cove C"3"	5/29/08	1	wet		
135-04.0	Westcott Cove C"3"	7/28/08	3	dry		
135-04.0	Westcott Cove C"3"	9/10/08	38	wet		
135-04.0	Westcott Cove C"3"	12/16/08	2	wet		
135-04.0	Westcott Cove C"3"	12/26/08	1	wet		
135-04.0	Westcott Cove C"3"	12/29/08	1	dry		
135-04.0	Westcott Cove C"3"	4/22/09	5	wet	4	NA
135-04.0	Westcott Cove C"3"	6/10/09	27	wet		
135-04.0	Westcott Cove C"3"	6/24/09	27	dry		
135-04.0	Westcott Cove C"3"	7/22/09	1	wet		
135-04.0	Westcott Cove C"3"	7/28/09	8	dry		
135-04.0	Westcott Cove C"3"	8/4/09	1	dry		
135-04.0	Westcott Cove C"3"	8/25/09	11	wet		
135-04.0	Westcott Cove C"3"	10/20/09	1	wet		
135-04.0	Westcott Cove C"3"	12/15/09	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-04.0	Westcott Cove C"3"	1/27/10	2	wet	2	N/A
135-04.0	Westcott Cove C"3"	3/18/10	2	wet		
135-04.0	Westcott Cove C"3"	3/25/10	1	wet		
135-04.0	Westcott Cove C"3"	5/5/10	2	wet		
135-04.0	Westcott Cove C"3"	5/20/10	2	wet		
135-04.0	Westcott Cove C"3"	6/23/10	6	wet		
135-04.0	Westcott Cove C"3"	4/26/11	1	dry	2	N/A
135-04.0	Westcott Cove C"3"	5/22/11	2	wet		
135-04.0	Westcott Cove C"3"	6/9/11	3	wet		
135-04.1	Westcott Cove C"9"/N"10"	2/3/00	2	dry	2	N/A
135-04.1	Westcott Cove C"9"/N"10"	2/23/00	2	dry		
135-04.1	Westcott Cove C"9"/N"10"	4/24/00	2	wet		
135-04.1	Westcott Cove C"9"/N"10"	5/30/01	8	dry	9	7
135-04.1	Westcott Cove C"9"/N"10"	6/20/01	14	wet		
135-04.1	Westcott Cove C"9"/N"10"	6/26/01	8	dry		
135-04.1	Westcott Cove C"9"/N"10"	6/26/01	2	dry		
135-04.1	Westcott Cove C"9"/N"10"	9/24/01	51	wet		
135-04.1	Westcott Cove C"9"/N"10"	10/4/01	8	dry		
135-04.1	Westcott Cove C"9"/N"10"	1/10/02	2	dry	4	NA
135-04.1	Westcott Cove C"9"/N"10"	1/23/02	2	wet		
135-04.1	Westcott Cove C"9"/N"10"	6/11/02	18	wet		
135-04.1	Westcott Cove C"9"/N"10"	8/18/03	51	wet	9	40
135-04.1	Westcott Cove C"9"/N"10"	10/1/03	2	dry		
135-04.1	Westcott Cove C"9"/N"10"	3/2/04	6	wet	6	15
135-04.1	Westcott Cove C"9"/N"10"	6/21/04	4	dry		
135-04.1	Westcott Cove C"9"/N"10"	7/7/04	50	dry		
135-04.1	Westcott Cove C"9"/N"10"	9/13/04	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet /Dry	Geo Mean	Reduction of Exceeding Samples
135-04.1	Westcott Cove C"9"/N"10"	2/23/06	4	wet	6	7
135-04.1	Westcott Cove C"9"/N"10"	7/17/06	29	dry		
135-04.1	Westcott Cove C"9"/N"10"	7/26/06	3	dry		
135-04.1	Westcott Cove C"9"/N"10"	10/11/06	39	wet		
135-04.1	Westcott Cove C"9"/N"10"	10/16/06	1	dry		
135-04.1	Westcott Cove C"9"/N"10"	11/1/06	3	dry		
135-04.1	Westcott Cove C"9"/N"10"	1/3/07	2	wet	6	NA
135-04.1	Westcott Cove C"9"/N"10"	10/31/07	17	dry		
135-04.1	Westcott Cove C"9"/N"10"	5/27/08	5	wet	9	7
135-04.1	Westcott Cove C"9"/N"10"	5/29/08	16	wet		
135-04.1	Westcott Cove C"9"/N"10"	7/28/08	51	dry		
135-04.1	Westcott Cove C"9"/N"10"	12/16/08	6	wet		
135-04.1	Westcott Cove C"9"/N"10"	12/26/08	6	wet		
135-04.1	Westcott Cove C"9"/N"10"	12/29/08	4	dry		
135-04.1	Westcott Cove C"9"/N"10"	4/22/09	8	wet	10	1
135-04.1	Westcott Cove C"9"/N"10"	6/10/09	48	wet		
135-04.1	Westcott Cove C"9"/N"10"	7/22/09	4	wet		
135-04.1	Westcott Cove C"9"/N"10"	7/28/09	12	dry		
135-04.1	Westcott Cove C"9"/N"10"	7/28/09	13	dry		
135-04.1	Westcott Cove C"9"/N"10"	8/4/09	1	dry		
135-04.1	Westcott Cove C"9"/N"10"	8/25/09	14	wet		
135-04.1	Westcott Cove C"9"/N"10"	10/20/09	13	wet		
135-04.1	Westcott Cove C"9"/N"10"	12/15/09	28	wet		
135-04.1	Westcott Cove C"9"/N"10"	1/27/10	1	wet	4	10
135-04.1	Westcott Cove C"9"/N"10"	3/25/10	1	wet		
135-04.1	Westcott Cove C"9"/N"10"	5/5/10	1	wet		
135-04.1	Westcott Cove C"9"/N"10"	5/20/10	8	wet		
135-04.1	Westcott Cove C"9"/N"10"	6/23/10	76	wet		
135-04.1	Westcott Cove C"9"/N"10"	4/26/11	1	dry	3	NA
135-04.1	Westcott Cove C"9"/N"10"	6/9/11	7	wet		
135-04.2	N. Vincent Island	2/3/00	4	dry	2	NA
135-04.2	N. Vincent Island	2/23/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-04.2	N. Vincent Island	5/30/01	6	dry	7	10
135-04.2	N. Vincent Island	6/20/01	11	wet		
135-04.2	N. Vincent Island	6/26/01	6	dry		
135-04.2	N. Vincent Island	6/26/01	2	dry		
135-04.2	N. Vincent Island	10/4/01	36	dry		
135-04.2	N. Vincent Island	1/10/02	6	dry	5	NA
135-04.2	N. Vincent Island	1/23/02	4	wet		
135-04.2	N. Vincent Island	8/18/03	14	wet	NA	NA
135-04.2	N. Vincent Island	3/2/04	4	wet	4	NA
135-04.2	N. Vincent Island	9/13/04	4	wet		
135-04.2	N. Vincent Island	2/23/06	1	wet	2	NA
135-04.2	N. Vincent Island	7/17/06	12	dry		
135-04.2	N. Vincent Island	7/26/06	1	dry		
135-04.2	N. Vincent Island	1/3/07	3	wet	NA	NA
135-04.2	N. Vincent Island	5/27/08	3	wet	NA	NA
135-04.2	N. Vincent Island	4/22/09	9	wet	4	NA
135-04.2	N. Vincent Island	7/28/09	3	dry		
135-04.2	N. Vincent Island	8/4/09	1	dry		
135-04.2	N. Vincent Island	10/20/09	7	wet		
135-04.2	N. Vincent Island	12/15/09	6	wet		
135-04.2	N. Vincent Island	1/27/10	2	wet	2	NA
135-04.2	N. Vincent Island	3/25/10	1	wet		
135-04.2	N. Vincent Island	5/5/10	3	wet		
135-04.2	N. Vincent Island	5/20/10	1	wet		
135-04.2	N. Vincent Island	6/23/10	11	wet		
135-04.2	N. Vincent Island	4/26/11	1	dry	1	NA
135-04.2	N. Vincent Island	6/9/11	2	wet		
135-04.3	Westcott Cove near demarc. sign	2/3/00	2	dry	2	NA
135-04.3	Westcott Cove near demarc. sign	2/23/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-04.3	Westcott Cove near demarc. sign	5/30/01	6	dry	6	NA
135-04.3	Westcott Cove near demarc. sign	6/20/01	8	wet		
135-04.3	Westcott Cove near demarc. sign	6/26/01	4	dry		
135-04.3	Westcott Cove near demarc. sign	6/26/01	2	dry		
135-04.3	Westcott Cove near demarc. sign	10/4/01	28	dry		
135-04.3	Westcott Cove near demarc. sign	1/10/02	8	dry	8	8
135-04.3	Westcott Cove near demarc. sign	1/23/02	8	wet		
135-04.3	Westcott Cove near demarc. sign	8/18/03	36	wet	NA	90
135-04.3	Westcott Cove near demarc. sign	3/2/04	2	wet	2	NA
135-04.3	Westcott Cove near demarc. sign	9/13/04	2	wet		
135-04.3	Westcott Cove near demarc. sign	2/23/06	1	wet	2	NA
135-04.3	Westcott Cove near demarc. sign	7/17/06	2	dry		
135-04.3	Westcott Cove near demarc. sign	7/26/06	4	dry		
135-04.3	Westcott Cove near demarc. sign	10/11/06	2	wet		
135-04.3	Westcott Cove near demarc. sign	1/3/07	1	wet	NA	NA
135-04.3	Westcott Cove near demarc. sign	5/27/08	1	wet	NA	NA
135-04.3	Westcott Cove near demarc. sign	4/22/09	5	wet	3	NA
135-04.3	Westcott Cove near demarc. sign	7/22/09	1	wet		
135-04.3	Westcott Cove near demarc. sign	7/28/09	3	dry		
135-04.3	Westcott Cove near demarc. sign	8/4/09	1	dry		
135-04.3	Westcott Cove near demarc. sign	8/25/09	5	wet		
135-04.3	Westcott Cove near demarc. sign	10/20/09	5	wet		
135-04.3	Westcott Cove near demarc. sign	12/15/09	4	wet		
135-04.3	Westcott Cove near demarc. sign	1/27/10	1	wet	2	NA
135-04.3	Westcott Cove near demarc. sign	3/25/10	1	wet		
135-04.3	Westcott Cove near demarc. sign	5/5/10	1	wet		
135-04.3	Westcott Cove near demarc. sign	5/20/10	1	wet		
135-04.3	Westcott Cove near demarc. sign	6/23/10	9	wet		
135-04.3	Westcott Cove near demarc. sign	4/26/11	1	dry	2	NA
135-04.3	Westcott Cove near demarc. sign	6/9/11	3	wet		
135-04.5	West Cove in channel near CA line	1/3/07	3	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-04.5	West Cove in channel near CA line	5/27/08	2	wet	NA	NA
135-04.5	West Cove in channel near CA line	4/22/09	7	wet	3	NA
135-04.5	West Cove in channel near CA line	7/22/09	4	wet		
135-04.5	West Cove in channel near CA line	7/28/09	4	dry		
135-04.5	West Cove in channel near CA line	8/4/09	1	dry		
135-04.5	West Cove in channel near CA line	8/25/09	2	wet		
135-04.5	West Cove in channel near CA line	10/20/09	9	wet		
135-04.5	West Cove in channel near CA line	12/15/09	3	wet		
135-04.5	West Cove in channel near CA line	1/27/10	1	wet	2	NA
135-04.5	West Cove in channel near CA line	3/25/10	1	wet		
135-04.5	West Cove in channel near CA line	5/5/10	1	wet		
135-04.5	West Cove in channel near CA line	5/20/10	5	wet		
135-04.5	West Cove in channel near CA line	6/23/10	5	wet		
135-04.5	West Cove in channel near CA line	4/26/11	1	dry	3	NA
135-04.5	West Cove in channel near CA line	6/9/11	8	wet		
135-05.0	S. Vincent Island	2/3/00	14	dry	**11* (NA)**	NA
135-05.0	S. Vincent Island	2/23/00	8	dry		
135-05.0	S. Vincent Island	5/30/01	2	dry	4	NA
135-05.0	S. Vincent Island	6/26/01	8	dry		
135-05.0	S. Vincent Island	6/26/01	2	dry		
135-05.0	S. Vincent Island	10/4/01	18	dry		
135-05.0	S. Vincent Island	1/10/02	14	dry	9	NA
135-05.0	S. Vincent Island	1/23/02	6	wet		
135-05.0	S. Vincent Island	4/30/03	2	dry	4	NA
135-05.0	S. Vincent Island	8/18/03	11	wet		
135-05.0	S. Vincent Island	3/2/04	14	wet	7	NA
135-05.0	S. Vincent Island	9/13/04	4	wet		
135-05.0	S. Vincent Island	8/16/05	37	wet	NA	90
135-05.0	S. Vincent Island	2/23/06	1	wet	5	NA
135-05.0	S. Vincent Island	7/17/06	26	dry		
135-05.0	S. Vincent Island	7/26/06	8	dry		
135-05.0	S. Vincent Island	10/11/06	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-05.0	S. Vincent Island	1/3/07	1	wet	NA	NA
135-05.0	S. Vincent Island	5/27/08	1	wet	NA	NA
135-05.0	S. Vincent Island	4/22/09	81	wet	7	19
135-05.0	S. Vincent Island	7/22/09	1	wet		
135-05.0	S. Vincent Island	7/28/09	16	dry		
135-05.0	S. Vincent Island	8/4/09	1	dry		
135-05.0	S. Vincent Island	8/25/09	77	wet		
135-05.0	S. Vincent Island	10/20/09	2	wet		
135-05.0	S. Vincent Island	12/15/09	3	wet		
135-05.0	S. Vincent Island	1/27/10	1	wet	1	NA
135-05.0	S. Vincent Island	3/25/10	1	wet		
135-05.0	S. Vincent Island	5/5/10	1	wet		
135-05.0	S. Vincent Island	5/20/10	1	wet		
135-05.0	S. Vincent Island	6/23/10	4	wet		
135-05.0	S. Vincent Island	4/26/11	1	dry	1	NA
135-05.0	S. Vincent Island	6/9/11	1	wet		
135-06.0	E. Greenway Island	2/3/00	11	dry	4	NA
135-06.0	E. Greenway Island	2/23/00	2	dry		
135-06.0	E. Greenway Island	5/30/01	6	dry	3	NA
135-06.0	E. Greenway Island	6/26/01	4	dry		
135-06.0	E. Greenway Island	6/26/01	2	dry		
135-06.0	E. Greenway Island	10/4/01	2	dry		
135-06.0	E. Greenway Island	1/10/02	4	dry	4	NA
135-06.0	E. Greenway Island	1/23/02	4	wet		
135-06.0	E. Greenway Island	8/18/03	51	wet	NA	90
135-06.0	E. Greenway Island	3/2/04	2	wet	4	NA
135-06.0	E. Greenway Island	9/13/04	11	wet		
135-06.0	E. Greenway Island	2/23/06	1	wet	2	NA
135-06.0	E. Greenway Island	7/17/06	7	dry		
135-06.0	E. Greenway Island	7/26/06	1	dry		
135-06.0	E. Greenway Island	10/11/06	2	wet		
135-06.0	E. Greenway Island	1/3/07	1	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-06.0	E. Greenway Island	5/27/08	1	wet	NA	NA
135-06.0	E. Greenway Island	4/22/09	33	wet	4	4
135-06.0	E. Greenway Island	7/22/09	1	wet		
135-06.0	E. Greenway Island	7/28/09	2	dry		
135-06.0	E. Greenway Island	8/4/09	1	dry		
135-06.0	E. Greenway Island	8/25/09	24	wet		
135-06.0	E. Greenway Island	10/20/09	3	wet		
135-06.0	E. Greenway Island	12/15/09	3	wet		
135-06.0	E. Greenway Island	1/27/10	1	wet	2	NA
135-06.0	E. Greenway Island	3/25/10	1	wet		
135-06.0	E. Greenway Island	5/5/10	3	wet		
135-06.0	E. Greenway Island	5/20/10	6	wet		
135-06.0	E. Greenway Island	6/23/10	3	wet		
135-06.0	E. Greenway Island	4/26/11	4	dry	4	NA
135-06.0	E. Greenway Island	6/9/11	5	wet		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 2: LIS WB Shore – Westcott Cove (CT-W2_018)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
135-04.0	Westcott Cove C"3"	2000-2011	32	17	3	3	3
135-04.1	Westcott Cove C"9"/N"10"	2000-2004, 2006-2011	27	21	6	8	5
135-04.2	N. Vincent Island	2000-2004, 2006-2011	17	12	4	4	3
135-04.3	Westcott Cove near demarc. Sign	2000-2004, 2006-2011	20	12	3	3	3
135-04.5	West Cove in channel near CA line	2007-2011	13	3	3	3	2
135-05.0	S. Vincent Island	2000-2011	20	13	4	3	5
135-06.0	E. Greenway Island	2000-2004, 2006-2011	19	12	3	3	3

Shaded cells indicate an exceedance of water quality criteria

Table 15: Segment 3: LIS WB Shore – Stamford Harbor Bacteria Data

Waterbody ID: CT-W2_019

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **30%**

90% of samples less than: **15%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Stamford Harbor (CT-W2_019) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.1	harbor channel near N"6"	4/24/00	2	wet	6	NA
135-01.1	harbor channel near N"6"	7/19/00	18	dry		
135-01.1	harbor channel near N"6"	9/14/00	6	wet		
135-01.1	harbor channel near N"6"	9/18/00	8	dry		
135-01.1	harbor channel near N"6"	5/29/01	2	dry	6	NA
135-01.1	harbor channel near N"6"	6/20/01	14	wet		
135-01.1	harbor channel near N"6"	8/14/01	14	dry		
135-01.1	harbor channel near N"6"	8/30/01	4	dry		
135-01.1	harbor channel near N"6"	9/24/01	6	wet		
135-01.1	harbor channel near N"6"	1/10/02	18	dry	8	10
135-01.1	harbor channel near N"6"	1/23/02	2	wet		
135-01.1	harbor channel near N"6"	6/11/02	6	wet		
135-01.1	harbor channel near N"6"	9/3/02	50	wet		
135-01.1	harbor channel near N"6"	9/30/02	4	dry		
135-01.1	harbor channel near N"6"	8/18/03	28	wet	10	NA
135-01.1	harbor channel near N"6"	10/1/03	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Stamford Harbor (CT-W2_019) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.1	harbor channel near N"6"	3/31/04	11	wet	5	NA
135-01.1	harbor channel near N"6"	5/11/04	11	wet		
135-01.1	harbor channel near N"6"	6/21/04	2	dry		
135-01.1	harbor channel near N"6"	7/7/04	2	dry		
135-01.1	harbor channel near N"6"	9/13/04	6	wet		
135-01.1	harbor channel near N"6"	9/21/04	14	dry		
135-01.1	harbor channel near N"6"	8/16/05	14	wet	**20* (30%)**	NA
135-01.1	harbor channel near N"6"	10/27/05	28	wet		
135-01.1	harbor channel near N"6"	7/17/06	14	dry	5	NA
135-01.1	harbor channel near N"6"	10/16/06	2	dry		
135-01.1	harbor channel near N"6"	11/1/06	4	dry		
135-01.1	harbor channel near N"6"	1/3/07	1	wet	13	15
135-01.1	harbor channel near N"6"	9/12/07	64	wet		
135-01.1	harbor channel near N"6"	10/22/07	21	wet		
135-01.1	harbor channel near N"6"	10/31/07	20	dry		
135-01.1	harbor channel near N"6"	5/29/08	18	wet	12	7
135-01.1	harbor channel near N"6"	7/28/08	7	dry		
135-01.1	harbor channel near N"6"	9/10/08	42	wet		
135-01.1	harbor channel near N"6"	12/16/08	10	wet		
135-01.1	harbor channel near N"6"	12/22/08	26	wet		
135-01.1	harbor channel near N"6"	12/29/08	2	dry		
135-01.1	harbor channel near N"6"	4/22/09	8	wet	6	NA
135-01.1	harbor channel near N"6"	6/10/09	9	wet		
135-01.1	harbor channel near N"6"	7/22/09	6	wet		
135-01.1	harbor channel near N"6"	8/4/09	1	dry		
135-01.1	harbor channel near N"6"	8/25/09	18	wet		
135-01.1	harbor channel near N"6"	1/27/10	3	wet	3	NA
135-01.1	harbor channel near N"6"	3/25/10	8	wet		
135-01.1	harbor channel near N"6"	5/5/10	1	wet		
135-01.1	harbor channel near N"6"	5/20/10	7	wet		
135-01.1	harbor channel near N"6"	9/20/10	2	dry		
135-01.1	harbor channel near N"6"	4/26/11	1	dry	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Stamford Harbor (CT-W2_019) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-02.1	end of Stamford Avenue	9/18/00	6	dry	NA	NA
135-02.1	end of Stamford Avenue	5/29/01	2	dry	3	NA
135-02.1	end of Stamford Avenue	6/20/01	2	wet		
135-02.1	end of Stamford Avenue	8/14/01	11	dry		
135-02.1	end of Stamford Avenue	8/30/01	4	dry		
135-02.1	end of Stamford Avenue	9/24/01	2	wet		
135-02.1	end of Stamford Avenue	1/10/02	18	dry	9	15
135-02.1	end of Stamford Avenue	6/11/02	2	wet		
135-02.1	end of Stamford Avenue	9/3/02	50	wet		
135-02.1	end of Stamford Avenue	9/30/02	4	dry		
135-02.1	end of Stamford Avenue	8/18/03	2	wet	3	NA
135-02.1	end of Stamford Avenue	10/1/03	6	dry		
135-02.1	end of Stamford Avenue	3/31/04	2	wet	2	NA
135-02.1	end of Stamford Avenue	5/11/04	2	wet		
135-02.1	end of Stamford Avenue	6/21/04	2	dry		
135-02.1	end of Stamford Avenue	7/7/04	2	dry		
135-02.1	end of Stamford Avenue	9/13/04	2	wet		
135-02.1	end of Stamford Avenue	9/21/04	11	dry		
135-02.1	end of Stamford Avenue	8/16/05	32	wet	NA	90
135-02.1	end of Stamford Avenue	7/17/06	1	dry	1	NA
135-02.1	end of Stamford Avenue	10/16/06	1	dry		
135-02.1	end of Stamford Avenue	11/1/06	2	dry		
135-02.1	end of Stamford Avenue	1/3/07	3	wet	8	15
135-02.1	end of Stamford Avenue	9/12/07	33	wet		
135-02.1	end of Stamford Avenue	10/22/07	6	wet		
135-02.1	end of Stamford Avenue	10/31/07	6	dry		
135-02.1	end of Stamford Avenue	5/29/08	16	wet	4	NA
135-02.1	end of Stamford Avenue	7/28/08	1	dry		
135-02.1	end of Stamford Avenue	9/10/08	19	wet		
135-02.1	end of Stamford Avenue	12/16/08	18	wet		
135-02.1	end of Stamford Avenue	12/26/08	1	wet		
135-02.1	end of Stamford Avenue	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Shore – Stamford Harbor (CT-W2_019) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-02.1	end of Stamford Avenue	4/22/09	2	wet	2	NA
135-02.1	end of Stamford Avenue	6/10/09	10	wet		
135-02.1	end of Stamford Avenue	6/24/09	2	dry		
135-02.1	end of Stamford Avenue	7/22/09	1	wet		
135-02.1	end of Stamford Avenue	8/4/09	1	dry		
135-02.1	end of Stamford Avenue	8/25/09	1	wet		
135-02.1	end of Stamford Avenue	1/27/10	1	wet	1	NA
135-02.1	end of Stamford Avenue	3/25/10	1	wet		
135-02.1	end of Stamford Avenue	5/5/10	1	wet		
135-02.1	end of Stamford Avenue	5/20/10	2	wet		
135-02.1	end of Stamford Avenue	9/20/10	1	dry		
135-02.1	end of Stamford Avenue	4/26/11	1	dry	NA	NA

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 3: LIS WB Shore – Stamford Harbor (CT-W2_019)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
135-01.1	harbor channel near N"6"	2000-2011	28	20	7	9	4
135-02.1	end of Stamford Avenue	2000-2011	24	20	3	3	3

Shaded cells indicate an exceedance of water quality criteria

Table 16: Segment 4: LIS WB Shore – Stamford Harbor (West) Bacteria Data

Waterbody ID: CT-W2_020

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **40%**

Data: 2002 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Stamford Harbor (West) (CTW2_020) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.9	S. Dolphin Cove	6/11/02	8	wet	23	23
135-01.9	S. Dolphin Cove	9/3/02	51	wet		
135-01.9	S. Dolphin Cove	9/30/02	28	dry		
135-01.9	S. Dolphin Cove	8/18/03	51	wet	**30* (53%)**	40
135-01.9	S. Dolphin Cove	10/1/03	18	dry		
135-01.9	S. Dolphin Cove	3/31/04	36	wet	11	7
135-01.9	S. Dolphin Cove	5/11/04	6	wet		
135-01.9	S. Dolphin Cove	6/21/04	2	dry		
135-01.9	S. Dolphin Cove	7/7/04	22	dry		
135-01.9	S. Dolphin Cove	9/13/04	11	wet		
135-01.9	S. Dolphin Cove	9/21/04	18	dry		
135-01.9	S. Dolphin Cove	8/16/05	79	wet	NA	90
135-01.9	S. Dolphin Cove	7/17/06	28	dry	6	NA
135-01.9	S. Dolphin Cove	10/16/06	1	dry		
135-01.9	S. Dolphin Cove	11/1/06	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Stamford Harbor (West) (CTW2_020) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-01.9	S. Dolphin Cove	9/12/07	22	wet	5	NA
135-01.9	S. Dolphin Cove	10/22/07	1	wet		
135-01.9	S. Dolphin Cove	10/31/07	6	dry		
135-01.9	S. Dolphin Cove	5/29/08	4	wet	6	7
135-01.9	S. Dolphin Cove	7/28/08	7	dry		
135-01.9	S. Dolphin Cove	9/10/08	52	wet		
135-01.9	S. Dolphin Cove	12/16/08	6	wet		
135-01.9	S. Dolphin Cove	12/26/08	2	wet		
135-01.9	S. Dolphin Cove	12/29/08	2	dry		
135-01.9	S. Dolphin Cove	4/22/09	8	wet	7	7
135-01.9	S. Dolphin Cove	6/10/09	38	wet		
135-01.9	S. Dolphin Cove	6/24/09	10	dry		
135-01.9	S. Dolphin Cove	7/22/09	12	wet		
135-01.9	S. Dolphin Cove	8/4/09	1	dry		
135-01.9	S. Dolphin Cove	8/25/09	4	wet		
135-01.9	S. Dolphin Cove	1/27/10	1	wet	2	N/A
135-01.9	S. Dolphin Cove	3/25/10	3	wet		
135-01.9	S. Dolphin Cove	5/5/10	1	wet		
135-01.9	S. Dolphin Cove	5/20/10	3	wet		
135-01.9	S. Dolphin Cove	9/20/10	1	dry		
135-01.9	S. Dolphin Cove	4/26/11	1	dry	NA	NA

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather geometric mean values for all monitoring stations on Segment 4: LIS WB Shore – Stamford Harbor (West) (CTW2_020)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
135-01.9	S. Dolphin Cove	2002-2011	21	15	7	8	5

Shaded cells indicate an exceedance of water quality criteria

Table 17: Segment 5: LIS WB Shore – Greenwich Cove Bacteria Data

Waterbody ID: CT-W2_021

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 104 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **26%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.0	Gr. Pt. Dock	1/2/00	2	dry	3	1
057-18.0	Gr. Pt. Dock	2/8/00	2	dry		
057-18.0	Gr. Pt. Dock	2/16/00	2	wet		
057-18.0	Gr. Pt. Dock	4/16/00	2	wet		
057-18.0	Gr. Pt. Dock	5/7/00	6	wet		
057-18.0	Gr. Pt. Dock	10/25/00	2	dry		
057-18.0	Gr. Pt. Dock	11/12/00	50	wet		
057-18.0	Gr. Pt. Dock	11/20/00	6	wet		
057-18.0	Gr. Pt. Dock	12/5/00	2	dry		
057-18.0	Gr. Pt. Dock	1/9/01	18	wet	3	NA
057-18.0	Gr. Pt. Dock	2/20/01	2	dry		
057-18.0	Gr. Pt. Dock	3/25/01	2	wet		
057-18.0	Gr. Pt. Dock	4/5/01	2	dry		
057-18.0	Gr. Pt. Dock	4/17/01	2	dry		
057-18.0	Gr. Pt. Dock	11/7/01	4	dry		
057-18.0	Gr. Pt. Dock	11/25/01	2	wet		
057-18.0	Gr. Pt. Dock	12/2/01	11	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.0	Gr. Pt. Dock	1/6/02	2	dry		
057-18.0	Gr. Pt. Dock	1/27/02	2	dry		
057-18.0	Gr. Pt. Dock	3/17/02	2	dry		
057-18.0	Gr. Pt. Dock	3/31/02	2	dry		
057-18.0	Gr. Pt. Dock	4/21/02	11	wet	3	NA
057-18.0	Gr. Pt. Dock	5/12/02	2	wet		
057-18.0	Gr. Pt. Dock	10/20/02	6	dry		
057-18.0	Gr. Pt. Dock	11/3/02	2	dry		
057-18.0	Gr. Pt. Dock	12/16/02	6	wet		
057-18.0	Gr. Pt. Dock	1/13/03	2	dry		
057-18.0	Gr. Pt. Dock	2/24/03	14	wet		
057-18.0	Gr. Pt. Dock	3/11/03	2	wet		
057-18.0	Gr. Pt. Dock	3/26/03	2	wet	3	NA
057-18.0	Gr. Pt. Dock	4/13/03	2	wet		
057-18.0	Gr. Pt. Dock	4/30/03	2	dry		
057-18.0	Gr. Pt. Dock	11/3/03	14	dry		
057-18.0	Gr. Pt. Dock	1/6/04	4	wet		
057-18.0	Gr. Pt. Dock	3/15/04	2	dry		
057-18.0	Gr. Pt. Dock	4/7/04	2	dry		
057-18.0	Gr. Pt. Dock	4/29/04	2	dry		
057-18.0	Gr. Pt. Dock	6/16/04	2	dry	4	NA
057-18.0	Gr. Pt. Dock	6/20/04	8	dry		
057-18.0	Gr. Pt. Dock	10/25/04	14	dry		
057-18.0	Gr. Pt. Dock	11/7/04	11	wet		
057-18.0	Gr. Pt. Dock	12/8/04	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.0	Gr. Pt. Dock	2/2/05	1	dry		
057-18.0	Gr. Pt. Dock	4/6/05	1	dry		
057-18.0	Gr. Pt. Dock	5/18/05	1	dry		
057-18.0	Gr. Pt. Dock	6/1/05	1	dry		
057-18.0	Gr. Pt. Dock	8/3/05	1	dry	2	NA
057-18.0	Gr. Pt. Dock	10/4/05	13	dry		
057-18.0	Gr. Pt. Dock	10/24/05	6	wet		
057-18.0	Gr. Pt. Dock	10/31/05	1	dry		
057-18.0	Gr. Pt. Dock	11/14/05	1	dry		
057-18.0	Gr. Pt. Dock	1/25/06	1	wet		
057-18.0	Gr. Pt. Dock	2/22/06	1	wet		
057-18.0	Gr. Pt. Dock	3/22/06	1	dry		
057-18.0	Gr. Pt. Dock	5/24/06	1	dry		
057-18.0	Gr. Pt. Dock	6/12/06	2	dry		
057-18.0	Gr. Pt. Dock	7/10/06	1	dry	2	NA
057-18.0	Gr. Pt. Dock	9/19/06	1	dry		
057-18.0	Gr. Pt. Dock	11/1/06	3	dry		
057-18.0	Gr. Pt. Dock	11/15/06	8	dry		
057-18.0	Gr. Pt. Dock	11/20/06	3	dry		
057-18.0	Gr. Pt. Dock	12/17/06	1	dry		
057-18.0	Gr. Pt. Dock	1/29/07	1	dry		
057-18.0	Gr. Pt. Dock	3/13/07	1	wet		
057-18.0	Gr. Pt. Dock	3/27/07	1	wet		
057-18.0	Gr. Pt. Dock	4/23/07	1	dry		
057-18.0	Gr. Pt. Dock	5/23/07	1	dry		
057-18.0	Gr. Pt. Dock	6/12/07	14	wet	3	NA
057-18.0	Gr. Pt. Dock	9/23/07	18	dry		
057-18.0	Gr. Pt. Dock	10/22/07	4	wet		
057-18.0	Gr. Pt. Dock	11/5/07	2	dry		
057-18.0	Gr. Pt. Dock	12/6/07	2	dry		
057-18.0	Gr. Pt. Dock	12/10/07	13	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.0	Gr. Pt. Dock	1/8/08	1	dry	2	3
057-18.0	Gr. Pt. Dock	3/3/08	1	dry		
057-18.0	Gr. Pt. Dock	4/23/08	1	dry		
057-18.0	Gr. Pt. Dock	4/30/08	3	wet		
057-18.0	Gr. Pt. Dock	10/27/08	34	wet		
057-18.0	Gr. Pt. Dock	11/2/08	1	dry		
057-18.0	Gr. Pt. Dock	11/24/08	1	dry		
057-18.0	Gr. Pt. Dock	12/29/08	1	dry		
057-18.0	Gr. Pt. Dock	2/9/09	1	dry	4	NA
057-18.0	Gr. Pt. Dock	3/10/09	1	wet		
057-18.0	Gr. Pt. Dock	4/22/09	1	wet		
057-18.0	Gr. Pt. Dock	5/11/09	2	dry		
057-18.0	Gr. Pt. Dock	10/5/09	6	wet		
057-18.0	Gr. Pt. Dock	11/3/09	11	dry		
057-18.0	Gr. Pt. Dock	11/23/09	4	dry		
057-18.0	Gr. Pt. Dock	12/1/09	11	wet		
057-18.0	Gr. Pt. Dock	12/14/09	12	wet		
057-18.0	Gr. Pt. Dock	12/21/09	2	dry		
057-18.0	Gr. Pt. Dock	12/28/09	8	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.0	Gr. Pt. Dock	1/19/10	1	wet	2	NA
057-18.0	Gr. Pt. Dock	1/27/10	1	wet		
057-18.0	Gr. Pt. Dock	2/22/10	1	dry		
057-18.0	Gr. Pt. Dock	3/2/10	1	wet		
057-18.0	Gr. Pt. Dock	4/4/10	18	dry		
057-18.0	Gr. Pt. Dock	4/11/10	1	wet		
057-18.0	Gr. Pt. Dock	5/5/10	1	wet		
057-18.0	Gr. Pt. Dock	6/9/10	3	wet		
057-18.0	Gr. Pt. Dock	7/7/10	2	dry		
057-18.0	Gr. Pt. Dock	7/26/10	4	wet		
057-18.0	Gr. Pt. Dock	8/4/10	1	dry		
057-18.0	Gr. Pt. Dock	8/19/10	1	dry		
057-18.0	Gr. Pt. Dock	8/25/10	5	wet		
057-18.0	Gr. Pt. Dock	9/13/10	1	dry		
057-18.0	Gr. Pt. Dock	9/20/10	1	dry		
057-18.0	Gr. Pt. Dock	9/21/10	2	dry		
057-18.0	Gr. Pt. Dock	9/29/10	5	wet		
057-18.0	Gr. Pt. Dock	10/3/10	35	wet		
057-18.0	Gr. Pt. Dock	11/2/10	1	dry		
057-18.0	Gr. Pt. Dock	11/18/10	9	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.0	Gr. Pt. Dock	3/15/11	2	dry	3	3
057-18.0	Gr. Pt. Dock	4/25/11	1	wet		
057-18.0	Gr. Pt. Dock	5/9/11	1	dry		
057-18.0	Gr. Pt. Dock	5/23/11	3	wet		
057-18.0	Gr. Pt. Dock	6/8/11	1	dry		
057-18.0	Gr. Pt. Dock	6/22/11	3	wet		
057-18.0	Gr. Pt. Dock	6/29/11	6	wet		
057-18.0	Gr. Pt. Dock	7/11/11	5	dry		
057-18.0	Gr. Pt. Dock	7/19/11	81	dry		
057-18.0	Gr. Pt. Dock	7/25/11	2	dry		
057-18.0	Gr. Pt. Dock	8/3/11	3	dry		
057-18.0	Gr. Pt. Dock	8/10/11	36	dry		
057-18.0	Gr. Pt. Dock	8/17/11	5	dry		
057-18.0	Gr. Pt. Dock	8/22/11	1	dry		
057-18.0	Gr. Pt. Dock	9/12/11	2	dry		
057-18.0	Gr. Pt. Dock	9/19/11	1	dry		
057-18.1	E. Greenwich Island	1/2/00	2	dry	3	NA
057-18.1	E. Greenwich Island	2/8/00	2	dry		
057-18.1	E. Greenwich Island	2/16/00	2	wet		
057-18.1	E. Greenwich Island	4/16/00	2	wet		
057-18.1	E. Greenwich Island	5/7/00	4	wet		
057-18.1	E. Greenwich Island	10/22/00	4	wet		
057-18.1	E. Greenwich Island	10/25/00	2	dry		
057-18.1	E. Greenwich Island	11/12/00	36	wet		
057-18.1	E. Greenwich Island	11/20/00	4	wet		
057-18.1	E. Greenwich Island	12/5/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.1	E. Greenwich Island	1/9/01	36	wet	3	3
057-18.1	E. Greenwich Island	2/20/01	2	dry		
057-18.1	E. Greenwich Island	3/25/01	2	wet		
057-18.1	E. Greenwich Island	4/5/01	2	dry		
057-18.1	E. Greenwich Island	4/17/01	2	dry		
057-18.1	E. Greenwich Island	11/7/01	2	dry		
057-18.1	E. Greenwich Island	11/25/01	2	wet		
057-18.1	E. Greenwich Island	12/2/01	6	dry		
057-18.1	E. Greenwich Island	1/6/02	2	dry	2	NA
057-18.1	E. Greenwich Island	1/27/02	2	dry		
057-18.1	E. Greenwich Island	3/17/02	2	dry		
057-18.1	E. Greenwich Island	3/31/02	2	dry		
057-18.1	E. Greenwich Island	4/21/02	2	wet		
057-18.1	E. Greenwich Island	5/12/02	2	wet		
057-18.1	E. Greenwich Island	10/20/02	8	dry		
057-18.1	E. Greenwich Island	11/3/02	2	dry		
057-18.1	E. Greenwich Island	12/16/02	6	wet		
057-18.1	E. Greenwich Island	1/13/03	2	dry	2	NA
057-18.1	E. Greenwich Island	3/26/03	2	wet		
057-18.1	E. Greenwich Island	4/13/03	2	wet		
057-18.1	E. Greenwich Island	4/30/03	2	dry		
057-18.1	E. Greenwich Island	11/3/03	2	dry		
057-18.1	E. Greenwich Island	1/6/04	4	wet	3	NA
057-18.1	E. Greenwich Island	3/15/04	2	dry		
057-18.1	E. Greenwich Island	4/7/04	2	dry		
057-18.1	E. Greenwich Island	4/29/04	2	dry		
057-18.1	E. Greenwich Island	6/16/04	2	dry		
057-18.1	E. Greenwich Island	6/20/04	2	dry		
057-18.1	E. Greenwich Island	10/25/04	6	dry		
057-18.1	E. Greenwich Island	11/7/04	28	wet		
057-18.1	E. Greenwich Island	12/8/04	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.1	E. Greenwich Island	2/2/05	1	dry	1	NA
057-18.1	E. Greenwich Island	4/6/05	1	dry		
057-18.1	E. Greenwich Island	5/18/05	1	dry		
057-18.1	E. Greenwich Island	6/1/05	1	dry		
057-18.1	E. Greenwich Island	8/3/05	2	dry		
057-18.1	E. Greenwich Island	10/4/05	1	dry		
057-18.1	E. Greenwich Island	10/24/05	10	wet		
057-18.1	E. Greenwich Island	10/31/05	1	dry		
057-18.1	E. Greenwich Island	11/14/05	1	dry		
057-18.1	E. Greenwich Island	1/25/06	1	wet	2	NA
057-18.1	E. Greenwich Island	2/22/06	1	wet		
057-18.1	E. Greenwich Island	3/22/06	1	dry		
057-18.1	E. Greenwich Island	5/24/06	1	dry		
057-18.1	E. Greenwich Island	6/12/06	1	dry		
057-18.1	E. Greenwich Island	7/10/06	1	dry		
057-18.1	E. Greenwich Island	9/19/06	10	dry		
057-18.1	E. Greenwich Island	11/1/06	2	dry		
057-18.1	E. Greenwich Island	11/15/06	21	dry		
057-18.1	E. Greenwich Island	11/20/06	5	dry		
057-18.1	E. Greenwich Island	12/17/06	1	dry		
057-18.1	E. Greenwich Island	1/29/07	1	dry	2	NA
057-18.1	E. Greenwich Island	3/13/07	1	wet		
057-18.1	E. Greenwich Island	3/27/07	1	wet		
057-18.1	E. Greenwich Island	4/23/07	2	dry		
057-18.1	E. Greenwich Island	5/23/07	1	dry		
057-18.1	E. Greenwich Island	6/12/07	5	wet		
057-18.1	E. Greenwich Island	9/23/07	2	dry		
057-18.1	E. Greenwich Island	11/5/07	1	dry		
057-18.1	E. Greenwich Island	12/6/07	3	dry		
057-18.1	E. Greenwich Island	12/10/07	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.1	E. Greenwich Island	1/8/08	1	dry	2	3
057-18.1	E. Greenwich Island	3/3/08	1	dry		
057-18.1	E. Greenwich Island	4/23/08	1	dry		
057-18.1	E. Greenwich Island	4/30/08	3	wet		
057-18.1	E. Greenwich Island	10/27/08	37	wet		
057-18.1	E. Greenwich Island	11/2/08	2	dry		
057-18.1	E. Greenwich Island	11/24/08	1	dry		
057-18.1	E. Greenwich Island	12/29/08	2	dry		
057-18.1	E. Greenwich Island	2/9/09	1	dry	3	NA
057-18.1	E. Greenwich Island	3/10/09	1	wet		
057-18.1	E. Greenwich Island	4/22/09	1	wet		
057-18.1	E. Greenwich Island	5/11/09	1	dry		
057-18.1	E. Greenwich Island	10/5/09	17	wet		
057-18.1	E. Greenwich Island	11/3/09	5	wet		
057-18.1	E. Greenwich Island	11/23/09	2	dry		
057-18.1	E. Greenwich Island	12/1/09	9	wet		
057-18.1	E. Greenwich Island	12/14/09	54	wet		
057-18.1	E. Greenwich Island	12/21/09	1	dry		
057-18.1	E. Greenwich Island	12/28/09	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.1	E. Greenwich Island	1/19/10	1	wet	2	NA
057-18.1	E. Greenwich Island	1/27/10	1	wet		
057-18.1	E. Greenwich Island	2/22/10	1	dry		
057-18.1	E. Greenwich Island	3/2/10	1	wet		
057-18.1	E. Greenwich Island	4/4/10	21	dry		
057-18.1	E. Greenwich Island	4/11/10	1	wet		
057-18.1	E. Greenwich Island	5/5/10	1	wet		
057-18.1	E. Greenwich Island	6/9/10	1	wet		
057-18.1	E. Greenwich Island	7/7/10	1	dry		
057-18.1	E. Greenwich Island	7/26/10	1	wet		
057-18.1	E. Greenwich Island	8/4/10	1	dry		
057-18.1	E. Greenwich Island	8/19/10	1	dry		
057-18.1	E. Greenwich Island	8/25/10	2	wet		
057-18.1	E. Greenwich Island	9/13/10	4	dry		
057-18.1	E. Greenwich Island	9/20/10	1	dry		
057-18.1	E. Greenwich Island	9/21/10	1	dry		
057-18.1	E. Greenwich Island	9/29/10	27	wet		
057-18.1	E. Greenwich Island	10/3/10	16	wet		
057-18.1	E. Greenwich Island	11/2/10	1	dry		
057-18.1	E. Greenwich Island	11/18/10	13	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.1	E. Greenwich Island	3/15/11	1	dry	3	NA
057-18.1	E. Greenwich Island	4/25/11	1	wet		
057-18.1	E. Greenwich Island	5/23/11	2	wet		
057-18.1	E. Greenwich Island	6/22/11	1	wet		
057-18.1	E. Greenwich Island	6/29/11	4	wet		
057-18.1	E. Greenwich Island	7/11/11	6	dry		
057-18.1	E. Greenwich Island	7/19/11	81	dry		
057-18.1	E. Greenwich Island	7/25/11	1	dry		
057-18.1	E. Greenwich Island	8/3/11	5	dry		
057-18.1	E. Greenwich Island	8/10/11	22	dry		
057-18.1	E. Greenwich Island	8/17/11	3	dry		
057-18.1	E. Greenwich Island	8/22/11	5	dry		
057-18.1	E. Greenwich Island	9/12/11	2	dry		
057-18.1	E. Greenwich Island	9/19/11	1	dry		
057-18.2	Cove Rock	1/2/00	6	dry	3	1
057-18.2	Cove Rock	2/8/00	2	dry		
057-18.2	Cove Rock	2/16/00	2	wet		
057-18.2	Cove Rock	4/16/00	2	wet		
057-18.2	Cove Rock	5/7/00	2	wet		
057-18.2	Cove Rock	10/25/00	2	dry		
057-18.2	Cove Rock	11/12/00	36	wet		
057-18.2	Cove Rock	11/20/00	2	wet		
057-18.2	Cove Rock	12/5/00	4	dry		
057-18.2	Cove Rock	1/9/01	22	wet	4	NA
057-18.2	Cove Rock	2/20/01	2	dry		
057-18.2	Cove Rock	3/25/01	2	wet		
057-18.2	Cove Rock	4/5/01	2	dry		
057-18.2	Cove Rock	4/17/01	2	dry		
057-18.2	Cove Rock	9/23/01	28	wet		
057-18.2	Cove Rock	11/7/01	4	dry		
057-18.2	Cove Rock	11/25/01	2	wet		
057-18.2	Cove Rock	12/2/01	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.2	Cove Rock	1/6/02	2	dry		
057-18.2	Cove Rock	1/27/02	2	dry		
057-18.2	Cove Rock	3/17/02	2	dry		
057-18.2	Cove Rock	3/31/02	2	dry		
057-18.2	Cove Rock	4/21/02	4	wet		
057-18.2	Cove Rock	5/12/02	2	wet		
057-18.2	Cove Rock	6/9/02	5†	wet		
057-18.2	Cove Rock	6/16/02	8	wet		
057-18.2	Cove Rock	6/23/02	11	dry	4	NA
057-18.2	Cove Rock	6/30/02	4	dry		
057-18.2	Cove Rock	8/4/02	4	wet		
057-18.2	Cove Rock	8/18/02	22	wet		
057-18.2	Cove Rock	9/8/02	14	dry		
057-18.2	Cove Rock	9/29/02	4	wet		
057-18.2	Cove Rock	10/20/02	4	dry		
057-18.2	Cove Rock	11/3/02	2	dry		
057-18.2	Cove Rock	12/16/02	2	wet		
057-18.2	Cove Rock	1/13/03	6	dry		
057-18.2	Cove Rock	2/24/03	28	wet		
057-18.2	Cove Rock	3/11/03	2	wet		
057-18.2	Cove Rock	3/26/03	2	wet		
057-18.2	Cove Rock	4/13/03	2	wet		
057-18.2	Cove Rock	4/30/03	2	dry	8	NA
057-18.2	Cove Rock	5/28/03	18	wet		
057-18.2	Cove Rock	6/8/03	50	wet		
057-18.2	Cove Rock	6/13/03	28	wet		
057-18.2	Cove Rock	9/24/03	28	wet		
057-18.2	Cove Rock	11/3/03	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.2	Cove Rock	1/6/04	6	wet	3	NA
057-18.2	Cove Rock	3/15/04	2	dry		
057-18.2	Cove Rock	4/7/04	2	dry		
057-18.2	Cove Rock	4/29/04	2	dry		
057-18.2	Cove Rock	6/16/04	2	dry		
057-18.2	Cove Rock	6/20/04	2	dry		
057-18.2	Cove Rock	11/7/04	8	wet		
057-18.2	Cove Rock	12/8/04	14	wet		
057-18.2	Cove Rock	2/2/05	1	dry	2	NA
057-18.2	Cove Rock	4/6/05	1	dry		
057-18.2	Cove Rock	5/18/05	1	dry		
057-18.2	Cove Rock	6/1/05	1	dry		
057-18.2	Cove Rock	8/3/05	2	dry		
057-18.2	Cove Rock	10/4/05	1	dry		
057-18.2	Cove Rock	10/24/05	11	wet		
057-18.2	Cove Rock	10/31/05	3	dry		
057-18.2	Cove Rock	11/14/05	1	dry		
057-18.2	Cove Rock	1/25/06	1	wet	2	NA
057-18.2	Cove Rock	2/22/06	1	wet		
057-18.2	Cove Rock	3/22/06	1	dry		
057-18.2	Cove Rock	5/24/06	2	dry		
057-18.2	Cove Rock	6/12/06	2	dry		
057-18.2	Cove Rock	7/10/06	2	dry		
057-18.2	Cove Rock	8/31/06	17	wet		
057-18.2	Cove Rock	9/19/06	1	dry		
057-18.2	Cove Rock	11/1/06	5	dry		
057-18.2	Cove Rock	11/15/06	2	dry		
057-18.2	Cove Rock	11/20/06	2	dry		
057-18.2	Cove Rock	12/17/06	3	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.2	Cove Rock	1/29/07	2	dry	2	NA
057-18.2	Cove Rock	3/13/07	1	wet		
057-18.2	Cove Rock	3/27/07	1	wet		
057-18.2	Cove Rock	4/23/07	1	dry		
057-18.2	Cove Rock	5/23/07	1	dry		
057-18.2	Cove Rock	6/12/07	7	wet		
057-18.2	Cove Rock	9/23/07	3	dry		
057-18.2	Cove Rock	10/22/07	1	wet		
057-18.2	Cove Rock	10/31/07	4	dry		
057-18.2	Cove Rock	11/5/07	1	dry		
057-18.2	Cove Rock	12/6/07	5	dry		
057-18.2	Cove Rock	12/10/07	1	wet		
057-18.2	Cove Rock	1/8/08	1	dry	2	NA
057-18.2	Cove Rock	3/3/08	1	dry		
057-18.2	Cove Rock	4/23/08	1	dry		
057-18.2	Cove Rock	4/30/08	2	wet		
057-18.2	Cove Rock	5/14/08	1	dry		
057-18.2	Cove Rock	5/20/08	1	wet		
057-18.2	Cove Rock	6/18/08	1	wet		
057-18.2	Cove Rock	7/27/08	21	dry		
057-18.2	Cove Rock	8/4/08	1	wet		
057-18.2	Cove Rock	8/26/08	1	dry		
057-18.2	Cove Rock	9/10/08	15	wet		
057-18.2	Cove Rock	9/17/08	1	dry		
057-18.2	Cove Rock	10/7/08	1	wet		
057-18.2	Cove Rock	10/27/08	17	wet		
057-18.2	Cove Rock	11/2/08	1	dry		
057-18.2	Cove Rock	11/24/08	1	dry		
057-18.2	Cove Rock	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-18.2	Cove Rock	2/9/09	1	dry		
057-18.2	Cove Rock	3/10/09	1	wet		
057-18.2	Cove Rock	4/22/09	3	wet		
057-18.2	Cove Rock	5/11/09	1	dry		
057-18.2	Cove Rock	8/3/09	7	dry		
057-18.2	Cove Rock	8/24/09	10	wet		
057-18.2	Cove Rock	10/5/09	8	wet	4	NA
057-18.2	Cove Rock	11/3/09	31	dry		
057-18.2	Cove Rock	11/23/09	6	dry		
057-18.2	Cove Rock	12/1/09	1	wet		
057-18.2	Cove Rock	12/14/09	11	wet		
057-18.2	Cove Rock	12/21/09	1	dry		
057-18.2	Cove Rock	12/28/09	11	wet		
057-18.2	Cove Rock	1/19/10	3	wet		
057-18.2	Cove Rock	1/27/10	2	wet		
057-18.2	Cove Rock	2/22/10	1	dry		
057-18.2	Cove Rock	3/2/10	1	wet		
057-18.2	Cove Rock	4/4/10	2	dry		
057-18.2	Cove Rock	4/11/10	1	wet		
057-18.2	Cove Rock	5/5/10	1	wet		
057-18.2	Cove Rock	6/9/10	1	wet		
057-18.2	Cove Rock	7/7/10	17	dry		
057-18.2	Cove Rock	7/26/10	1	wet	3	NA
057-18.2	Cove Rock	8/4/10	1	dry		
057-18.2	Cove Rock	8/19/10	17	dry		
057-18.2	Cove Rock	8/25/10	2	wet		
057-18.2	Cove Rock	9/13/10	1	dry		
057-18.2	Cove Rock	9/21/10	12	dry		
057-18.2	Cove Rock	9/29/10	3	wet		
057-18.2	Cove Rock	10/3/10	21	wet		
057-18.2	Cove Rock	11/2/10	1	dry		
057-18.2	Cove Rock	11/18/10	24	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-18.2	Cove Rock	3/15/11	1	dry	3	NA
057-18.2	Cove Rock	4/25/11	6	wet		
057-18.2	Cove Rock	5/9/11	1	dry		
057-18.2	Cove Rock	5/23/11	7	wet		
057-18.2	Cove Rock	6/8/11	1	dry		
057-18.2	Cove Rock	6/22/11	1	wet		
057-18.2	Cove Rock	6/29/11	2	wet		
057-18.2	Cove Rock	7/11/11	2	dry		
057-18.2	Cove Rock	7/19/11	81	dry		
057-18.2	Cove Rock	7/25/11	2	dry		
057-18.2	Cove Rock	8/3/11	4	dry		
057-18.2	Cove Rock	8/10/11	14	dry		
057-18.2	Cove Rock	8/17/11	4	dry		
057-18.2	Cove Rock	8/22/11	1	dry		
057-18.2	Cove Rock	9/12/11	1	dry		
057-18.2	Cove Rock	9/19/11	1	dry		
057-19.0	Greenwich Cove	1/2/00	4	dry	3	NA
057-19.0	Greenwich Cove	2/8/00	2	dry		
057-19.0	Greenwich Cove	2/16/00	2	wet		
057-19.0	Greenwich Cove	4/16/00	2	wet		
057-19.0	Greenwich Cove	5/7/00	2	wet		
057-19.0	Greenwich Cove	10/25/00	2	dry		
057-19.0	Greenwich Cove	11/12/00	28	wet		
057-19.0	Greenwich Cove	11/20/00	2	wet		
057-19.0	Greenwich Cove	12/5/00	4	dry		
057-19.0	Greenwich Cove	2/20/01	2	dry	2	NA
057-19.0	Greenwich Cove	3/25/01	2	wet		
057-19.0	Greenwich Cove	4/5/01	2	dry		
057-19.0	Greenwich Cove	4/17/01	2	dry		
057-19.0	Greenwich Cove	11/7/01	4	dry		
057-19.0	Greenwich Cove	11/25/01	4	wet		
057-19.0	Greenwich Cove	12/2/01	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-19.0	Greenwich Cove	1/6/02	6	dry	3	NA
057-19.0	Greenwich Cove	1/27/02	2	dry		
057-19.0	Greenwich Cove	3/17/02	2	dry		
057-19.0	Greenwich Cove	3/31/02	2	dry		
057-19.0	Greenwich Cove	4/21/02	4	wet		
057-19.0	Greenwich Cove	5/12/02	2	wet		
057-19.0	Greenwich Cove	10/20/02	4	dry		
057-19.0	Greenwich Cove	11/3/02	2	dry		
057-19.0	Greenwich Cove	12/16/02	6	wet		
057-19.0	Greenwich Cove	1/13/03	2	dry	4	7
057-19.0	Greenwich Cove	2/24/03	50	wet		
057-19.0	Greenwich Cove	3/26/03	2	wet		
057-19.0	Greenwich Cove	4/13/03	2	wet		
057-19.0	Greenwich Cove	4/30/03	2	dry		
057-19.0	Greenwich Cove	11/3/03	8	dry		
057-19.0	Greenwich Cove	1/6/04	6	wet	4	1
057-19.0	Greenwich Cove	3/15/04	2	dry		
057-19.0	Greenwich Cove	4/7/04	2	dry		
057-19.0	Greenwich Cove	4/29/04	2	dry		
057-19.0	Greenwich Cove	6/16/04	2	dry		
057-19.0	Greenwich Cove	6/20/04	2	dry		
057-19.0	Greenwich Cove	10/25/04	22	dry		
057-19.0	Greenwich Cove	11/7/04	11	wet		
057-19.0	Greenwich Cove	12/8/04	36	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-19.0	Greenwich Cove	2/2/05	1	dry		
057-19.0	Greenwich Cove	4/6/05	1	dry		
057-19.0	Greenwich Cove	5/18/05	1	dry		
057-19.0	Greenwich Cove	6/1/05	1	dry		
057-19.0	Greenwich Cove	8/3/05	1	dry	2	1
057-19.0	Greenwich Cove	10/4/05	1	dry		
057-19.0	Greenwich Cove	10/24/05	45	wet		
057-19.0	Greenwich Cove	10/31/05	1	dry		
057-19.0	Greenwich Cove	11/14/05	1	dry		
057-19.0	Greenwich Cove	1/25/06	1	wet		
057-19.0	Greenwich Cove	2/22/06	2	wet		
057-19.0	Greenwich Cove	3/22/06	1	dry		
057-19.0	Greenwich Cove	5/24/06	1	dry		
057-19.0	Greenwich Cove	6/12/06	1	dry		
057-19.0	Greenwich Cove	7/10/06	1	dry	2	NA
057-19.0	Greenwich Cove	9/19/06	1	dry		
057-19.0	Greenwich Cove	11/1/06	1	dry		
057-19.0	Greenwich Cove	11/15/06	44	dry		
057-19.0	Greenwich Cove	11/20/06	2	dry		
057-19.0	Greenwich Cove	12/17/06	1	dry		
057-19.0	Greenwich Cove	1/29/07	1	dry		
057-19.0	Greenwich Cove	3/13/07	1	wet		
057-19.0	Greenwich Cove	3/27/07	1	wet		
057-19.0	Greenwich Cove	4/23/07	3	dry		
057-19.0	Greenwich Cove	5/23/07	2	dry		
057-19.0	Greenwich Cove	6/12/07	15	wet	2	NA
057-19.0	Greenwich Cove	9/23/07	1	dry		
057-19.0	Greenwich Cove	10/22/07	4	wet		
057-19.0	Greenwich Cove	11/5/07	1	dry		
057-19.0	Greenwich Cove	12/6/07	1	dry		
057-19.0	Greenwich Cove	12/10/07	5	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-19.0	Greenwich Cove	1/8/08	1	dry	2	3
057-19.0	Greenwich Cove	3/3/08	1	dry		
057-19.0	Greenwich Cove	4/23/08	1	dry		
057-19.0	Greenwich Cove	4/30/08	1	wet		
057-19.0	Greenwich Cove	10/27/08	68	wet		
057-19.0	Greenwich Cove	11/2/08	1	dry		
057-19.0	Greenwich Cove	11/24/08	1	dry		
057-19.0	Greenwich Cove	12/29/08	2	dry		
057-19.0	Greenwich Cove	2/9/09	1	dry	3	NA
057-19.0	Greenwich Cove	3/10/09	1	wet		
057-19.0	Greenwich Cove	4/22/09	2	wet		
057-19.0	Greenwich Cove	5/11/09	1	dry		
057-19.0	Greenwich Cove	10/5/09	1	wet		
057-19.0	Greenwich Cove	11/3/09	7	dry		
057-19.0	Greenwich Cove	11/23/09	13	dry		
057-19.0	Greenwich Cove	12/1/09	1	wet		
057-19.0	Greenwich Cove	12/14/09	81	wet		
057-19.0	Greenwich Cove	12/21/09	1	dry		
057-19.0	Greenwich Cove	12/28/09	7	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-19.0	Greenwich Cove	1/19/10	1	wet	2	NA
057-19.0	Greenwich Cove	1/27/10	1	wet		
057-19.0	Greenwich Cove	2/22/10	2	dry		
057-19.0	Greenwich Cove	3/2/10	1	wet		
057-19.0	Greenwich Cove	4/4/10	13	dry		
057-19.0	Greenwich Cove	4/11/10	1	wet		
057-19.0	Greenwich Cove	5/5/10	5	wet		
057-19.0	Greenwich Cove	6/9/10	1	wet		
057-19.0	Greenwich Cove	7/7/10	1	dry		
057-19.0	Greenwich Cove	7/26/10	1	wet		
057-19.0	Greenwich Cove	8/4/10	1	dry		
057-19.0	Greenwich Cove	8/19/10	1	dry		
057-19.0	Greenwich Cove	8/25/10	4	wet		
057-19.0	Greenwich Cove	9/13/10	35	dry		
057-19.0	Greenwich Cove	9/20/10	1	dry		
057-19.0	Greenwich Cove	9/21/10	1	dry		
057-19.0	Greenwich Cove	9/29/10	8	wet		
057-19.0	Greenwich Cove	10/3/10	21	wet		
057-19.0	Greenwich Cove	11/2/10	2	dry		
057-19.0	Greenwich Cove	11/18/10	12	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-19.0	Greenwich Cove	3/15/11	1	dry	**13* (NA)**	9
057-19.0	Greenwich Cove	4/25/11	26	wet		
057-19.0	Greenwich Cove	5/9/11	12	dry		
057-19.0	Greenwich Cove	5/23/11	190	wet		
057-19.0	Greenwich Cove	6/8/11	11	dry		
057-19.0	Greenwich Cove	6/22/11	2	wet		
057-19.0	Greenwich Cove	6/29/11	3	wet		
057-19.0	Greenwich Cove	7/11/11	4	dry		
057-19.0	Greenwich Cove	7/19/11	81	dry		
057-19.0	Greenwich Cove	7/25/11	9	dry		
057-19.0	Greenwich Cove	8/3/11	26	dry		
057-19.0	Greenwich Cove	8/10/11	126	dry		
057-19.0	Greenwich Cove	8/17/11	10	dry		
057-19.0	Greenwich Cove	8/22/11	21	dry		
057-19.0	Greenwich Cove	9/12/11	10	dry		
057-19.0	Greenwich Cove	9/19/11	12	dry		
057-19.1	N. Greenwich Cove	1/2/00	2	dry	3	NA
057-19.1	N. Greenwich Cove	2/8/00	2	dry		
057-19.1	N. Greenwich Cove	2/16/00	2	wet		
057-19.1	N. Greenwich Cove	4/16/00	6	wet		
057-19.1	N. Greenwich Cove	5/7/00	2	wet		
057-19.1	N. Greenwich Cove	10/25/00	2	dry		
057-19.1	N. Greenwich Cove	11/12/00	22	wet		
057-19.1	N. Greenwich Cove	11/20/00	2	wet		
057-19.1	N. Greenwich Cove	12/5/00	2	dry		
057-19.1	N. Greenwich Cove	3/25/01	2	wet	2	NA
057-19.1	N. Greenwich Cove	4/5/01	2	dry		
057-19.1	N. Greenwich Cove	4/17/01	2	dry		
057-19.1	N. Greenwich Cove	11/7/01	2	dry		
057-19.1	N. Greenwich Cove	11/25/01	4	wet		
057-19.1	N. Greenwich Cove	12/2/01	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-19.1	N. Greenwich Cove	1/6/02	11	dry	3	NA
057-19.1	N. Greenwich Cove	1/27/02	2	dry		
057-19.1	N. Greenwich Cove	3/17/02	2	dry		
057-19.1	N. Greenwich Cove	3/31/02	2	dry		
057-19.1	N. Greenwich Cove	4/21/02	2	wet		
057-19.1	N. Greenwich Cove	5/12/02	2	wet		
057-19.1	N. Greenwich Cove	10/20/02	8	dry		
057-19.1	N. Greenwich Cove	11/3/02	2	dry		
057-19.1	N. Greenwich Cove	12/16/02	6	wet		
057-19.1	N. Greenwich Cove	2/24/03	51	wet	4	7
057-19.1	N. Greenwich Cove	3/26/03	2	wet		
057-19.1	N. Greenwich Cove	4/13/03	2	wet		
057-19.1	N. Greenwich Cove	4/30/03	2	dry		
057-19.1	N. Greenwich Cove	9/30/03	4	wet		
057-19.1	N. Greenwich Cove	11/3/03	8	dry		
057-19.1	N. Greenwich Cove	1/6/04	2	wet	8	**26**
057-19.1	N. Greenwich Cove	4/7/04	2	dry		
057-19.1	N. Greenwich Cove	4/29/04	2	dry		
057-19.1	N. Greenwich Cove	6/16/04	2	dry		
057-19.1	N. Greenwich Cove	6/20/04	2	dry		
057-19.1	N. Greenwich Cove	7/7/04	4	wet		
057-19.1	N. Greenwich Cove	7/26/04	28	wet		
057-19.1	N. Greenwich Cove	8/17/04	51	wet		
057-19.1	N. Greenwich Cove	9/12/04	51	wet		
057-19.1	N. Greenwich Cove	11/7/04	51	wet		
057-19.1	N. Greenwich Cove	12/8/04	51	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-19.1	N. Greenwich Cove	4/6/05	1	dry	4	4
057-19.1	N. Greenwich Cove	5/18/05	3	dry		
057-19.1	N. Greenwich Cove	8/3/05	1	dry		
057-19.1	N. Greenwich Cove	10/4/05	1	dry		
057-19.1	N. Greenwich Cove	10/24/05	57	wet		
057-19.1	N. Greenwich Cove	10/31/05	3	dry		
057-19.1	N. Greenwich Cove	11/14/05	19	dry		
057-19.1	N. Greenwich Cove	1/25/06	1	wet	3	7
057-19.1	N. Greenwich Cove	7/10/06	1	dry		
057-19.1	N. Greenwich Cove	9/19/06	1	dry		
057-19.1	N. Greenwich Cove	11/1/06	34	dry		
057-19.1	N. Greenwich Cove	11/20/06	16	dry		
057-19.1	N. Greenwich Cove	12/17/06	3	dry		
057-19.1	N. Greenwich Cove	1/29/07	1	dry	6	NA
057-19.1	N. Greenwich Cove	3/13/07	3	wet		
057-19.1	N. Greenwich Cove	3/27/07	2	wet		
057-19.1	N. Greenwich Cove	4/23/07	2	dry		
057-19.1	N. Greenwich Cove	5/23/07	3	dry		
057-19.1	N. Greenwich Cove	6/12/07	37	wet		
057-19.1	N. Greenwich Cove	9/23/07	18	dry		
057-19.1	N. Greenwich Cove	10/22/07	27	wet		
057-19.1	N. Greenwich Cove	11/5/07	7	dry		
057-19.1	N. Greenwich Cove	12/6/07	4	dry		
057-19.1	N. Greenwich Cove	12/10/07	13	wet		
057-19.1	N. Greenwich Cove	1/8/08	1	dry	4	15
057-19.1	N. Greenwich Cove	3/3/08	1	dry		
057-19.1	N. Greenwich Cove	4/23/08	1	dry		
057-19.1	N. Greenwich Cove	4/30/08	52	wet		
057-19.1	N. Greenwich Cove	10/27/08	81	wet		
057-19.1	N. Greenwich Cove	11/2/08	2	dry		
057-19.1	N. Greenwich Cove	11/24/08	2	dry		
057-19.1	N. Greenwich Cove	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-19.1	N. Greenwich Cove	2/9/09	1	dry	7	17
057-19.1	N. Greenwich Cove	3/10/09	1	wet		
057-19.1	N. Greenwich Cove	4/22/09	9	wet		
057-19.1	N. Greenwich Cove	5/11/09	2	dry		
057-19.1	N. Greenwich Cove	10/5/09	9	wet		
057-19.1	N. Greenwich Cove	11/3/09	10	dry		
057-19.1	N. Greenwich Cove	11/23/09	34	dry		
057-19.1	N. Greenwich Cove	12/1/09	39	wet		
057-19.1	N. Greenwich Cove	12/14/09	51	wet		
057-19.1	N. Greenwich Cove	12/21/09	1	dry		
057-19.1	N. Greenwich Cove	12/28/09	9	wet		
057-19.1	N. Greenwich Cove	1/19/10	1	wet	3	8
057-19.1	N. Greenwich Cove	1/27/10	6	wet		
057-19.1	N. Greenwich Cove	2/22/10	2	dry		
057-19.1	N. Greenwich Cove	3/2/10	1	wet		
057-19.1	N. Greenwich Cove	4/4/10	4	dry		
057-19.1	N. Greenwich Cove	4/11/10	1	wet		
057-19.1	N. Greenwich Cove	5/5/10	6	wet		
057-19.1	N. Greenwich Cove	6/9/10	1	wet		
057-19.1	N. Greenwich Cove	7/7/10	1	dry		
057-19.1	N. Greenwich Cove	7/26/10	30	wet		
057-19.1	N. Greenwich Cove	8/19/10	2	dry		
057-19.1	N. Greenwich Cove	9/20/10	2	dry		
057-19.1	N. Greenwich Cove	9/21/10	1	dry		
057-19.1	N. Greenwich Cove	9/29/10	7	wet		
057-19.1	N. Greenwich Cove	10/3/10	78	wet		
057-19.1	N. Greenwich Cove	11/2/10	1	dry		
057-19.1	N. Greenwich Cove	11/18/10	32	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-19.1	N. Greenwich Cove	3/15/11	1	dry	9	15
057-19.1	N. Greenwich Cove	6/22/11	1	wet		
057-19.1	N. Greenwich Cove	6/29/11	32	wet		
057-19.1	N. Greenwich Cove	7/11/11	5	dry		
057-19.1	N. Greenwich Cove	7/19/11	81	dry		
057-19.1	N. Greenwich Cove	7/25/11	9	dry		
057-19.1	N. Greenwich Cove	8/3/11	23	dry		
057-19.1	N. Greenwich Cove	8/10/11	156	dry		
057-19.1	N. Greenwich Cove	8/17/11	26	dry		
057-19.1	N. Greenwich Cove	8/22/11	27	dry		
057-19.1	N. Greenwich Cove	9/12/11	1	dry		
057-19.1	N. Greenwich Cove	9/19/11	1	dry		
057-22.0	Finch Rock	1/2/00	6	dry	3	NA
057-22.0	Finch Rock	2/8/00	2	dry		
057-22.0	Finch Rock	2/16/00	2	wet		
057-22.0	Finch Rock	4/16/00	2	wet		
057-22.0	Finch Rock	5/7/00	2	wet		
057-22.0	Finch Rock	9/13/00	4	wet		
057-22.0	Finch Rock	10/25/00	2	dry		
057-22.0	Finch Rock	11/12/00	28	wet		
057-22.0	Finch Rock	11/20/00	6	wet		
057-22.0	Finch Rock	12/5/00	4	dry		
057-22.0	Finch Rock	2/20/01	2	dry	3	NA
057-22.0	Finch Rock	3/25/01	6	wet		
057-22.0	Finch Rock	4/5/01	4	dry		
057-22.0	Finch Rock	4/17/01	2	dry		
057-22.0	Finch Rock	7/12/01	18	wet		
057-22.0	Finch Rock	11/7/01	2	dry		
057-22.0	Finch Rock	11/25/01	2	wet		
057-22.0	Finch Rock	12/2/01	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.0	Finch Rock	1/6/02	6	dry	4	NA
057-22.0	Finch Rock	1/27/02	2	dry		
057-22.0	Finch Rock	3/17/02	2	dry		
057-22.0	Finch Rock	3/31/02	2	dry		
057-22.0	Finch Rock	4/21/02	2	wet		
057-22.0	Finch Rock	5/12/02	2	wet		
057-22.0	Finch Rock	6/9/02	11	wet		
057-22.0	Finch Rock	6/16/02	11	wet		
057-22.0	Finch Rock	6/23/02	4	dry		
057-22.0	Finch Rock	6/30/02	11	dry		
057-22.0	Finch Rock	8/4/02	2	wet		
057-22.0	Finch Rock	8/18/02	36	wet		
057-22.0	Finch Rock	9/8/02	2	dry		
057-22.0	Finch Rock	9/29/02	6	wet		
057-22.0	Finch Rock	10/20/02	14	dry		
057-22.0	Finch Rock	11/3/02	2	dry		
057-22.0	Finch Rock	12/16/02	10†	wet		
057-22.0	Finch Rock	1/13/03	4	dry	6	NA
057-22.0	Finch Rock	2/24/03	18	wet		
057-22.0	Finch Rock	3/11/03	2	wet		
057-22.0	Finch Rock	3/26/03	2	wet		
057-22.0	Finch Rock	4/13/03	2	wet		
057-22.0	Finch Rock	4/30/03	2	dry		
057-22.0	Finch Rock	5/28/03	11	wet		
057-22.0	Finch Rock	6/8/03	28	wet		
057-22.0	Finch Rock	6/23/03	28	wet		
057-22.0	Finch Rock	9/24/03	22	wet		
057-22.0	Finch Rock	11/3/03	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.0	Finch Rock	1/6/04	6	wet	3	1
057-22.0	Finch Rock	4/7/04	2	dry		
057-22.0	Finch Rock	4/29/04	2	dry		
057-22.0	Finch Rock	6/16/04	2	dry		
057-22.0	Finch Rock	6/20/04	2	dry		
057-22.0	Finch Rock	7/26/04	4	wet		
057-22.0	Finch Rock	10/25/04	51	dry		
057-22.0	Finch Rock	11/7/04	6	wet		
057-22.0	Finch Rock	12/8/04	2	wet		
057-22.0	Finch Rock	2/2/05	1	dry	1	NA
057-22.0	Finch Rock	4/6/05	1	dry		
057-22.0	Finch Rock	5/18/05	1	dry		
057-22.0	Finch Rock	6/1/05	1	dry		
057-22.0	Finch Rock	8/3/05	1	dry		
057-22.0	Finch Rock	10/4/05	1	dry		
057-22.0	Finch Rock	10/24/05	8	wet		
057-22.0	Finch Rock	10/31/05	2	dry		
057-22.0	Finch Rock	11/14/05	1	dry		
057-22.0	Finch Rock	1/25/06	6	wet	1	NA
057-22.0	Finch Rock	2/22/06	1	wet		
057-22.0	Finch Rock	3/22/06	1	dry		
057-22.0	Finch Rock	5/24/06	1	dry		
057-22.0	Finch Rock	6/12/06	1	dry		
057-22.0	Finch Rock	7/10/06	5	dry		
057-22.0	Finch Rock	9/19/06	1	dry		
057-22.0	Finch Rock	11/1/06	1	dry		
057-22.0	Finch Rock	11/15/06	1	dry		
057-22.0	Finch Rock	11/20/06	2	dry		
057-22.0	Finch Rock	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-22.0	Finch Rock	1/29/07	1	dry	2	NA
057-22.0	Finch Rock	3/13/07	1	wet		
057-22.0	Finch Rock	3/27/07	1	wet		
057-22.0	Finch Rock	4/23/07	1	dry		
057-22.0	Finch Rock	5/23/07	1	dry		
057-22.0	Finch Rock	6/12/07	4	wet		
057-22.0	Finch Rock	7/8/07	5	dry		
057-22.0	Finch Rock	7/31/07	1	dry		
057-22.0	Finch Rock	8/28/07	4	dry		
057-22.0	Finch Rock	9/23/07	1	dry		
057-22.0	Finch Rock	10/22/07	1	wet		
057-22.0	Finch Rock	10/31/07	3	dry		
057-22.0	Finch Rock	11/5/07	1	dry		
057-22.0	Finch Rock	12/6/07	6	dry		
057-22.0	Finch Rock	12/10/07	2	wet		
057-22.0	Finch Rock	1/8/08	1	dry	2	NA
057-22.0	Finch Rock	3/3/08	1	dry		
057-22.0	Finch Rock	4/23/08	1	dry		
057-22.0	Finch Rock	4/30/08	1	wet		
057-22.0	Finch Rock	5/14/08	3	dry		
057-22.0	Finch Rock	5/20/08	1	wet		
057-22.0	Finch Rock	6/18/08	1	wet		
057-22.0	Finch Rock	7/27/08	8	dry		
057-22.0	Finch Rock	8/4/08	1	wet		
057-22.0	Finch Rock	8/26/08	4	dry		
057-22.0	Finch Rock	9/10/08	12	wet		
057-22.0	Finch Rock	9/17/08	1	dry		
057-22.0	Finch Rock	10/7/08	1	wet		
057-22.0	Finch Rock	10/27/08	16	wet		
057-22.0	Finch Rock	11/2/08	1	dry		
057-22.0	Finch Rock	11/24/08	1	dry		
057-22.0	Finch Rock	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.0	Finch Rock	2/9/09	1	dry		
057-22.0	Finch Rock	3/10/09	1	wet		
057-22.0	Finch Rock	4/22/09	1	wet		
057-22.0	Finch Rock	5/11/09	1	dry		
057-22.0	Finch Rock	6/8/09	2	dry		
057-22.0	Finch Rock	6/10/09	8	wet		
057-22.0	Finch Rock	6/22/09	7	wet		
057-22.0	Finch Rock	7/20/09	1	dry		
057-22.0	Finch Rock	8/3/09	3	dry	2	NA
057-22.0	Finch Rock	8/24/09	3	wet		
057-22.0	Finch Rock	10/5/09	3	wet		
057-22.0	Finch Rock	11/3/09	4	dry		
057-22.0	Finch Rock	11/23/09	1	dry		
057-22.0	Finch Rock	12/1/09	1	wet		
057-22.0	Finch Rock	12/14/09	17	wet		
057-22.0	Finch Rock	12/21/09	1	dry		
057-22.0	Finch Rock	12/28/09	12	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.0	Finch Rock	1/19/10	2	wet	2	NA
057-22.0	Finch Rock	1/27/10	2	wet		
057-22.0	Finch Rock	2/22/10	1	dry		
057-22.0	Finch Rock	3/2/10	1	wet		
057-22.0	Finch Rock	4/4/10	2	dry		
057-22.0	Finch Rock	4/11/10	1	wet		
057-22.0	Finch Rock	5/5/10	3	wet		
057-22.0	Finch Rock	6/9/10	1	wet		
057-22.0	Finch Rock	7/7/10	1	dry		
057-22.0	Finch Rock	7/26/10	1	wet		
057-22.0	Finch Rock	8/4/10	1	dry		
057-22.0	Finch Rock	8/19/10	1	dry		
057-22.0	Finch Rock	8/25/10	3	wet		
057-22.0	Finch Rock	9/13/10	3	dry		
057-22.0	Finch Rock	9/20/10	1	dry		
057-22.0	Finch Rock	9/21/10	1	dry		
057-22.0	Finch Rock	9/29/10	2	wet		
057-22.0	Finch Rock	10/3/10	8	wet		
057-22.0	Finch Rock	11/2/10	2	dry		
057-22.0	Finch Rock	11/18/10	17	wet		
057-22.0	Finch Rock	5/23/11	14	wet	NA	NA
057-23.0	N. "2GP"/"1GP"	1/2/00	2	dry	3	NA
057-23.0	N. "2GP"/"1GP"	2/8/00	2	dry		
057-23.0	N. "2GP"/"1GP"	2/16/00	2	wet		
057-23.0	N. "2GP"/"1GP"	4/16/00	2	wet		
057-23.0	N. "2GP"/"1GP"	5/7/00	2	wet		
057-23.0	N. "2GP"/"1GP"	10/25/00	4	dry		
057-23.0	N. "2GP"/"1GP"	11/12/00	18	wet		
057-23.0	N. "2GP"/"1GP"	11/20/00	2	wet		
057-23.0	N. "2GP"/"1GP"	12/5/00	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-23.0	N. "2GP"/"1GP"	2/20/01	2	dry	2	NA
057-23.0	N. "2GP"/"1GP"	3/25/01	2	wet		
057-23.0	N. "2GP"/"1GP"	4/5/01	2	dry		
057-23.0	N. "2GP"/"1GP"	4/17/01	2	dry		
057-23.0	N. "2GP"/"1GP"	11/7/01	2	dry		
057-23.0	N. "2GP"/"1GP"	11/25/01	2	wet		
057-23.0	N. "2GP"/"1GP"	12/2/01	2	dry		
057-23.0	N. "2GP"/"1GP"	1/6/02	2	dry	3	NA
057-23.0	N. "2GP"/"1GP"	1/27/02	2	dry		
057-23.0	N. "2GP"/"1GP"	3/17/02	2	dry		
057-23.0	N. "2GP"/"1GP"	3/31/02	2	dry		
057-23.0	N. "2GP"/"1GP"	4/21/02	2	wet		
057-23.0	N. "2GP"/"1GP"	5/12/02	4	wet		
057-23.0	N. "2GP"/"1GP"	10/20/02	8	dry		
057-23.0	N. "2GP"/"1GP"	11/3/02	2	dry		
057-23.0	N. "2GP"/"1GP"	12/16/02	14	wet		
057-23.0	N. "2GP"/"1GP"	1/13/03	2	dry	3	NA
057-23.0	N. "2GP"/"1GP"	2/24/03	14	wet		
057-23.0	N. "2GP"/"1GP"	3/11/03	2	wet		
057-23.0	N. "2GP"/"1GP"	3/26/03	2	wet		
057-23.0	N. "2GP"/"1GP"	4/13/03	2	wet		
057-23.0	N. "2GP"/"1GP"	4/30/03	2	dry		
057-23.0	N. "2GP"/"1GP"	11/3/03	6	dry		
057-23.0	N. "2GP"/"1GP"	1/6/04	2	wet	3	NA
057-23.0	N. "2GP"/"1GP"	3/15/04	2	dry		
057-23.0	N. "2GP"/"1GP"	4/7/04	2	dry		
057-23.0	N. "2GP"/"1GP"	4/29/04	2	dry		
057-23.0	N. "2GP"/"1GP"	6/16/04	6	dry		
057-23.0	N. "2GP"/"1GP"	6/20/04	2	dry		
057-23.0	N. "2GP"/"1GP"	10/25/04	6	dry		
057-23.0	N. "2GP"/"1GP"	11/7/04	11	wet		
057-23.0	N. "2GP"/"1GP"	12/8/04	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-23.0	N. "2GP"/"1GP"	2/2/05	1	dry		
057-23.0	N. "2GP"/"1GP"	4/6/05	1	dry		
057-23.0	N. "2GP"/"1GP"	5/18/05	2	dry		
057-23.0	N. "2GP"/"1GP"	6/1/05	1	dry		
057-23.0	N. "2GP"/"1GP"	8/3/05	1	dry	1	NA
057-23.0	N. "2GP"/"1GP"	10/4/05	1	dry		
057-23.0	N. "2GP"/"1GP"	10/24/05	11	wet		
057-23.0	N. "2GP"/"1GP"	10/31/05	1	dry		
057-23.0	N. "2GP"/"1GP"	11/14/05	1	dry		
057-23.0	N. "2GP"/"1GP"	1/25/06	1	wet		
057-23.0	N. "2GP"/"1GP"	2/22/06	1	wet		
057-23.0	N. "2GP"/"1GP"	3/22/06	1	dry		
057-23.0	N. "2GP"/"1GP"	5/24/06	1	dry		
057-23.0	N. "2GP"/"1GP"	6/12/06	2	dry		
057-23.0	N. "2GP"/"1GP"	7/10/06	2	dry	2	NA
057-23.0	N. "2GP"/"1GP"	9/19/06	2	dry		
057-23.0	N. "2GP"/"1GP"	11/1/06	4	dry		
057-23.0	N. "2GP"/"1GP"	11/15/06	9	dry		
057-23.0	N. "2GP"/"1GP"	11/20/06	3	dry		
057-23.0	N. "2GP"/"1GP"	12/17/06	1	dry		
057-23.0	N. "2GP"/"1GP"	1/29/07	1	dry		
057-23.0	N. "2GP"/"1GP"	3/13/07	1	wet		
057-23.0	N. "2GP"/"1GP"	3/27/07	1	wet		
057-23.0	N. "2GP"/"1GP"	4/23/07	2	dry		
057-23.0	N. "2GP"/"1GP"	5/23/07	1	dry		
057-23.0	N. "2GP"/"1GP"	6/12/07	3	wet	2	NA
057-23.0	N. "2GP"/"1GP"	9/23/07	4	dry		
057-23.0	N. "2GP"/"1GP"	10/22/07	5	wet		
057-23.0	N. "2GP"/"1GP"	10/31/07	2	dry		
057-23.0	N. "2GP"/"1GP"	12/6/07	5	dry		
057-23.0	N. "2GP"/"1GP"	12/10/07	5	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-23.0	N. "2GP"/"1GP"	1/8/08	1	dry	1	NA
057-23.0	N. "2GP"/"1GP"	3/3/08	1	dry		
057-23.0	N. "2GP"/"1GP"	4/23/08	1	dry		
057-23.0	N. "2GP"/"1GP"	4/30/08	1	wet		
057-23.0	N. "2GP"/"1GP"	10/27/08	12	wet		
057-23.0	N. "2GP"/"1GP"	11/2/08	1	dry		
057-23.0	N. "2GP"/"1GP"	11/24/08	1	dry		
057-23.0	N. "2GP"/"1GP"	12/29/08	2	dry		
057-23.0	N. "2GP"/"1GP"	2/9/09	1	dry	2	NA
057-23.0	N. "2GP"/"1GP"	3/10/09	1	wet		
057-23.0	N. "2GP"/"1GP"	4/22/09	1	wet		
057-23.0	N. "2GP"/"1GP"	5/11/09	1	dry		
057-23.0	N. "2GP"/"1GP"	10/5/09	5	wet		
057-23.0	N. "2GP"/"1GP"	11/3/09	7	dry		
057-23.0	N. "2GP"/"1GP"	11/23/09	1	dry		
057-23.0	N. "2GP"/"1GP"	12/1/09	1	wet		
057-23.0	N. "2GP"/"1GP"	12/14/09	30	wet		
057-23.0	N. "2GP"/"1GP"	12/21/09	1	dry		
057-23.0	N. "2GP"/"1GP"	12/28/09	5	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-23.0	N. "2GP"/"1GP"	1/19/10	1	wet	2	NA
057-23.0	N. "2GP"/"1GP"	1/27/10	2	wet		
057-23.0	N. "2GP"/"1GP"	2/22/10	1	dry		
057-23.0	N. "2GP"/"1GP"	3/2/10	1	wet		
057-23.0	N. "2GP"/"1GP"	4/4/10	4	dry		
057-23.0	N. "2GP"/"1GP"	4/11/10	1	wet		
057-23.0	N. "2GP"/"1GP"	5/5/10	7	wet		
057-23.0	N. "2GP"/"1GP"	6/9/10	1	wet		
057-23.0	N. "2GP"/"1GP"	7/7/10	1	dry		
057-23.0	N. "2GP"/"1GP"	7/26/10	4	wet		
057-23.0	N. "2GP"/"1GP"	8/4/10	1	dry		
057-23.0	N. "2GP"/"1GP"	8/19/10	2	dry		
057-23.0	N. "2GP"/"1GP"	8/25/10	1	wet		
057-23.0	N. "2GP"/"1GP"	9/13/10	2	dry		
057-23.0	N. "2GP"/"1GP"	9/20/10	1	dry		
057-23.0	N. "2GP"/"1GP"	9/21/10	2	dry		
057-23.0	N. "2GP"/"1GP"	9/29/10	2	wet		
057-23.0	N. "2GP"/"1GP"	10/3/10	9	wet		
057-23.0	N. "2GP"/"1GP"	11/2/10	1	dry		
057-23.0	N. "2GP"/"1GP"	11/18/10	15	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-23.0	N. "2GP"/"1GP"	3/15/11	1	dry	4	NA
057-23.0	N. "2GP"/"1GP"	4/25/11	3	wet		
057-23.0	N. "2GP"/"1GP"	5/9/11	1	dry		
057-23.0	N. "2GP"/"1GP"	5/23/11	7	wet		
057-23.0	N. "2GP"/"1GP"	6/8/11	6	dry		
057-23.0	N. "2GP"/"1GP"	6/29/11	13	wet		
057-23.0	N. "2GP"/"1GP"	7/11/11	7	dry		
057-23.0	N. "2GP"/"1GP"	7/19/11	81	dry		
057-23.0	N. "2GP"/"1GP"	7/25/11	1	dry		
057-23.0	N. "2GP"/"1GP"	8/3/11	4	dry		
057-23.0	N. "2GP"/"1GP"	8/10/11	30	dry		
057-23.0	N. "2GP"/"1GP"	8/17/11	3	dry		
057-23.0	N. "2GP"/"1GP"	8/22/11	3	dry		
057-23.0	N. "2GP"/"1GP"	9/12/11	2	dry		
057-23.0	N. "2GP"/"1GP"	9/19/11	3	dry		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 5: LIS WB Shore – Greenwich Cove (CT-W2_021)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-18.0	Gr. Pt. Dock	2000-2011	49	79	3	4	2
057-18.1	E. Greenwich Island	2000-2011	48	76	2	3	2
057-18.2	Cove Rock	2000-2011	67	86	3	4	2
057-19.0	Greenwich Cove	2000-2011	47	79	3	4	2
057-19.1	N. Greenwich Cove	2000-2011	48	65	4	7	3
057-22.0	Finch Rock	2000-2011	66	80	3	4	2
057-23.0	N. "2GP"/"1GP"	2000-2011	47	79	2	3	2

Shaded cells indicate an exceedance of water quality criteria

Table 18: Segment 6: LIS WB Shore – Cos Cob Harbor Bacteria Data

Waterbody ID: CT-W2_022

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **18%**

90% of samples less than: **29%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	1/2/00	8	dry		
057-20.0	Cos Cob N. C"7"	1/6/00	6	wet		
057-20.0	Cos Cob N. C"7"	2/8/00	2	dry		
057-20.0	Cos Cob N. C"7"	2/16/00	2	wet		
057-20.0	Cos Cob N. C"7"	4/16/00	4	wet		
057-20.0	Cos Cob N. C"7"	5/7/00	8	wet	9	17
057-20.0	Cos Cob N. C"7"	7/4/00	8	wet		
057-20.0	Cos Cob N. C"7"	8/7/00	51	dry		
057-20.0	Cos Cob N. C"7"	9/13/00	51	wet		
057-20.0	Cos Cob N. C"7"	11/12/00	51	wet		
057-20.0	Cos Cob N. C"7"	12/5/00	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	3/15/01	4	dry	7	11
057-20.0	Cos Cob N. C"7"	3/25/01	2	wet		
057-20.0	Cos Cob N. C"7"	4/5/01	2	dry		
057-20.0	Cos Cob N. C"7"	4/14/01	9	dry		
057-20.0	Cos Cob N. C"7"	4/17/01	11	dry		
057-20.0	Cos Cob N. C"7"	7/12/01	36	wet		
057-20.0	Cos Cob N. C"7"	8/14/01	51	wet		
057-20.0	Cos Cob N. C"7"	8/19/01	4	dry		
057-20.0	Cos Cob N. C"7"	9/9/01	4	dry		
057-20.0	Cos Cob N. C"7"	9/16/01	14	wet		
057-20.0	Cos Cob N. C"7"	9/23/01	51	wet		
057-20.0	Cos Cob N. C"7"	10/2/01	28	wet		
057-20.0	Cos Cob N. C"7"	11/25/01	2	wet		
057-20.0	Cos Cob N. C"7"	12/2/01	2	dry		
057-20.0	Cos Cob N. C"7"	1/6/02	6	dry	6	8
057-20.0	Cos Cob N. C"7"	1/27/02	2	dry		
057-20.0	Cos Cob N. C"7"	3/17/02	2	dry		
057-20.0	Cos Cob N. C"7"	3/31/02	2	dry		
057-20.0	Cos Cob N. C"7"	4/21/02	6	wet		
057-20.0	Cos Cob N. C"7"	5/12/02	2	wet		
057-20.0	Cos Cob N. C"7"	6/9/02	18	wet		
057-20.0	Cos Cob N. C"7"	6/16/02	51	wet		
057-20.0	Cos Cob N. C"7"	6/23/02	2	dry		
057-20.0	Cos Cob N. C"7"	6/30/02	18	dry		
057-20.0	Cos Cob N. C"7"	8/4/02	2	wet		
057-20.0	Cos Cob N. C"7"	8/18/02	51	wet		
057-20.0	Cos Cob N. C"7"	9/8/02	22	dry		
057-20.0	Cos Cob N. C"7"	9/29/02	8	wet		
057-20.0	Cos Cob N. C"7"	10/20/02	8	dry		
057-20.0	Cos Cob N. C"7"	11/3/02	2	dry		
057-20.0	Cos Cob N. C"7"	12/16/02	50	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	1/13/03	11	dry		
057-20.0	Cos Cob N. C"7"	2/24/03	50	wet		
057-20.0	Cos Cob N. C"7"	3/11/03	2	wet		
057-20.0	Cos Cob N. C"7"	3/26/03	2	wet		
057-20.0	Cos Cob N. C"7"	4/13/03	2	wet		
057-20.0	Cos Cob N. C"7"	4/30/03	2	dry		
057-20.0	Cos Cob N. C"7"	5/28/03	51	wet	10	28
057-20.0	Cos Cob N. C"7"	6/8/03	51	wet		
057-20.0	Cos Cob N. C"7"	6/23/03	51	wet		
057-20.0	Cos Cob N. C"7"	9/10/03	2	wet		
057-20.0	Cos Cob N. C"7"	9/24/03	51	wet		
057-20.0	Cos Cob N. C"7"	11/3/03	14	dry		
057-20.0	Cos Cob N. C"7"	12/22/03	14	dry		
057-20.0	Cos Cob N. C"7"	1/6/04	4	wet		
057-20.0	Cos Cob N. C"7"	3/15/04	2	dry		
057-20.0	Cos Cob N. C"7"	4/7/04	2	dry		
057-20.0	Cos Cob N. C"7"	4/29/04	2	dry		
057-20.0	Cos Cob N. C"7"	6/16/04	2	dry		
057-20.0	Cos Cob N. C"7"	6/20/04	2	dry		
057-20.0	Cos Cob N. C"7"	7/7/04	4	wet	5	NA
057-20.0	Cos Cob N. C"7"	7/26/04	18	wet		
057-20.0	Cos Cob N. C"7"	8/17/04	2	wet		
057-20.0	Cos Cob N. C"7"	9/12/04	51	wet		
057-20.0	Cos Cob N. C"7"	10/25/04	14	dry		
057-20.0	Cos Cob N. C"7"	11/7/04	22	wet		
057-20.0	Cos Cob N. C"7"	12/8/04	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	2/2/05	1	dry	2	NA
057-20.0	Cos Cob N. C"7"	4/6/05	1	dry		
057-20.0	Cos Cob N. C"7"	5/18/05	1	dry		
057-20.0	Cos Cob N. C"7"	6/1/05	1	dry		
057-20.0	Cos Cob N. C"7"	6/20/05	4	dry		
057-20.0	Cos Cob N. C"7"	7/5/05	2	dry		
057-20.0	Cos Cob N. C"7"	7/11/05	1	dry		
057-20.0	Cos Cob N. C"7"	8/3/05	1	dry		
057-20.0	Cos Cob N. C"7"	8/17/05	15	wet		
057-20.0	Cos Cob N. C"7"	9/19/05	1	dry		
057-20.0	Cos Cob N. C"7"	10/4/05	1	dry		
057-20.0	Cos Cob N. C"7"	10/24/05	12	wet		
057-20.0	Cos Cob N. C"7"	10/31/05	1	dry		
057-20.0	Cos Cob N. C"7"	11/14/05	2	dry		
057-20.0	Cos Cob N. C"7"	1/25/06	19	wet	5	NA
057-20.0	Cos Cob N. C"7"	2/22/06	5	wet		
057-20.0	Cos Cob N. C"7"	3/22/06	1	dry		
057-20.0	Cos Cob N. C"7"	5/24/06	7	dry		
057-20.0	Cos Cob N. C"7"	6/12/06	3	dry		
057-20.0	Cos Cob N. C"7"	7/10/06	2	dry		
057-20.0	Cos Cob N. C"7"	9/19/06	5	dry		
057-20.0	Cos Cob N. C"7"	11/1/06	28	dry		
057-20.0	Cos Cob N. C"7"	11/15/06	27	dry		
057-20.0	Cos Cob N. C"7"	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	1/29/07	4	dry		
057-20.0	Cos Cob N. C"7"	3/7/07	10	dry		
057-20.0	Cos Cob N. C"7"	3/13/07	1	wet		
057-20.0	Cos Cob N. C"7"	3/27/07	1	wet		
057-20.0	Cos Cob N. C"7"	4/23/07	1	dry		
057-20.0	Cos Cob N. C"7"	5/23/07	3	dry		
057-20.0	Cos Cob N. C"7"	6/12/07	12	wet		
057-20.0	Cos Cob N. C"7"	7/8/07	14	dry		
057-20.0	Cos Cob N. C"7"	7/31/07	2	dry	4	NA
057-20.0	Cos Cob N. C"7"	8/28/07	3	dry		
057-20.0	Cos Cob N. C"7"	9/23/07	13	dry		
057-20.0	Cos Cob N. C"7"	10/16/07	28	dry		
057-20.0	Cos Cob N. C"7"	10/22/07	6	wet		
057-20.0	Cos Cob N. C"7"	10/31/07	18	dry		
057-20.0	Cos Cob N. C"7"	11/5/07	2	dry		
057-20.0	Cos Cob N. C"7"	12/6/07	1	dry		
057-20.0	Cos Cob N. C"7"	12/10/07	13	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	1/8/08	1	dry	3	NA
057-20.0	Cos Cob N. C"7"	3/3/08	1	dry		
057-20.0	Cos Cob N. C"7"	4/23/08	4	dry		
057-20.0	Cos Cob N. C"7"	4/30/08	6	wet		
057-20.0	Cos Cob N. C"7"	5/14/08	2	dry		
057-20.0	Cos Cob N. C"7"	5/20/08	4	wet		
057-20.0	Cos Cob N. C"7"	5/29/08	16	wet		
057-20.0	Cos Cob N. C"7"	6/18/08	1	wet		
057-20.0	Cos Cob N. C"7"	6/30/08	10	wet		
057-20.0	Cos Cob N. C"7"	7/27/08	4	dry		
057-20.0	Cos Cob N. C"7"	8/4/08	1	wet		
057-20.0	Cos Cob N. C"7"	8/26/08	1	dry		
057-20.0	Cos Cob N. C"7"	9/10/08	25	wet		
057-20.0	Cos Cob N. C"7"	9/17/08	5	dry		
057-20.0	Cos Cob N. C"7"	10/7/08	3	wet		
057-20.0	Cos Cob N. C"7"	10/27/08	19	wet		
057-20.0	Cos Cob N. C"7"	11/24/08	1	dry		
057-20.0	Cos Cob N. C"7"	12/29/08	7	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	2/9/09	1	dry	5	10
057-20.0	Cos Cob N. C"7"	3/10/09	1	wet		
057-20.0	Cos Cob N. C"7"	4/22/09	15	wet		
057-20.0	Cos Cob N. C"7"	5/11/09	1	dry		
057-20.0	Cos Cob N. C"7"	6/8/09	1	dry		
057-20.0	Cos Cob N. C"7"	6/10/09	23	wet		
057-20.0	Cos Cob N. C"7"	6/22/09	41	wet		
057-20.0	Cos Cob N. C"7"	7/20/09	3	dry		
057-20.0	Cos Cob N. C"7"	8/3/09	2	dry		
057-20.0	Cos Cob N. C"7"	8/24/09	81	wet		
057-20.0	Cos Cob N. C"7"	9/1/09	6	dry		
057-20.0	Cos Cob N. C"7"	10/5/09	2	wet		
057-20.0	Cos Cob N. C"7"	11/3/09	8	wet		
057-20.0	Cos Cob N. C"7"	12/1/09	1	wet		
057-20.0	Cos Cob N. C"7"	12/14/09	33	wet		
057-20.0	Cos Cob N. C"7"	1/19/10	2	wet	4	NA
057-20.0	Cos Cob N. C"7"	1/27/10	5	wet		
057-20.0	Cos Cob N. C"7"	2/22/10	1	dry		
057-20.0	Cos Cob N. C"7"	3/2/10	1	wet		
057-20.0	Cos Cob N. C"7"	4/4/10	7	dry		
057-20.0	Cos Cob N. C"7"	4/11/10	10	wet		
057-20.0	Cos Cob N. C"7"	5/5/10	11	wet		
057-20.0	Cos Cob N. C"7"	6/9/10	1	wet		
057-20.0	Cos Cob N. C"7"	7/26/10	1	wet		
057-20.0	Cos Cob N. C"7"	8/25/10	6	wet		
057-20.0	Cos Cob N. C"7"	9/20/10	2	dry		
057-20.0	Cos Cob N. C"7"	9/21/10	1	dry		
057-20.0	Cos Cob N. C"7"	10/3/10	31	wet		
057-20.0	Cos Cob N. C"7"	11/18/10	21	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-20.0	Cos Cob N. C"7"	3/15/11	1	dry	10	NA
057-20.0	Cos Cob N. C"7"	4/25/11	28	wet		
057-20.0	Cos Cob N. C"7"	5/23/11	26	wet		
057-20.0	Cos Cob N. C"7"	6/8/11	7	dry		
057-20.0	Cos Cob N. C"7"	6/22/11	8	wet		
057-20.0	Cos Cob N. C"7"	7/11/11	4	dry		
057-20.0	Cos Cob N. C"7"	7/19/11	81	dry		
057-20.0	Cos Cob N. C"7"	7/25/11	6	dry		
057-20.0	Cos Cob N. C"7"	8/3/11	4	dry		
057-20.0	Cos Cob N. C"7"	8/10/11	20	dry		
057-20.0	Cos Cob N. C"7"	8/17/11	9	dry		
057-20.0	Cos Cob N. C"7"	9/12/11	21	dry		
057-20.0	Cos Cob N. C"7"	9/19/11	8	dry		
057-20.1	Cos Cob N"12" modified south	1/2/00	14	dry	8	13
057-20.1	Cos Cob N"12" modified south	1/6/00	18	wet		
057-20.1	Cos Cob N"12" modified south	2/8/00	2	dry		
057-20.1	Cos Cob N"12" modified south	2/16/00	2	wet		
057-20.1	Cos Cob N"12" modified south	4/12/00	50	dry		
057-20.1	Cos Cob N"12" modified south	4/16/00	2	wet		
057-20.1	Cos Cob N"12" modified south	4/18/00	6	wet		
057-20.1	Cos Cob N"12" modified south	4/27/00	2	dry		
057-20.1	Cos Cob N"12" modified south	5/7/00	8	wet		
057-20.1	Cos Cob N"12" modified south	7/4/00	8	wet		
057-20.1	Cos Cob N"12" modified south	8/7/00	51	dry		
057-20.1	Cos Cob N"12" modified south	11/12/00	51	wet		
057-20.1	Cos Cob N"12" modified south	12/5/00	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-20.1	Cos Cob N"12" modified south	3/25/01	6	wet		
057-20.1	Cos Cob N"12" modified south	4/5/01	2	dry		
057-20.1	Cos Cob N"12" modified south	4/14/01	41	dry		
057-20.1	Cos Cob N"12" modified south	6/20/01	51	wet		
057-20.1	Cos Cob N"12" modified south	7/12/01	50	wet		
057-20.1	Cos Cob N"12" modified south	8/14/01	51	wet		
057-20.1	Cos Cob N"12" modified south	8/19/01	11	dry	15	**29**
057-20.1	Cos Cob N"12" modified south	9/9/01	8	dry		
057-20.1	Cos Cob N"12" modified south	9/16/01	2	wet		
057-20.1	Cos Cob N"12" modified south	9/23/01	28	wet		
057-20.1	Cos Cob N"12" modified south	10/2/01	51	wet		
057-20.1	Cos Cob N"12" modified south	11/25/01	28	wet		
057-20.1	Cos Cob N"12" modified south	12/2/01	8	dry		
057-20.1	Cos Cob N"12" modified south	1/6/02	8	dry		
057-20.1	Cos Cob N"12" modified south	1/27/02	2	dry		
057-20.1	Cos Cob N"12" modified south	3/17/02	2	dry		
057-20.1	Cos Cob N"12" modified south	3/31/02	2	dry		
057-20.1	Cos Cob N"12" modified south	4/21/02	11	wet		
057-20.1	Cos Cob N"12" modified south	5/12/02	18	wet		
057-20.1	Cos Cob N"12" modified south	6/9/02	51	wet		
057-20.1	Cos Cob N"12" modified south	6/16/02	50	wet		
057-20.1	Cos Cob N"12" modified south	6/23/02	8	dry	11	19
057-20.1	Cos Cob N"12" modified south	6/30/02	28	dry		
057-20.1	Cos Cob N"12" modified south	8/4/02	18	wet		
057-20.1	Cos Cob N"12" modified south	8/18/02	51	wet		
057-20.1	Cos Cob N"12" modified south	9/8/02	6	dry		
057-20.1	Cos Cob N"12" modified south	9/29/02	36	wet		
057-20.1	Cos Cob N"12" modified south	10/20/02	14	dry		
057-20.1	Cos Cob N"12" modified south	11/3/02	2	dry		
057-20.1	Cos Cob N"12" modified south	12/16/02	36	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.1	Cos Cob N"12" modified south	1/13/03	8	dry	14	26
057-20.1	Cos Cob N"12" modified south	3/26/03	8	wet		
057-20.1	Cos Cob N"12" modified south	4/13/03	2	wet		
057-20.1	Cos Cob N"12" modified south	4/30/03	22	dry		
057-20.1	Cos Cob N"12" modified south	5/28/03	51	wet		
057-20.1	Cos Cob N"12" modified south	6/8/03	50	wet		
057-20.1	Cos Cob N"12" modified south	6/23/03	51	wet		
057-20.1	Cos Cob N"12" modified south	9/10/03	8	wet		
057-20.1	Cos Cob N"12" modified south	9/24/03	51	wet		
057-20.1	Cos Cob N"12" modified south	9/30/03	2	wet		
057-20.1	Cos Cob N"12" modified south	11/3/03	22	dry		
057-20.1	Cos Cob N"12" modified south	1/6/04	14	wet	12	15
057-20.1	Cos Cob N"12" modified south	4/7/04	2	dry		
057-20.1	Cos Cob N"12" modified south	4/29/04	22	dry		
057-20.1	Cos Cob N"12" modified south	6/16/04	8	dry		
057-20.1	Cos Cob N"12" modified south	6/20/04	4	dry		
057-20.1	Cos Cob N"12" modified south	8/17/04	36	wet		
057-20.1	Cos Cob N"12" modified south	9/12/04	51	wet		
057-20.1	Cos Cob N"12" modified south	11/7/04	18	wet		
057-20.1	Cos Cob N"12" modified south	4/6/05	1	dry	8	15
057-20.1	Cos Cob N"12" modified south	5/18/05	11	dry		
057-20.1	Cos Cob N"12" modified south	6/1/05	20	dry		
057-20.1	Cos Cob N"12" modified south	6/20/05	4	dry		
057-20.1	Cos Cob N"12" modified south	7/5/05	21	dry		
057-20.1	Cos Cob N"12" modified south	7/11/05	39	dry		
057-20.1	Cos Cob N"12" modified south	8/3/05	1	dry		
057-20.1	Cos Cob N"12" modified south	8/17/05	41	wet		
057-20.1	Cos Cob N"12" modified south	9/19/05	52	dry		
057-20.1	Cos Cob N"12" modified south	10/4/05	1	dry		
057-20.1	Cos Cob N"12" modified south	10/31/05	6	dry		
057-20.1	Cos Cob N"12" modified south	11/14/05	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.1	Cos Cob N"12" modified south	1/25/06	10	wet	8	NA
057-20.1	Cos Cob N"12" modified south	5/24/06	2	dry		
057-20.1	Cos Cob N"12" modified south	6/12/06	6	dry		
057-20.1	Cos Cob N"12" modified south	7/10/06	7	dry		
057-20.1	Cos Cob N"12" modified south	8/8/06	5	dry		
057-20.1	Cos Cob N"12" modified south	9/19/06	12	dry		
057-20.1	Cos Cob N"12" modified south	11/1/06	26	dry		
057-20.1	Cos Cob N"12" modified south	11/15/06	20	dry		
057-20.1	Cos Cob N"12" modified south	12/17/06	5	dry		
057-20.1	Cos Cob N"12" modified south	1/29/07	2	dry	7	25
057-20.1	Cos Cob N"12" modified south	3/7/07	10	dry		
057-20.1	Cos Cob N"12" modified south	3/13/07	1	wet		
057-20.1	Cos Cob N"12" modified south	3/27/07	1	wet		
057-20.1	Cos Cob N"12" modified south	4/23/07	3	dry		
057-20.1	Cos Cob N"12" modified south	5/23/07	6	dry		
057-20.1	Cos Cob N"12" modified south	6/12/07	33	wet		
057-20.1	Cos Cob N"12" modified south	7/8/07	38	dry		
057-20.1	Cos Cob N"12" modified south	7/31/07	1	dry		
057-20.1	Cos Cob N"12" modified south	8/28/07	1	dry		
057-20.1	Cos Cob N"12" modified south	9/23/07	42	dry		
057-20.1	Cos Cob N"12" modified south	10/16/07	58	dry		
057-20.1	Cos Cob N"12" modified south	10/22/07	6	wet		
057-20.1	Cos Cob N"12" modified south	10/31/07	51	dry		
057-20.1	Cos Cob N"12" modified south	11/5/07	3	dry		
057-20.1	Cos Cob N"12" modified south	12/6/07	2	dry		
057-20.1	Cos Cob N"12" modified south	12/10/07	73	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.1	Cos Cob N"12" modified south	1/8/08	1	dry	6	1
057-20.1	Cos Cob N"12" modified south	3/3/08	1	dry		
057-20.1	Cos Cob N"12" modified south	4/23/08	1	dry		
057-20.1	Cos Cob N"12" modified south	4/30/08	12	wet		
057-20.1	Cos Cob N"12" modified south	5/14/08	4	dry		
057-20.1	Cos Cob N"12" modified south	5/20/08	5	wet		
057-20.1	Cos Cob N"12" modified south	5/29/08	10	wet		
057-20.1	Cos Cob N"12" modified south	6/18/08	7	wet		
057-20.1	Cos Cob N"12" modified south	6/30/08	19	wet		
057-20.1	Cos Cob N"12" modified south	7/27/08	9	dry		
057-20.1	Cos Cob N"12" modified south	8/4/08	7	wet		
057-20.1	Cos Cob N"12" modified south	8/26/08	4	dry		
057-20.1	Cos Cob N"12" modified south	9/10/08	81	wet		
057-20.1	Cos Cob N"12" modified south	9/17/08	13	dry		
057-20.1	Cos Cob N"12" modified south	10/7/08	1	wet		
057-20.1	Cos Cob N"12" modified south	10/27/08	52	wet		
057-20.1	Cos Cob N"12" modified south	11/24/08	1	dry		
057-20.1	Cos Cob N"12" modified south	12/29/08	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.1	Cos Cob N"12" modified south	2/9/09	1	dry	9	17
057-20.1	Cos Cob N"12" modified south	3/10/09	1	wet		
057-20.1	Cos Cob N"12" modified south	4/22/09	16	wet		
057-20.1	Cos Cob N"12" modified south	5/11/09	9	dry		
057-20.1	Cos Cob N"12" modified south	6/8/09	2	dry		
057-20.1	Cos Cob N"12" modified south	6/10/09	42	wet		
057-20.1	Cos Cob N"12" modified south	6/22/09	52	wet		
057-20.1	Cos Cob N"12" modified south	7/20/09	1	dry		
057-20.1	Cos Cob N"12" modified south	8/3/09	16	dry		
057-20.1	Cos Cob N"12" modified south	8/24/09	81	wet		
057-20.1	Cos Cob N"12" modified south	9/1/09	2	dry		
057-20.1	Cos Cob N"12" modified south	10/5/09	25	wet		
057-20.1	Cos Cob N"12" modified south	11/3/09	12	wet		
057-20.1	Cos Cob N"12" modified south	12/1/09	5	wet		
057-20.1	Cos Cob N"12" modified south	12/14/09	42	wet		
057-20.1	Cos Cob N"12" modified south	1/19/10	1	wet	6	4
057-20.1	Cos Cob N"12" modified south	1/27/10	19	wet		
057-20.1	Cos Cob N"12" modified south	2/22/10	1	dry		
057-20.1	Cos Cob N"12" modified south	3/2/10	1	wet		
057-20.1	Cos Cob N"12" modified south	4/4/10	25	dry		
057-20.1	Cos Cob N"12" modified south	4/11/10	49	wet		
057-20.1	Cos Cob N"12" modified south	5/5/10	17	wet		
057-20.1	Cos Cob N"12" modified south	6/9/10	5	wet		
057-20.1	Cos Cob N"12" modified south	7/7/10	1	dry		
057-20.1	Cos Cob N"12" modified south	7/26/10	3	wet		
057-20.1	Cos Cob N"12" modified south	8/25/10	15	wet		
057-20.1	Cos Cob N"12" modified south	9/20/10	7	dry		
057-20.1	Cos Cob N"12" modified south	9/21/10	7	dry		
057-20.1	Cos Cob N"12" modified south	10/3/10	35	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-20.1	Cos Cob N"12" modified south	3/15/11	4	dry	**17* (18%)**	13
057-20.1	Cos Cob N"12" modified south	4/25/11	20	wet		
057-20.1	Cos Cob N"12" modified south	5/23/11	28	wet		
057-20.1	Cos Cob N"12" modified south	6/8/11	12	dry		
057-20.1	Cos Cob N"12" modified south	6/22/11	14	wet		
057-20.1	Cos Cob N"12" modified south	7/11/11	9	dry		
057-20.1	Cos Cob N"12" modified south	7/19/11	42	dry		
057-20.1	Cos Cob N"12" modified south	7/25/11	12	dry		
057-20.1	Cos Cob N"12" modified south	8/3/11	7	dry		
057-20.1	Cos Cob N"12" modified south	8/10/11	66	dry		
057-20.1	Cos Cob N"12" modified south	8/22/11	26	dry		
057-20.1	Cos Cob N"12" modified south	9/12/11	45	dry		
057-20.1	Cos Cob N"12" modified south	9/19/11	11	dry		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 6: LIS WB-Shore – Cos Cob Harbor (CT-W2_022)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-20.0	Cos Cob N. C"7"	2000-2011	78	91	5	9	3
057-20.1	Cos Cob N"12" modified south	2000-2011	72	88	9	14	7

Shaded cells indicate an exceedance of water quality criteria

Table 19: Segment 7: LIS WB Shore – Byram Harbor Bacteria Data

Waterbody ID: CT-W2_024

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Recreation (*enterococci)* and Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for enterococci:

Geometric Mean: 35 colonies/100 mL

Single Sample: 104 colonies/100 mL (designated beach)

Percent Reduction to meet TMDL:

Geometric Mean: **10%**

Single Sample: **95%**

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than: **14%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	5/16/2007	53	wet**	26
CT872506	Byram Beach East	5/23/2007	10	dry	
CT872506	Byram Beach East	5/30/2007	10	dry**	
CT872506	Byram Beach East	6/6/2007	10	wet	
CT872506	Byram Beach East	6/13/2007	10	wet	
CT872506	Byram Beach East	6/14/2007	20	dry	
CT872506	Byram Beach East	6/20/2007	10	dry	
CT872506	Byram Beach East	6/27/2007	10	wet	
CT872506	Byram Beach East	7/2/2007	10	dry	
CT872506	Byram Beach East	7/5/2007	531	wet	
CT872506	Byram Beach East	7/11/2007	99	dry	
CT872506	Byram Beach East	7/19/2007	104	wet	

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	7/25/2007	75	dry	
CT872506	Byram Beach East	7/26/2007	10	dry	
CT872506	Byram Beach East	8/1/2007	10	dry	
CT872506	Byram Beach East	8/8/2007	**2005* (95%)**	wet	
CT872506	Byram Beach East	8/15/2007	10	dry	
CT872506	Byram Beach East	8/23/2007	10	dry	
CT872506	Byram Beach East	8/29/2007	10	dry	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	5/14/2008	10	dry**	
CT872506	Byram Beach East	5/21/2008	10	wet**	
CT872506	Byram Beach East	5/22/2008	10	dry**	
CT872506	Byram Beach East	5/28/2008	20	wet**	
CT872506	Byram Beach East	6/4/2008	**2005* (95%)**	wet**	
CT872506	Byram Beach East	6/5/2008	10	wet**	
CT872506	Byram Beach East	6/11/2008	10	dry**	
CT872506	Byram Beach East	6/18/2008	10	wet**	
CT872506	Byram Beach East	6/25/2008	10	wet**	
CT872506	Byram Beach East	7/2/2008	10	dry**	
CT872506	Byram Beach East	7/9/2008	10	dry**	20
CT872506	Byram Beach East	7/14/2008	**2005* (95%)**	wet**	
CT872506	Byram Beach East	7/15/2008	10	wet**	
CT872506	Byram Beach East	7/23/2008	10	wet**	
CT872506	Byram Beach East	7/28/2008	20	wet**	
CT872506	Byram Beach East	7/30/2008	20	dry**	
CT872506	Byram Beach East	8/5/2008	10	dry	
CT872506	Byram Beach East	8/11/2008	10	wet	
CT872506	Byram Beach East	8/20/2008	20	dry	
CT872506	Byram Beach East	8/27/2008	10	dry	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	5/13/2009	10	dry**	16
CT872506	Byram Beach East	5/20/2009	10	dry**	
CT872506	Byram Beach East	5/27/2009	111	wet**	
CT872506	Byram Beach East	5/28/2009	20	wet**	
CT872506	Byram Beach East	6/3/2009	31	dry**	
CT872506	Byram Beach East	6/10/2009	10	wet**	
CT872506	Byram Beach East	6/17/2009	10	dry**	
CT872506	Byram Beach East	6/24/2009	10	dry**	
CT872506	Byram Beach East	7/1/2009	10	wet**	
CT872506	Byram Beach East	7/8/2009	10	dry**	
CT872506	Byram Beach East	7/15/2009	10	dry**	
CT872506	Byram Beach East	7/22/2009	10	wet**	
CT872506	Byram Beach East	7/29/2009	20	wet**	
CT872506	Byram Beach East	7/30/2009	31	wet**	
CT872506	Byram Beach East	8/5/2009	10	dry**	
CT872506	Byram Beach East	8/12/2009	10	dry**	
CT872506	Byram Beach East	8/13/2009	124	dry**	
CT872506	Byram Beach East	8/19/2009	10	dry**	
CT872506	Byram Beach East	8/26/2009	31	dry**	
CT872506	Byram Beach East	9/2/2009	10	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	5/19/2010	10	wet**	24
CT872506	Byram Beach East	5/26/2010	10	wet**	
CT872506	Byram Beach East	6/2/2010	531	wet**	
CT872506	Byram Beach East	6/3/2010	20	wet**	
CT872506	Byram Beach East	6/9/2010	10	wet**	
CT872506	Byram Beach East	6/16/2010	20	dry**	
CT872506	Byram Beach East	6/23/2010	53	wet**	
CT872506	Byram Beach East	6/30/2010	10	dry**	
CT872506	Byram Beach East	7/7/2010	10	dry**	

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	7/14/2010	254	wet**	
CT872506	Byram Beach East	7/15/2010	137	wet**	
CT872506	Byram Beach East	7/21/2010	20	dry**	
CT872506	Byram Beach East	7/22/2010	10	dry**	
CT872506	Byram Beach East	7/28/2010	10	dry**	
CT872506	Byram Beach East	8/4/2010	10	dry**	
CT872506	Byram Beach East	8/11/2010	31	dry**	
CT872506	Byram Beach East	8/18/2010	10	dry**	
CT872506	Byram Beach East	8/25/2010	87	dry**	
CT872506	Byram Beach East	9/1/2010	10	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach East	5/25/2011	1184	unknown	
CT872506	Byram Beach East	5/27/2011	124	unknown	
CT872506	Byram Beach East	6/1/2011	10	unknown	
CT872506	Byram Beach East	6/8/2011	10	unknown	
CT872506	Byram Beach East	6/15/2011	10	unknown	
CT872506	Byram Beach East	6/22/2011	10	unknown	
CT872506	Byram Beach East	6/23/2011	2001	unknown	
CT872506	Byram Beach East	6/29/2011	10	unknown	
CT872506	Byram Beach East	7/6/2011	20	unknown	26
CT872506	Byram Beach East	7/13/2011	10	unknown	
CT872506	Byram Beach East	7/20/2011	42	unknown	
CT872506	Byram Beach East	7/27/2011	20	unknown	
CT872506	Byram Beach East	8/3/2011	10	unknown	
CT872506	Byram Beach East	8/10/2011	30	unknown	
CT872506	Byram Beach East	8/17/2011	10	unknown	
CT872506	Byram Beach East	8/24/2011	10	unknown	
CT872506	Byram Beach East	8/30/2011	10	unknown	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	5/16/2007	10	wet**	**39* (10%)**
CT872506	Byram Beach Rosenwald	5/23/2007	21	dry	
CT872506	Byram Beach Rosenwald	5/30/2007	288	dry**	
CT872506	Byram Beach Rosenwald	6/6/2007	10	wet	
CT872506	Byram Beach Rosenwald	6/13/2007	254	wet	
CT872506	Byram Beach Rosenwald	6/14/2007	42	dry	
CT872506	Byram Beach Rosenwald	6/20/2007	10	dry	
CT872506	Byram Beach Rosenwald	6/27/2007	10	wet	
CT872506	Byram Beach Rosenwald	7/2/2007	10	dry	
CT872506	Byram Beach Rosenwald	7/5/2007	1298	wet	
CT872506	Byram Beach Rosenwald	7/11/2007	10	dry	
CT872506	Byram Beach Rosenwald	7/19/2007	344	wet	
CT872506	Byram Beach Rosenwald	7/25/2007	20	dry	
CT872506	Byram Beach Rosenwald	7/26/2007	10	dry	
CT872506	Byram Beach Rosenwald	8/1/2007	42	dry	
CT872506	Byram Beach Rosenwald	8/8/2007	**2005* (95%)**	wet	
CT872506	Byram Beach Rosenwald	8/15/2007	10	dry	
CT872506	Byram Beach Rosenwald	8/23/2007	31	dry	
CT872506	Byram Beach Rosenwald	8/29/2007	10	dry	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	5/14/2008	10	dry**	24
CT872506	Byram Beach Rosenwald	5/21/2008	10	wet**	
CT872506	Byram Beach Rosenwald	5/22/2008	10	dry**	
CT872506	Byram Beach Rosenwald	5/28/2008	42	wet**	
CT872506	Byram Beach Rosenwald	6/4/2008	**2005* (95%)**	wet**	
CT872506	Byram Beach Rosenwald	6/5/2008	42	wet**	
CT872506	Byram Beach Rosenwald	6/11/2008	31	dry**	
CT872506	Byram Beach Rosenwald	6/18/2008	10	wet**	

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	6/25/2008	10	wet**	
CT872506	Byram Beach Rosenwald	7/2/2008	10	dry**	
CT872506	Byram Beach Rosenwald	7/9/2008	10	dry**	
CT872506	Byram Beach Rosenwald	7/14/2008	659	wet**	
CT872506	Byram Beach Rosenwald	7/15/2008	10	wet**	
CT872506	Byram Beach Rosenwald	7/23/2008	10	wet**	
CT872506	Byram Beach Rosenwald	7/30/2008	10	dry**	
CT872506	Byram Beach Rosenwald	8/5/2008	10	dry	
CT872506	Byram Beach Rosenwald	8/11/2008	10	wet	
CT872506	Byram Beach Rosenwald	8/20/2008	254	dry	
CT872506	Byram Beach Rosenwald	8/27/2008	10	dry	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	5/13/2009	10	dry**	
CT872506	Byram Beach Rosenwald	5/20/2009	10	dry**	
CT872506	Byram Beach Rosenwald	5/27/2009	111	wet**	
CT872506	Byram Beach Rosenwald	5/28/2009	20	wet**	
CT872506	Byram Beach Rosenwald	6/3/2009	10	dry**	
CT872506	Byram Beach Rosenwald	6/10/2009	150	wet**	
CT872506	Byram Beach Rosenwald	6/17/2009	42	dry**	
CT872506	Byram Beach Rosenwald	6/24/2009	10	dry**	
CT872506	Byram Beach Rosenwald	7/1/2009	63	wet**	
CT872506	Byram Beach Rosenwald	7/8/2009	10	dry**	
CT872506	Byram Beach Rosenwald	7/15/2009	10	dry**	27
CT872506	Byram Beach Rosenwald	7/22/2009	10	wet**	
CT872506	Byram Beach Rosenwald	7/29/2009	192	wet**	
CT872506	Byram Beach Rosenwald	7/30/2009	31	wet**	
CT872506	Byram Beach Rosenwald	8/5/2009	10	dry**	
CT872506	Byram Beach Rosenwald	8/12/2009	254	dry**	
CT872506	Byram Beach Rosenwald	8/13/2009	137	dry**	
CT872506	Byram Beach Rosenwald	8/19/2009	20	dry**	
CT872506	Byram Beach Rosenwald	8/26/2009	10	dry**	
CT872506	Byram Beach Rosenwald	9/2/2009	10	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	5/19/2010	64	wet**	
CT872506	Byram Beach Rosenwald	5/26/2010	31	wet**	
CT872506	Byram Beach Rosenwald	6/2/2010	504	wet**	
CT872506	Byram Beach Rosenwald	6/3/2010	10	wet**	
CT872506	Byram Beach Rosenwald	6/9/2010	10	wet**	
CT872506	Byram Beach Rosenwald	6/16/2010	10	dry**	
CT872506	Byram Beach Rosenwald	6/23/2010	384	wet**	
CT872506	Byram Beach Rosenwald	6/30/2010	10	dry**	
CT872506	Byram Beach Rosenwald	7/7/2010	53	dry**	
CT872506	Byram Beach Rosenwald	7/14/2010	1298	wet**	31
CT872506	Byram Beach Rosenwald	7/15/2010	53	wet**	
CT872506	Byram Beach Rosenwald	7/21/2010	10	dry**	
CT872506	Byram Beach Rosenwald	7/22/2010	10	dry**	
CT872506	Byram Beach Rosenwald	7/28/2010	10	dry**	
CT872506	Byram Beach Rosenwald	8/4/2010	10	dry**	
CT872506	Byram Beach Rosenwald	8/11/2010	10	dry**	
CT872506	Byram Beach Rosenwald	8/18/2010	10	dry**	
CT872506	Byram Beach Rosenwald	8/25/2010	75	dry**	
CT872506	Byram Beach Rosenwald	9/1/2010	20	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	5/25/2011	10	unknown	
CT872506	Byram Beach Rosenwald	5/26/2011	111	unknown	
CT872506	Byram Beach Rosenwald	5/27/2011	31	unknown	
CT872506	Byram Beach Rosenwald	6/1/2011	10	unknown	
CT872506	Byram Beach Rosenwald	6/8/2011	10	unknown	23
CT872506	Byram Beach Rosenwald	6/15/2011	10	unknown	
CT872506	Byram Beach Rosenwald	6/22/2011	31	unknown	
CT872506	Byram Beach Rosenwald	6/23/2011	2001	unknown	
CT872506	Byram Beach Rosenwald	6/29/2011	10	unknown	

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach Rosenwald	7/6/2011	10	unknown	
CT872506	Byram Beach Rosenwald	7/13/2011	10	unknown	
CT872506	Byram Beach Rosenwald	7/20/2011	31	unknown	
CT872506	Byram Beach Rosenwald	7/27/2011	10	unknown	
CT872506	Byram Beach Rosenwald	8/3/2011	10	unknown	
CT872506	Byram Beach Rosenwald	8/10/2011	20	unknown	
CT872506	Byram Beach Rosenwald	8/17/2011	10	unknown	
CT872506	Byram Beach Rosenwald	8/24/2011	10	unknown	
CT872506	Byram Beach Rosenwald	8/30/2011	238	unknown	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach West	5/16/2007	10	wet**	38
CT872506	Byram Beach West	5/23/2007	87	dry	
CT872506	Byram Beach West	5/30/2007	20	dry**	
CT872506	Byram Beach West	6/6/2007	30	wet	
CT872506	Byram Beach West	6/13/2007	288	wet	
CT872506	Byram Beach West	6/14/2007	10	dry	
CT872506	Byram Beach West	6/20/2007	99	dry	
CT872506	Byram Beach West	6/27/2007	10	wet	
CT872506	Byram Beach West	7/2/2007	10	dry	
CT872506	Byram Beach West	7/11/2007	87	dry	
CT872506	Byram Beach West	7/19/2007	53	wet	
CT872506	Byram Beach West	7/25/2007	137	dry	
CT872506	Byram Beach West	7/26/2007	31	dry	
CT872506	Byram Beach West	8/1/2007	10	dry	
CT872506	Byram Beach West	8/8/2007	**2005* (95%)**	wet	
CT872506	Byram Beach West	8/15/2007	20	dry	
CT872506	Byram Beach West	8/23/2007	10	dry	
CT872506	Byram Beach West	8/29/2007	20	dry	
CT872506	Byram Beach West	9/10/2007	53	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach West	5/14/2008	10	dry**	21
CT872506	Byram Beach West	5/21/2008	10	wet**	
CT872506	Byram Beach West	5/22/2008	10	dry**	
CT872506	Byram Beach West	5/28/2008	53	wet**	
CT872506	Byram Beach West	6/4/2008	**2005* (95%)**	wet**	
CT872506	Byram Beach West	6/5/2008	10	wet**	
CT872506	Byram Beach West	6/11/2008	10	dry**	
CT872506	Byram Beach West	6/18/2008	10	wet**	
CT872506	Byram Beach West	6/25/2008	10	wet**	
CT872506	Byram Beach West	7/2/2008	10	dry**	
CT872506	Byram Beach West	7/9/2008	10	dry**	
CT872506	Byram Beach West	7/14/2008	**2005* (95%)**	wet**	
CT872506	Byram Beach West	7/15/2008	10	wet**	
CT872506	Byram Beach West	7/23/2008	10	wet**	
CT872506	Byram Beach West	7/30/2008	42	dry**	
CT872506	Byram Beach West	8/11/2008	10	wet	
CT872506	Byram Beach West	8/20/2008	10	dry	
CT872506	Byram Beach West	8/27/2008	10	dry	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach West	5/13/2009	10	dry**	25
CT872506	Byram Beach West	5/20/2009	10	dry**	
CT872506	Byram Beach West	5/27/2009	63	wet**	
CT872506	Byram Beach West	5/28/2009	87	wet**	
CT872506	Byram Beach West	6/3/2009	111	dry**	
CT872506	Byram Beach West	6/10/2009	63	wet**	
CT872506	Byram Beach West	6/17/2009	10	dry**	
CT872506	Byram Beach West	6/24/2009	10	dry**	
CT872506	Byram Beach West	7/1/2009	10	wet**	

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach West	7/8/2009	10	dry**	
CT872506	Byram Beach West	7/15/2009	94†	dry**	
CT872506	Byram Beach West	7/22/2009	20	wet**	
CT872506	Byram Beach West	7/29/2009	31	wet**	
CT872506	Byram Beach West	7/30/2009	10	wet**	
CT872506	Byram Beach West	8/5/2009	10	dry**	
CT872506	Byram Beach West	8/12/2009	10	dry**	
CT872506	Byram Beach West	8/13/2009	87	dry**	
CT872506	Byram Beach West	8/19/2009	63	dry**	
CT872506	Byram Beach West	8/26/2009	53	dry**	
CT872506	Byram Beach West	9/2/2009	10	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach West	5/19/2010	10	wet**	
CT872506	Byram Beach West	5/26/2010	10	wet**	
CT872506	Byram Beach West	6/2/2010	306	wet**	
CT872506	Byram Beach West	6/3/2010	53	wet**	
CT872506	Byram Beach West	6/9/2010	10	wet**	
CT872506	Byram Beach West	6/16/2010	20	dry**	
CT872506	Byram Beach West	6/23/2010	238	wet**	
CT872506	Byram Beach West	6/30/2010	10	dry**	
CT872506	Byram Beach West	7/7/2010	10	dry**	
CT872506	Byram Beach West	7/14/2010	591	wet**	27
CT872506	Byram Beach West	7/15/2010	111	wet**	
CT872506	Byram Beach West	7/21/2010	10	dry**	
CT872506	Byram Beach West	7/22/2010	30	dry**	
CT872506	Byram Beach West	7/28/2010	10	dry**	
CT872506	Byram Beach West	8/4/2010	10	dry**	
CT872506	Byram Beach West	8/11/2010	10	dry**	
CT872506	Byram Beach West	8/18/2010	10	dry**	
CT872506	Byram Beach West	8/25/2010	75	dry**	
CT872506	Byram Beach West	9/1/2010	10	dry**	

Single sample enterococci data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means calculated (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean
CT872506	Byram Beach West	5/25/2011	10	unknown	22
CT872506	Byram Beach West	5/26/2011	111	unknown	
CT872506	Byram Beach West	5/27/2011	31	unknown	
CT872506	Byram Beach West	6/1/2011	10	unknown	
CT872506	Byram Beach West	6/8/2011	64	unknown	
CT872506	Byram Beach West	6/13/2011	10	unknown	
CT872506	Byram Beach West	6/15/2011	10	unknown	
CT872506	Byram Beach West	6/22/2011	20	unknown	
CT872506	Byram Beach West	6/23/2011	2001	unknown	
CT872506	Byram Beach West	6/29/2011	10	unknown	
CT872506	Byram Beach West	7/6/2011	10	unknown	
CT872506	Byram Beach West	7/13/2011	10	unknown	
CT872506	Byram Beach West	7/18/2011	10	unknown	
CT872506	Byram Beach West	7/20/2011	53	unknown	
CT872506	Byram Beach West	8/3/2011	20	unknown	
CT872506	Byram Beach West	8/17/2011	10	unknown	
CT872506	Byram Beach West	8/24/2011	10	unknown	
CT872506	Byram Beach West	8/30/2011	20	unknown	

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather enterococci (colonies/100 mL) geometric mean values for all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
CT872506	Byram Beach East	2007-2011	33	45	21	36	14
CT872506	Byram Beach Rosenwald	2007-2011	32	45	30	62	18
CT872506	Byram Beach West	2007-2011	31	44	27	44	19

Shaded cells indicate an exceedance of water quality criteria

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	1/2/00	8	dry	**11* (NA)**	**14**
057-08.9	E. Rich Island	1/6/00	11	wet		
057-08.9	E. Rich Island	2/16/00	11	wet		
057-08.9	E. Rich Island	4/16/00	4	dry		
057-08.9	E. Rich Island	4/23/00	6	wet		
057-08.9	E. Rich Island	5/17/00	2	wet		
057-08.9	E. Rich Island	6/22/00	4	dry		
057-08.9	E. Rich Island	7/4/00	51	wet		
057-08.9	E. Rich Island	7/16/00	18	wet		
057-08.9	E. Rich Island	7/30/00	51	wet		
057-08.9	E. Rich Island	8/6/00	22	dry		
057-08.9	E. Rich Island	9/13/00	51	wet		
057-08.9	E. Rich Island	9/17/00	4	wet		
057-08.9	E. Rich Island	9/20/00	51	wet		
057-08.9	E. Rich Island	11/12/00	28	wet		
057-08.9	E. Rich Island	11/29/00	6	wet		
057-08.9	E. Rich Island	12/5/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	1/9/01	11	wet	**11* (NA)**	8
057-08.9	E. Rich Island	3/25/01	2	wet		
057-08.9	E. Rich Island	5/30/01	11	wet		
057-08.9	E. Rich Island	7/12/01	36	wet		
057-08.9	E. Rich Island	7/25/01	14	dry		
057-08.9	E. Rich Island	8/12/01	28	wet		
057-08.9	E. Rich Island	8/14/01	36	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	8/19/01	2	dry		
057-08.9	E. Rich Island	9/9/01	6	dry		
057-08.9	E. Rich Island	9/16/01	14	wet		
057-08.9	E. Rich Island	9/23/01	50	wet		
057-08.9	E. Rich Island	9/24/01	18	wet		
057-08.9	E. Rich Island	10/2/01	8	wet		
057-08.9	E. Rich Island	11/7/01	4	dry		
057-08.9	E. Rich Island	11/25/01	4	wet		
057-08.9	E. Rich Island	12/2/01	22	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	1/6/02	11	dry		
057-08.9	E. Rich Island	1/27/02	2	dry		
057-08.9	E. Rich Island	3/17/02	2	dry		
057-08.9	E. Rich Island	3/31/02	2	dry		
057-08.9	E. Rich Island	4/21/02	2	wet		
057-08.9	E. Rich Island	5/5/02	6	dry		
057-08.9	E. Rich Island	5/12/02	4	wet		
057-08.9	E. Rich Island	5/19/02	18	wet		
057-08.9	E. Rich Island	6/9/02	14	wet		
057-08.9	E. Rich Island	6/16/02	51	wet	7	NA
057-08.9	E. Rich Island	6/23/02	11	dry		
057-08.9	E. Rich Island	6/30/02	22	dry		
057-08.9	E. Rich Island	7/8/02	28	dry		
057-08.9	E. Rich Island	7/22/02	2	dry		
057-08.9	E. Rich Island	8/4/02	8	wet		
057-08.9	E. Rich Island	8/18/02	22	wet		
057-08.9	E. Rich Island	9/8/02	14	dry		
057-08.9	E. Rich Island	9/29/02	36	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	10/20/02	18	dry		
057-08.9	E. Rich Island	11/3/02	2	dry		
057-08.9	E. Rich Island	12/16/02	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	1/13/03	2	dry	8	13
057-08.9	E. Rich Island	2/24/03	14	wet		
057-08.9	E. Rich Island	3/11/03	2	wet		
057-08.9	E. Rich Island	3/26/03	2	wet		
057-08.9	E. Rich Island	4/13/03	2	wet		
057-08.9	E. Rich Island	4/30/03	2	dry		
057-08.9	E. Rich Island	5/28/03	11	wet		
057-08.9	E. Rich Island	6/8/03	51	wet		
057-08.9	E. Rich Island	6/13/03	18	wet		
057-08.9	E. Rich Island	7/23/03	51	wet		
057-08.9	E. Rich Island	8/19/03	51	wet		
057-08.9	E. Rich Island	9/10/03	4	wet		
057-08.9	E. Rich Island	9/24/03	22	wet		
057-08.9	E. Rich Island	1/6/04	2	wet	4	5
057-08.9	E. Rich Island	3/15/04	2	dry		
057-08.9	E. Rich Island	4/7/04	2	dry		
057-08.9	E. Rich Island	4/29/04	2	dry		
057-08.9	E. Rich Island	6/16/04	11	dry		
057-08.9	E. Rich Island	6/20/04	6	dry		
057-08.9	E. Rich Island	7/7/04	2	wet		
057-08.9	E. Rich Island	7/26/04	2	wet		
057-08.9	E. Rich Island	8/17/04	2	wet		
057-08.9	E. Rich Island	9/12/04	14	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	9/21/04	36	dry		
057-08.9	E. Rich Island	10/25/04	36	dry		
057-08.9	E. Rich Island	11/7/04	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	4/6/05	1	dry	3	NA
057-08.9	E. Rich Island	5/18/05	1	dry		
057-08.9	E. Rich Island	6/1/05	6	dry		
057-08.9	E. Rich Island	6/20/05	2	dry		
057-08.9	E. Rich Island	7/5/05	6	dry		
057-08.9	E. Rich Island	7/11/05	2	dry		
057-08.9	E. Rich Island	8/3/05	1	dry		
057-08.9	E. Rich Island	8/17/05	15	wet		
057-08.9	E. Rich Island	9/19/05	3	dry		
057-08.9	E. Rich Island	10/4/05	4	dry		
057-08.9	E. Rich Island	10/31/05	3	dry		
057-08.9	E. Rich Island	11/14/05	1	dry		
057-08.9	E. Rich Island	1/25/06	1	wet	2	NA
057-08.9	E. Rich Island	2/22/06	1	wet		
057-08.9	E. Rich Island	5/24/06	1	dry		
057-08.9	E. Rich Island	6/12/06	3	dry		
057-08.9	E. Rich Island	7/10/06	1	dry		
057-08.9	E. Rich Island	8/8/06	7	dry		
057-08.9	E. Rich Island	9/19/06	1	dry		
057-08.9	E. Rich Island	11/1/06	4	dry		
057-08.9	E. Rich Island	12/17/06	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	1/29/07	1	dry	5	NA
057-08.9	E. Rich Island	3/27/07	1	wet		
057-08.9	E. Rich Island	4/23/07	1	dry		
057-08.9	E. Rich Island	5/23/07	4	dry		
057-08.9	E. Rich Island	6/12/07	7	wet		
057-08.9	E. Rich Island	6/17/07	6	dry		
057-08.9	E. Rich Island	7/8/07	39	dry		
057-08.9	E. Rich Island	7/31/07	8	dry		
057-08.9	E. Rich Island	8/28/07	1	dry		
057-08.9	E. Rich Island	9/23/07	25	dry		
057-08.9	E. Rich Island	10/16/07	23	dry		
057-08.9	E. Rich Island	10/22/07	3	wet		
057-08.9	E. Rich Island	10/31/07	26	dry		
057-08.9	E. Rich Island	11/5/07	1	dry		
057-08.9	E. Rich Island	12/6/07	3	dry		
057-08.9	E. Rich Island	12/10/07	17	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	1/8/08	1	dry		
057-08.9	E. Rich Island	3/3/08	1	dry		
057-08.9	E. Rich Island	4/23/08	1	dry		
057-08.9	E. Rich Island	4/30/08	1	wet		
057-08.9	E. Rich Island	5/14/08	3	dry		
057-08.9	E. Rich Island	5/20/08	1	wet		
057-08.9	E. Rich Island	5/29/08	1	wet		
057-08.9	E. Rich Island	6/18/08	2	wet		
057-08.9	E. Rich Island	6/30/08	9	wet		
057-08.9	E. Rich Island	7/27/08	11	dry	2	NA
057-08.9	E. Rich Island	8/4/08	4	wet		
057-08.9	E. Rich Island	8/26/08	1	dry		
057-08.9	E. Rich Island	9/10/08	12	wet		
057-08.9	E. Rich Island	9/17/08	2	dry		
057-08.9	E. Rich Island	10/7/08	2	wet		
057-08.9	E. Rich Island	10/27/08	22	wet		
057-08.9	E. Rich Island	11/2/08	3	dry		
057-08.9	E. Rich Island	11/24/08	1	dry		
057-08.9	E. Rich Island	12/29/08	3	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	2/9/09	1	dry	4	NA
057-08.9	E. Rich Island	3/10/09	1	wet		
057-08.9	E. Rich Island	4/22/09	8	wet		
057-08.9	E. Rich Island	5/11/09	1	dry		
057-08.9	E. Rich Island	6/8/09	3	dry		
057-08.9	E. Rich Island	6/10/09	15	wet		
057-08.9	E. Rich Island	6/22/09	7	wet		
057-08.9	E. Rich Island	7/20/09	7	dry		
057-08.9	E. Rich Island	8/3/09	10	dry		
057-08.9	E. Rich Island	8/24/09	39	wet		
057-08.9	E. Rich Island	9/1/09	1	dry		
057-08.9	E. Rich Island	10/5/09	4	wet		
057-08.9	E. Rich Island	11/3/09	17	wet		
057-08.9	E. Rich Island	12/1/09	2	wet		
057-08.9	E. Rich Island	12/14/09	1	wet		
057-08.9	E. Rich Island	12/28/09	10	wet		
057-08.9	E. Rich Island	1/19/10	1	wet	2	NA
057-08.9	E. Rich Island	1/27/10	1	wet		
057-08.9	E. Rich Island	2/22/10	1	dry		
057-08.9	E. Rich Island	3/2/10	1	wet		
057-08.9	E. Rich Island	4/4/10	1	dry		
057-08.9	E. Rich Island	4/11/10	1	wet		
057-08.9	E. Rich Island	5/5/10	4	wet		
057-08.9	E. Rich Island	6/9/10	1	wet		
057-08.9	E. Rich Island	7/7/10	4	dry		
057-08.9	E. Rich Island	7/26/10	2	wet		
057-08.9	E. Rich Island	8/25/10	1	wet		
057-08.9	E. Rich Island	9/20/10	2	dry		
057-08.9	E. Rich Island	9/21/10	1	dry		
057-08.9	E. Rich Island	10/3/10	33	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.9	E. Rich Island	3/15/11	1	dry	10	NA
057-08.9	E. Rich Island	4/25/11	12	wet		
057-08.9	E. Rich Island	5/23/11	41	wet		
057-08.9	E. Rich Island	6/8/11	25	dry		
057-08.9	E. Rich Island	6/22/11	7	wet		
057-08.9	E. Rich Island	7/11/11	3	dry		
057-08.9	E. Rich Island	7/19/11	43	dry		
057-08.9	E. Rich Island	7/25/11	1	dry		
057-08.9	E. Rich Island	8/10/11	12	dry		
057-08.9	E. Rich Island	8/17/11	30	dry		
057-08.9	E. Rich Island	8/22/11	10	dry		
057-08.9	E. Rich Island	9/12/11	6	dry		
057-08.9	E. Rich Island	9/19/11	22	dry		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 7: LIS WB-Shore – Byram Harbor (CT-W2_024)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-08.9	E. Rich Island	2000-2011	87	92	5	7	4

Shaded cells indicate an exceedance of water quality criteria

Table 20: Segment 8: LIS WB Shore – Byram Harbor (West) Bacteria Data

Waterbody ID: CT-W2_025

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

$90^{\%}$ of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

$90^{\%}$ of samples less than: **4%**

Data: 2001 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	3/25/01	2	wet	**9* (NA)**	NA
057-09.2	W. Shell Island	5/30/01	6	wet		
057-09.2	W. Shell Island	7/12/01	8	wet		
057-09.2	W. Shell Island	7/25/01	6	dry		
057-09.2	W. Shell Island	8/12/01	28	wet		
057-09.2	W. Shell Island	8/14/01	28	wet		
057-09.2	W. Shell Island	8/19/01	6	dry		
057-09.2	W. Shell Island	9/9/01	22	dry		
057-09.2	W. Shell Island	9/16/01	4	wet		
057-09.2	W. Shell Island	9/23/01	28	wet		
057-09.2	W. Shell Island	10/2/01	11	wet		
057-09.2	W. Shell Island	11/7/01	51	dry		
057-09.2	W. Shell Island	11/25/01	2	wet		
057-09.2	W. Shell Island	12/2/01	11	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	1/6/02	4	dry		
057-09.2	W. Shell Island	1/27/02	4	dry		
057-09.2	W. Shell Island	3/17/02	2	dry		
057-09.2	W. Shell Island	3/31/02	2	dry		
057-09.2	W. Shell Island	4/21/02	2	wet		
057-09.2	W. Shell Island	5/5/02	2	dry		
057-09.2	W. Shell Island	5/12/02	2	wet		
057-09.2	W. Shell Island	5/19/02	2	wet		
057-09.2	W. Shell Island	6/9/02	18	wet		
057-09.2	W. Shell Island	6/16/02	14	wet		
057-09.2	W. Shell Island	6/23/02	18	dry	5	NA
057-09.2	W. Shell Island	6/30/02	2	dry		
057-09.2	W. Shell Island	7/8/02	8	dry		
057-09.2	W. Shell Island	7/22/02	2	dry		
057-09.2	W. Shell Island	8/4/02	8	wet		
057-09.2	W. Shell Island	8/18/02	50	wet		
057-09.2	W. Shell Island	9/8/02	2	dry		
057-09.2	W. Shell Island	9/29/02	18	wet		
057-09.2	W. Shell Island	10/20/02	22	dry		
057-09.2	W. Shell Island	11/3/02	6	dry		
057-09.2	W. Shell Island	12/16/02	18	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	1/13/03	8	dry	7	**4**
057-09.2	W. Shell Island	2/24/03	36	wet		
057-09.2	W. Shell Island	3/11/03	2	wet		
057-09.2	W. Shell Island	3/26/03	2	wet		
057-09.2	W. Shell Island	4/13/03	2	wet		
057-09.2	W. Shell Island	4/30/03	2	dry		
057-09.2	W. Shell Island	5/28/03	8	wet		
057-09.2	W. Shell Island	6/8/03	18	wet		
057-09.2	W. Shell Island	6/13/03	18	wet		
057-09.2	W. Shell Island	7/23/03	22	wet		
057-09.2	W. Shell Island	8/19/03	8	wet		
057-09.2	W. Shell Island	9/10/03	2	wet		
057-09.2	W. Shell Island	9/24/03	51	wet		
057-09.2	W. Shell Island	9/30/03	11	wet		
057-09.2	W. Shell Island	1/6/04	8	wet	3	NA
057-09.2	W. Shell Island	3/15/04	2	dry		
057-09.2	W. Shell Island	4/7/04	2	dry		
057-09.2	W. Shell Island	4/29/04	2	dry		
057-09.2	W. Shell Island	6/16/04	2	dry		
057-09.2	W. Shell Island	6/20/04	2	dry		
057-09.2	W. Shell Island	7/7/04	2	wet		
057-09.2	W. Shell Island	7/26/04	6	wet		
057-09.2	W. Shell Island	8/17/04	4	wet		
057-09.2	W. Shell Island	9/12/04	51	wet		
057-09.2	W. Shell Island	9/21/04	22	dry		
057-09.2	W. Shell Island	10/25/04	2	dry		
057-09.2	W. Shell Island	11/7/04	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	4/6/05	1	dry	2	NA
057-09.2	W. Shell Island	5/18/05	3	dry		
057-09.2	W. Shell Island	6/1/05	1	dry		
057-09.2	W. Shell Island	6/20/05	1	dry		
057-09.2	W. Shell Island	7/5/05	1	dry		
057-09.2	W. Shell Island	7/11/05	1	dry		
057-09.2	W. Shell Island	8/3/05	2	dry		
057-09.2	W. Shell Island	8/17/05	5	wet		
057-09.2	W. Shell Island	9/19/05	1	dry		
057-09.2	W. Shell Island	10/4/05	1	dry		
057-09.2	W. Shell Island	10/31/05	1	dry		
057-09.2	W. Shell Island	11/14/05	13	dry		
057-09.2	W. Shell Island	1/25/06	1	wet	2	NA
057-09.2	W. Shell Island	2/22/06	1	wet		
057-09.2	W. Shell Island	3/22/06	1	dry		
057-09.2	W. Shell Island	5/24/06	1	dry		
057-09.2	W. Shell Island	6/12/06	1	dry		
057-09.2	W. Shell Island	7/10/06	14	dry		
057-09.2	W. Shell Island	8/8/06	1	dry		
057-09.2	W. Shell Island	9/19/06	2	dry		
057-09.2	W. Shell Island	11/1/06	6	dry		
057-09.2	W. Shell Island	11/15/06	10	dry		
057-09.2	W. Shell Island	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	1/29/07	1	dry	2	NA
057-09.2	W. Shell Island	3/27/07	1	wet		
057-09.2	W. Shell Island	4/23/07	1	dry		
057-09.2	W. Shell Island	5/23/07	1	dry		
057-09.2	W. Shell Island	6/12/07	1	wet		
057-09.2	W. Shell Island	6/17/07	1	dry		
057-09.2	W. Shell Island	7/8/07	8	dry		
057-09.2	W. Shell Island	7/31/07	1	dry		
057-09.2	W. Shell Island	8/28/07	1	dry		
057-09.2	W. Shell Island	9/23/07	1	dry		
057-09.2	W. Shell Island	10/16/07	2	dry		
057-09.2	W. Shell Island	10/22/07	1	wet		
057-09.2	W. Shell Island	10/31/07	24	dry		
057-09.2	W. Shell Island	11/5/07	1	dry		
057-09.2	W. Shell Island	12/6/07	1	dry		
057-09.2	W. Shell Island	12/10/07	12	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	1/8/08	1	dry		
057-09.2	W. Shell Island	3/3/08	1	dry		
057-09.2	W. Shell Island	4/23/08	1	dry		
057-09.2	W. Shell Island	4/30/08	1	wet		
057-09.2	W. Shell Island	5/14/08	1	dry		
057-09.2	W. Shell Island	5/20/08	1	wet		
057-09.2	W. Shell Island	5/29/08	8	wet		
057-09.2	W. Shell Island	6/18/08	1	wet		
057-09.2	W. Shell Island	6/30/08	13	wet		
057-09.2	W. Shell Island	7/27/08	6	dry	2	NA
057-09.2	W. Shell Island	8/4/08	1	wet		
057-09.2	W. Shell Island	8/26/08	4	dry		
057-09.2	W. Shell Island	9/10/08	26	wet		
057-09.2	W. Shell Island	9/17/08	1	dry		
057-09.2	W. Shell Island	10/7/08	1	wet		
057-09.2	W. Shell Island	10/27/08	7	wet		
057-09.2	W. Shell Island	11/2/08	1	dry		
057-09.2	W. Shell Island	11/24/08	1	dry		
057-09.2	W. Shell Island	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	2/9/09	1	dry	3	NA
057-09.2	W. Shell Island	3/10/09	1	wet		
057-09.2	W. Shell Island	4/22/09	5	wet		
057-09.2	W. Shell Island	5/11/09	1	dry		
057-09.2	W. Shell Island	6/8/09	5	dry		
057-09.2	W. Shell Island	6/10/09	12	wet		
057-09.2	W. Shell Island	6/22/09	5	wet		
057-09.2	W. Shell Island	7/20/09	1	dry		
057-09.2	W. Shell Island	8/3/09	3	dry		
057-09.2	W. Shell Island	8/17/09	2	dry		
057-09.2	W. Shell Island	8/24/09	26	wet		
057-09.2	W. Shell Island	9/1/09	1	dry		
057-09.2	W. Shell Island	10/5/09	5	wet		
057-09.2	W. Shell Island	11/3/09	5	wet		
057-09.2	W. Shell Island	12/1/09	2	wet		
057-09.2	W. Shell Island	12/14/09	8	wet		
057-09.2	W. Shell Island	12/28/09	12	wet		
057-09.2	W. Shell Island	1/19/10	1	wet	2	NA
057-09.2	W. Shell Island	1/27/10	1	wet		
057-09.2	W. Shell Island	2/22/10	1	dry		
057-09.2	W. Shell Island	3/2/10	1	wet		
057-09.2	W. Shell Island	4/4/10	2	dry		
057-09.2	W. Shell Island	4/11/10	1	wet		
057-09.2	W. Shell Island	5/5/10	9	wet		
057-09.2	W. Shell Island	6/9/10	1	wet		
057-09.2	W. Shell Island	7/7/10	1	dry		
057-09.2	W. Shell Island	7/26/10	2	wet		
057-09.2	W. Shell Island	8/25/10	4	wet		
057-09.2	W. Shell Island	9/20/10	1	dry		
057-09.2	W. Shell Island	9/21/10	1	dry		
057-09.2	W. Shell Island	10/3/10	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.2	W. Shell Island	3/15/11	1	dry		
057-09.2	W. Shell Island	4/25/11	3	wet		
057-09.2	W. Shell Island	5/23/11	19	wet		
057-09.2	W. Shell Island	6/8/11	4	dry		
057-09.2	W. Shell Island	6/22/11	2	wet		
057-09.2	W. Shell Island	7/11/11	3	dry		
057-09.2	W. Shell Island	7/19/11	7	dry	4	NA
057-09.2	W. Shell Island	7/25/11	1	dry		
057-09.2	W. Shell Island	8/10/11	18	dry		
057-09.2	W. Shell Island	8/17/11	6	dry		
057-09.2	W. Shell Island	8/22/11	1	dry		
057-09.2	W. Shell Island	9/12/11	7	dry		
057-09.2	W. Shell Island	9/19/11	3	dry		
057-09.3	N. Shell Island	3/25/01	2	wet		
057-09.3	N. Shell Island	5/30/01	11	wet		
057-09.3	N. Shell Island	7/12/01	11	wet		
057-09.3	N. Shell Island	7/25/01	2	dry		
057-09.3	N. Shell Island	8/12/01	22	wet		
057-09.3	N. Shell Island	8/14/01	36	wet		
057-09.3	N. Shell Island	8/19/01	4	dry	**9* (NA)**	**4**
057-09.3	N. Shell Island	9/9/01	6	dry		
057-09.3	N. Shell Island	9/16/01	6	wet		
057-09.3	N. Shell Island	9/23/01	14	wet		
057-09.3	N. Shell Island	10/2/01	6	wet		
057-09.3	N. Shell Island	11/7/01	50	dry		
057-09.3	N. Shell Island	11/25/01	8	wet		
057-09.3	N. Shell Island	12/2/01	22	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	1/6/02	2	dry		
057-09.3	N. Shell Island	1/27/02	2	dry		
057-09.3	N. Shell Island	3/17/02	2	dry		
057-09.3	N. Shell Island	3/31/02	2	dry		
057-09.3	N. Shell Island	4/21/02	2	wet		
057-09.3	N. Shell Island	5/5/02	2	dry		
057-09.3	N. Shell Island	5/12/02	4	wet		
057-09.3	N. Shell Island	5/19/02	8	wet		
057-09.3	N. Shell Island	6/9/02	18	wet		
057-09.3	N. Shell Island	6/16/02	36	wet		
057-09.3	N. Shell Island	6/23/02	11	dry	4	NA
057-09.3	N. Shell Island	6/30/02	4	dry		
057-09.3	N. Shell Island	7/8/02	4	dry		
057-09.3	N. Shell Island	7/22/02	4	dry		
057-09.3	N. Shell Island	8/4/02	2	wet		
057-09.3	N. Shell Island	8/18/02	14	wet		
057-09.3	N. Shell Island	9/8/02	2	dry		
057-09.3	N. Shell Island	9/29/02	6	wet		
057-09.3	N. Shell Island	10/20/02	22	dry		
057-09.3	N. Shell Island	11/3/02	2	dry		
057-09.3	N. Shell Island	12/16/02	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	1/13/03	11	dry	7	NA
057-09.3	N. Shell Island	2/24/03	14	wet		
057-09.3	N. Shell Island	3/11/03	2	wet		
057-09.3	N. Shell Island	3/26/03	2	wet		
057-09.3	N. Shell Island	4/13/03	2	wet		
057-09.3	N. Shell Island	4/30/03	2	dry		
057-09.3	N. Shell Island	5/28/03	14	wet		
057-09.3	N. Shell Island	6/8/03	18	wet		
057-09.3	N. Shell Island	6/13/03	18	wet		
057-09.3	N. Shell Island	7/23/03	36	wet		
057-09.3	N. Shell Island	8/19/03	18	wet		
057-09.3	N. Shell Island	9/10/03	2	wet		
057-09.3	N. Shell Island	9/24/03	28	wet		
057-09.3	N. Shell Island	9/30/03	8	wet		
057-09.3	N. Shell Island	1/6/04	8	wet	4	NA
057-09.3	N. Shell Island	3/15/04	2	dry		
057-09.3	N. Shell Island	4/7/04	2	dry		
057-09.3	N. Shell Island	4/29/04	2	dry		
057-09.3	N. Shell Island	6/16/04	2	dry		
057-09.3	N. Shell Island	6/20/04	2	dry		
057-09.3	N. Shell Island	7/7/04	6	wet		
057-09.3	N. Shell Island	7/26/04	4	wet		
057-09.3	N. Shell Island	8/17/04	2	wet		
057-09.3	N. Shell Island	9/12/04	51	wet		
057-09.3	N. Shell Island	9/21/04	28	dry		
057-09.3	N. Shell Island	10/25/04	14	dry		
057-09.3	N. Shell Island	11/7/04	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	4/6/05	1	dry	2	NA
057-09.3	N. Shell Island	5/18/05	5	dry		
057-09.3	N. Shell Island	6/1/05	81	dry		
057-09.3	N. Shell Island	6/20/05	3	dry		
057-09.3	N. Shell Island	7/5/05	1	dry		
057-09.3	N. Shell Island	7/11/05	1	dry		
057-09.3	N. Shell Island	8/3/05	2	dry		
057-09.3	N. Shell Island	8/17/05	13	wet		
057-09.3	N. Shell Island	9/19/05	1	dry		
057-09.3	N. Shell Island	10/4/05	1	dry		
057-09.3	N. Shell Island	10/31/05	1	dry		
057-09.3	N. Shell Island	11/14/05	1	dry		
057-09.3	N. Shell Island	1/25/06	1	wet	2	NA
057-09.3	N. Shell Island	2/22/06	1	wet		
057-09.3	N. Shell Island	5/24/06	1	dry		
057-09.3	N. Shell Island	6/12/06	1	dry		
057-09.3	N. Shell Island	7/10/06	26	dry		
057-09.3	N. Shell Island	8/8/06	2	dry		
057-09.3	N. Shell Island	9/19/06	3	dry		
057-09.3	N. Shell Island	10/16/06	1	dry		
057-09.3	N. Shell Island	11/1/06	2	dry		
057-09.3	N. Shell Island	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	1/29/07	1	dry	2	NA
057-09.3	N. Shell Island	3/27/07	1	wet		
057-09.3	N. Shell Island	4/23/07	1	dry		
057-09.3	N. Shell Island	5/23/07	2	dry		
057-09.3	N. Shell Island	6/12/07	1	wet		
057-09.3	N. Shell Island	6/17/07	3	dry		
057-09.3	N. Shell Island	7/8/07	13	dry		
057-09.3	N. Shell Island	7/31/07	1	dry		
057-09.3	N. Shell Island	8/28/07	1	dry		
057-09.3	N. Shell Island	9/23/07	1	dry		
057-09.3	N. Shell Island	10/16/07	5	dry		
057-09.3	N. Shell Island	10/22/07	3	wet		
057-09.3	N. Shell Island	10/31/07	12	dry		
057-09.3	N. Shell Island	11/5/07	1	dry		
057-09.3	N. Shell Island	12/6/07	3	dry		
057-09.3	N. Shell Island	12/10/07	9	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	1/8/08	1	dry	2	NA
057-09.3	N. Shell Island	2/9/08	1	dry		
057-09.3	N. Shell Island	3/3/08	1	dry		
057-09.3	N. Shell Island	4/23/08	1	dry		
057-09.3	N. Shell Island	4/30/08	1	wet		
057-09.3	N. Shell Island	5/14/08	2	dry		
057-09.3	N. Shell Island	5/20/08	1	wet		
057-09.3	N. Shell Island	5/29/08	12	wet		
057-09.3	N. Shell Island	6/18/08	1	wet		
057-09.3	N. Shell Island	6/30/08	15	wet		
057-09.3	N. Shell Island	7/27/08	3	dry		
057-09.3	N. Shell Island	8/4/08	1	wet		
057-09.3	N. Shell Island	8/26/08	1	dry		
057-09.3	N. Shell Island	9/10/08	15	wet		
057-09.3	N. Shell Island	9/17/08	1	dry		
057-09.3	N. Shell Island	10/7/08	1	wet		
057-09.3	N. Shell Island	10/27/08	4	wet		
057-09.3	N. Shell Island	11/2/08	2	dry		
057-09.3	N. Shell Island	11/24/08	1	dry		
057-09.3	N. Shell Island	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	3/10/09	1	wet	3	NA
057-09.3	N. Shell Island	4/22/09	3	wet		
057-09.3	N. Shell Island	5/11/09	1	dry		
057-09.3	N. Shell Island	6/8/09	1	dry		
057-09.3	N. Shell Island	6/10/09	2	wet		
057-09.3	N. Shell Island	6/22/09	6	wet		
057-09.3	N. Shell Island	7/20/09	2	dry		
057-09.3	N. Shell Island	8/3/09	3	dry		
057-09.3	N. Shell Island	8/17/09	1	dry		
057-09.3	N. Shell Island	8/24/09	16	wet		
057-09.3	N. Shell Island	9/1/09	2	dry		
057-09.3	N. Shell Island	10/5/09	2	wet		
057-09.3	N. Shell Island	11/3/09	7	wet		
057-09.3	N. Shell Island	12/1/09	1	wet		
057-09.3	N. Shell Island	12/14/09	9	wet		
057-09.3	N. Shell Island	12/28/09	7	wet		
057-09.3	N. Shell Island	1/19/10	3	wet	2	NA
057-09.3	N. Shell Island	1/27/10	1	wet		
057-09.3	N. Shell Island	2/22/10	1	dry		
057-09.3	N. Shell Island	3/2/10	1	wet		
057-09.3	N. Shell Island	4/4/10	3	dry		
057-09.3	N. Shell Island	4/11/10	1	wet		
057-09.3	N. Shell Island	5/5/10	2	wet		
057-09.3	N. Shell Island	6/9/10	3	wet		
057-09.3	N. Shell Island	7/7/10	1	dry		
057-09.3	N. Shell Island	7/26/10	2	wet		
057-09.3	N. Shell Island	8/25/10	4	wet		
057-09.3	N. Shell Island	9/20/10	2	dry		
057-09.3	N. Shell Island	9/21/10	1	dry		
057-09.3	N. Shell Island	10/3/10	13	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.3	N. Shell Island	6/8/11	2	dry	3	NA
057-09.3	N. Shell Island	8/17/11	5	dry		
057-09.3	N. Shell Island	8/22/11	1	dry		
057-09.3	N. Shell Island	9/12/11	9	dry		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 8: LIS WB-Shore – Byram Harbor (West) (CT-W2_025)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-09.2	W. Shell Island	2001-2011	74	90	3	5	2
057-09.3	N. Shell Island	2001-2011	71	83	3	5	2

Shaded cells indicate an exceedance of water quality criteria

Table 21: Segment 9: LIS WB Midshore – Outer Westcott Cove Bacteria Data

Waterbody ID: CT-W3_011

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **50%**

90% of samples less than: **40%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-01.6	R"32" bell	4/24/00	2	wet	2	NA
135-01.6	R"32" bell	7/18/00	2	dry		
135-01.6	R"32" bell	7/19/00	4	dry		
135-01.6	R"32" bell	9/14/00	2	wet		
135-01.6	R"32" bell	9/18/00	2	dry		
135-01.6	R"32" bell	5/29/01	2	dry	2	NA
135-01.6	R"32" bell	6/20/01	2	wet		
135-01.6	R"32" bell	8/14/01	14	dry		
135-01.6	R"32" bell	8/30/01	2	dry		
135-01.6	R"32" bell	9/24/01	2	wet		
135-01.6	R"32" bell	1/10/02	2	dry	4	15
135-01.6	R"32" bell	6/11/02	2	wet		
135-01.6	R"32" bell	9/3/02	51	wet		
135-01.6	R"32" bell	9/30/02	2	dry		
135-01.6	R"32" bell	8/18/03	2	wet	2	NA
135-01.6	R"32" bell	10/1/03	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-01.6	R"32" bell	3/31/04	2	wet	2	NA
135-01.6	R"32" bell	5/11/04	2	wet		
135-01.6	R"32" bell	6/21/04	2	dry		
135-01.6	R"32" bell	7/7/04	2	dry		
135-01.6	R"32" bell	9/13/04	4	wet		
135-01.6	R"32" bell	9/21/04	2	dry		
135-01.6	R"32" bell	8/16/05	10	wet	6	NA
135-01.6	R"32" bell	10/26/05	6	wet		
135-01.6	R"32" bell	10/27/05	3	wet		
135-01.6	R"32" bell	7/17/06	1	dry	2	NA
135-01.6	R"32" bell	8/31/06	17	wet		
135-01.6	R"32" bell	9/5/06	3	wet		
135-01.6	R"32" bell	10/16/06	1	dry		
135-01.6	R"32" bell	11/1/06	1	dry		
135-01.6	R"32" bell	1/3/07	1	wet	2	NA
135-01.6	R"32" bell	6/7/07	1	wet		
135-01.6	R"32" bell	9/12/07	24	wet		
135-01.6	R"32" bell	10/22/07	1	wet		
135-01.6	R"32" bell	10/31/07	1	dry		
135-01.6	R"32" bell	5/29/08	1	wet	3	NA
135-01.6	R"32" bell	7/28/08	3	dry		
135-01.6	R"32" bell	9/10/08	28	wet		
135-01.6	R"32" bell	12/16/08	8	wet		
135-01.6	R"32" bell	12/22/08	1	wet		
135-01.6	R"32" bell	12/26/08	3	wet		
135-01.6	R"32" bell	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-01.6	R"32" bell	4/22/09	1	wet	1	NA
135-01.6	R"32" bell	6/10/09	4	wet		
135-01.6	R"32" bell	6/24/09	1	dry		
135-01.6	R"32" bell	7/22/09	1	wet		
135-01.6	R"32" bell	8/4/09	1	dry		
135-01.6	R"32" bell	8/25/09	1	wet		
135-01.6	R"32" bell	1/27/10	1	wet	1	NA
135-01.6	R"32" bell	3/18/10	1	wet		
135-01.6	R"32" bell	3/25/10	6	wet		
135-01.6	R"32" bell	5/5/10	1	wet		
135-01.6	R"32" bell	5/20/10	1	wet		
135-01.6	R"32" bell	9/20/10	1	dry		
135-01.6	R"32" bell	4/26/11	1	dry	1	NA
135-01.6	R"32" bell	5/22/11	1	wet		
135-02.0	N. of "The Cows"	2/3/00	14	dry	3	NA
135-02.0	N. of "The Cows"	4/24/00	2	wet		
135-02.0	N. of "The Cows"	7/18/00	2	dry		
135-02.0	N. of "The Cows"	7/19/00	2	dry		
135-02.0	N. of "The Cows"	9/14/00	2	wet		
135-02.0	N. of "The Cows"	9/18/00	6	dry		
135-02.0	N. of "The Cows"	5/29/01	2	dry	4	NA
135-02.0	N. of "The Cows"	6/20/01	8	wet		
135-02.0	N. of "The Cows"	8/14/01	18	dry		
135-02.0	N. of "The Cows"	8/30/01	4	dry		
135-02.0	N. of "The Cows"	9/24/01	2	wet		
135-02.0	N. of "The Cows"	1/10/02	4	dry	6	15
135-02.0	N. of "The Cows"	6/11/02	2	wet		
135-02.0	N. of "The Cows"	9/3/02	51	wet		
135-02.0	N. of "The Cows"	9/30/02	4	dry		
135-02.0	N. of "The Cows"	8/18/03	4	wet	2	NA
135-02.0	N. of "The Cows"	10/1/03	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-02.0	N. of "The Cows"	3/31/04	2	wet	2	NA
135-02.0	N. of "The Cows"	5/11/04	2	wet		
135-02.0	N. of "The Cows"	6/21/04	2	dry		
135-02.0	N. of "The Cows"	7/7/04	2	dry		
135-02.0	N. of "The Cows"	9/13/04	2	wet		
135-02.0	N. of "The Cows"	9/21/04	14	dry		
135-02.0	N. of "The Cows"	8/16/05	40	wet	**28* (50%)**	**40**
135-02.0	N. of "The Cows"	10/27/05	19	wet		
135-02.0	N. of "The Cows"	7/17/06	1	dry	3	NA
135-02.0	N. of "The Cows"	8/31/06	29	wet		
135-02.0	N. of "The Cows"	9/5/06	2	wet		
135-02.0	N. of "The Cows"	9/6/06	10	dry		
135-02.0	N. of "The Cows"	10/16/06	1	dry		
135-02.0	N. of "The Cows"	11/1/06	1	dry		
135-02.0	N. of "The Cows"	1/3/07	1	wet	5	23
135-02.0	N. of "The Cows"	5/1/07	1	wet		
135-02.0	N. of "The Cows"	6/7/07	1	wet		
135-02.0	N. of "The Cows"	9/12/07	81	wet		
135-02.0	N. of "The Cows"	10/22/07	47	wet		
135-02.0	N. of "The Cows"	10/31/07	3	dry		
135-02.0	N. of "The Cows"	5/29/08	6	wet	4	NA
135-02.0	N. of "The Cows"	7/28/08	1	dry		
135-02.0	N. of "The Cows"	9/10/08	15	wet		
135-02.0	N. of "The Cows"	12/16/08	16	wet		
135-02.0	N. of "The Cows"	12/26/08	2	wet		
135-02.0	N. of "The Cows"	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-02.0	N. of "The Cows"	4/22/09	3	wet	2	NA
135-02.0	N. of "The Cows"	6/10/09	7	wet		
135-02.0	N. of "The Cows"	6/24/09	1	dry		
135-02.0	N. of "The Cows"	7/22/09	3	wet		
135-02.0	N. of "The Cows"	8/4/09	1	dry		
135-02.0	N. of "The Cows"	8/25/09	3	wet		
135-02.0	N. of "The Cows"	1/27/10	1	wet	1	NA
135-02.0	N. of "The Cows"	3/18/10	1	wet		
135-02.0	N. of "The Cows"	3/25/10	1	wet		
135-02.0	N. of "The Cows"	5/5/10	1	wet		
135-02.0	N. of "The Cows"	5/20/10	1	wet		
135-02.0	N. of "The Cows"	9/20/10	1	dry		
135-02.0	N. of "The Cows"	4/26/11	1	dry	1	NA
135-02.0	N. of "The Cows"	5/22/11	1	wet		
135-03.0	end of Shippan Avenue	2/3/00	18	dry	3	NA
135-03.0	end of Shippan Avenue	4/24/00	2	wet		
135-03.0	end of Shippan Avenue	7/18/00	2	dry		
135-03.0	end of Shippan Avenue	7/19/00	2	dry		
135-03.0	end of Shippan Avenue	9/18/00	2	dry		
135-03.0	end of Shippan Avenue	5/29/01	4	dry	4	10
135-03.0	end of Shippan Avenue	6/20/01	2	wet		
135-03.0	end of Shippan Avenue	8/14/01	50	dry		
135-03.0	end of Shippan Avenue	8/30/01	2	dry		
135-03.0	end of Shippan Avenue	9/24/01	2	wet		
135-03.0	end of Shippan Avenue	1/10/02	18	dry	11	15
135-03.0	end of Shippan Avenue	6/11/02	2	wet		
135-03.0	end of Shippan Avenue	9/3/02	51	wet		
135-03.0	end of Shippan Avenue	9/30/02	8	dry		
135-03.0	end of Shippan Avenue	8/18/03	4	wet	4	NA
135-03.0	end of Shippan Avenue	10/1/03	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-03.0	end of Shippan Avenue	3/31/04	2	wet	2	NA
135-03.0	end of Shippan Avenue	5/11/04	2	wet		
135-03.0	end of Shippan Avenue	6/21/04	2	dry		
135-03.0	end of Shippan Avenue	7/7/04	2	dry		
135-03.0	end of Shippan Avenue	9/13/04	6	wet		
135-03.0	end of Shippan Avenue	9/21/04	6	dry		
135-03.0	end of Shippan Avenue	8/16/05	26	wet	14	NA
135-03.0	end of Shippan Avenue	10/27/05	8	wet		
135-03.0	end of Shippan Avenue	7/17/06	1	dry	2	7
135-03.0	end of Shippan Avenue	8/31/06	31	wet		
135-03.0	end of Shippan Avenue	9/5/06	1	wet		
135-03.0	end of Shippan Avenue	9/6/06	4	dry		
135-03.0	end of Shippan Avenue	10/16/06	1	dry		
135-03.0	end of Shippan Avenue	11/1/06	1	dry		
135-03.0	end of Shippan Avenue	1/3/07	2	wet	3	7
135-03.0	end of Shippan Avenue	5/1/07	1	wet		
135-03.0	end of Shippan Avenue	6/7/07	1	wet		
135-03.0	end of Shippan Avenue	9/12/07	68	wet		
135-03.0	end of Shippan Avenue	10/22/07	3	wet		
135-03.0	end of Shippan Avenue	10/31/07	2	dry		
135-03.0	end of Shippan Avenue	5/29/08	5	wet	5	7
135-03.0	end of Shippan Avenue	7/28/08	1	dry		
135-03.0	end of Shippan Avenue	9/10/08	38	wet		
135-03.0	end of Shippan Avenue	12/16/08	6	wet		
135-03.0	end of Shippan Avenue	12/26/08	3	wet		
135-03.0	end of Shippan Avenue	12/29/08	3	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-03.0	end of Shippan Avenue	4/22/09	4	wet	3	NA
135-03.0	end of Shippan Avenue	6/10/09	7	wet		
135-03.0	end of Shippan Avenue	6/24/09	4	dry		
135-03.0	end of Shippan Avenue	7/22/09	2	wet		
135-03.0	end of Shippan Avenue	8/4/09	1	dry		
135-03.0	end of Shippan Avenue	8/25/09	5	wet		
135-03.0	end of Shippan Avenue	1/27/10	1	wet	1	NA
135-03.0	end of Shippan Avenue	3/18/10	1	wet		
135-03.0	end of Shippan Avenue	3/25/10	1	wet		
135-03.0	end of Shippan Avenue	5/5/10	1	wet		
135-03.0	end of Shippan Avenue	5/20/10	1	wet		
135-03.0	end of Shippan Avenue	9/20/10	1	dry		
135-03.0	end of Shippan Avenue	4/26/11	1	dry	1	NA
135-03.0	end of Shippan Avenue	5/22/11	1	wet		
135-03.1	E. of station 3.0	9/18/00	2	dry	NA	NA
135-03.1	E. of station 3.0	5/29/01	2	dry	2	NA
135-03.1	E. of station 3.0	6/20/01	2	wet		
135-03.1	E. of station 3.0	8/14/01	2	dry		
135-03.1	E. of station 3.0	8/30/01	2	dry		
135-03.1	E. of station 3.0	9/24/01	2	wet		
135-03.1	E. of station 3.0	1/10/02	4	dry	6	10
135-03.1	E. of station 3.0	1/23/02	6	wet		
135-03.1	E. of station 3.0	6/11/02	2	wet		
135-03.1	E. of station 3.0	9/3/02	51	wet		
135-03.1	E. of station 3.0	9/30/02	6	dry		
135-03.1	E. of station 3.0	4/30/03	2	dry	4	NA
135-03.1	E. of station 3.0	6/2/03	22	wet		
135-03.1	E. of station 3.0	6/11/03	4	dry		
135-03.1	E. of station 3.0	8/18/03	8	wet		
135-03.1	E. of station 3.0	10/1/03	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-03.1	E. of station 3.0	3/31/04	2	wet	3	NA
135-03.1	E. of station 3.0	5/11/04	2	wet		
135-03.1	E. of station 3.0	6/21/04	2	dry		
135-03.1	E. of station 3.0	7/7/04	2	dry		
135-03.1	E. of station 3.0	9/13/04	8	wet		
135-03.1	E. of station 3.0	9/21/04	6	dry		
135-03.1	E. of station 3.0	8/16/05	26	wet	17	NA
135-03.1	E. of station 3.0	10/26/05	26	wet		
135-03.1	E. of station 3.0	10/27/05	7	wet		
135-03.1	E. of station 3.0	7/17/06	1	dry	2	NA
135-03.1	E. of station 3.0	8/31/06	24	wet		
135-03.1	E. of station 3.0	9/5/06	1	wet		
135-03.1	E. of station 3.0	9/6/06	6	dry		
135-03.1	E. of station 3.0	10/16/06	1	dry		
135-03.1	E. of station 3.0	11/1/06	1	dry		
135-03.1	E. of station 3.0	1/3/07	1	wet	3	7
135-03.1	E. of station 3.0	5/1/07	1	wet		
135-03.1	E. of station 3.0	6/7/07	1	wet		
135-03.1	E. of station 3.0	9/12/07	81	wet		
135-03.1	E. of station 3.0	10/22/07	7	wet		
135-03.1	E. of station 3.0	10/31/07	1	dry		
135-03.1	E. of station 3.0	5/29/08	2	wet	3	NA
135-03.1	E. of station 3.0	7/28/08	3	dry		
135-03.1	E. of station 3.0	9/10/08	18	wet		
135-03.1	E. of station 3.0	12/16/08	2	wet		
135-03.1	E. of station 3.0	12/26/08	2	wet		
135-03.1	E. of station 3.0	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-03.1	E. of station 3.0	4/22/09	1	wet	2	NA
135-03.1	E. of station 3.0	6/10/09	1	wet		
135-03.1	E. of station 3.0	6/24/09	3	dry		
135-03.1	E. of station 3.0	7/22/09	2	wet		
135-03.1	E. of station 3.0	8/4/09	1	dry		
135-03.1	E. of station 3.0	8/25/09	4	wet		
135-03.1	E. of station 3.0	1/27/10	1	wet	1	NA
135-03.1	E. of station 3.0	3/18/10	3	wet		
135-03.1	E. of station 3.0	3/25/10	1	wet		
135-03.1	E. of station 3.0	5/5/10	1	wet		
135-03.1	E. of station 3.0	5/20/10	1	wet		
135-03.1	E. of station 3.0	9/20/10	1	dry		
135-03.1	E. of station 3.0	4/26/11	1	dry	1	NA
135-03.1	E. of station 3.0	5/22/11	1	wet		
135-05.1	SW Cove Rocks near N"2"	2/3/00	11	dry	4	NA
135-05.1	SW Cove Rocks near N"2"	4/24/00	4	wet		
135-05.1	SW Cove Rocks near N"2"	5/25/00	11	wet		
135-05.1	SW Cove Rocks near N"2"	7/18/00	2	dry		
135-05.1	SW Cove Rocks near N"2"	7/19/00	6	dry		
135-05.1	SW Cove Rocks near N"2"	9/18/00	2	dry		
135-05.1	SW Cove Rocks near N"2"	5/29/01	2	dry	4	NA
135-05.1	SW Cove Rocks near N"2"	6/20/01	2	wet		
135-05.1	SW Cove Rocks near N"2"	8/14/01	22	dry		
135-05.1	SW Cove Rocks near N"2"	8/30/01	2	dry		
135-05.1	SW Cove Rocks near N"2"	9/24/01	11	wet		
135-05.1	SW Cove Rocks near N"2"	1/10/02	36	dry	6	30
135-05.1	SW Cove Rocks near N"2"	1/23/02	2	wet		
135-05.1	SW Cove Rocks near N"2"	6/11/02	2	wet		
135-05.1	SW Cove Rocks near N"2"	9/3/02	51	wet		
135-05.1	SW Cove Rocks near N"2"	9/30/02	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-05.1	SW Cove Rocks near N"2"	4/30/03	2	dry	3	NA
135-05.1	SW Cove Rocks near N"2"	6/2/03	14	wet		
135-05.1	SW Cove Rocks near N"2"	6/11/03	4	dry		
135-05.1	SW Cove Rocks near N"2"	8/18/03	2	wet		
135-05.1	SW Cove Rocks near N"2"	10/1/03	4	dry		
135-05.1	SW Cove Rocks near N"2"	3/31/04	2	wet	4	NA
135-05.1	SW Cove Rocks near N"2"	5/11/04	2	wet		
135-05.1	SW Cove Rocks near N"2"	6/21/04	2	dry		
135-05.1	SW Cove Rocks near N"2"	7/7/04	4	dry		
135-05.1	SW Cove Rocks near N"2"	9/13/04	6	wet		
135-05.1	SW Cove Rocks near N"2"	9/21/04	22	dry		
135-05.1	SW Cove Rocks near N"2"	8/16/05	28	wet	9	NA
135-05.1	SW Cove Rocks near N"2"	10/27/05	3	wet		
135-05.1	SW Cove Rocks near N"2"	7/17/06	1	dry	2	NA
135-05.1	SW Cove Rocks near N"2"	8/31/06	29	wet		
135-05.1	SW Cove Rocks near N"2"	9/5/06	1	wet		
135-05.1	SW Cove Rocks near N"2"	9/6/06	1	dry		
135-05.1	SW Cove Rocks near N"2"	10/16/06	1	dry		
135-05.1	SW Cove Rocks near N"2"	11/1/06	1	dry		
135-05.1	SW Cove Rocks near N"2"	1/3/07	1	wet	3	NA
135-05.1	SW Cove Rocks near N"2"	5/1/07	1	wet		
135-05.1	SW Cove Rocks near N"2"	6/7/07	2	wet		
135-05.1	SW Cove Rocks near N"2"	9/12/07	27	wet		
135-05.1	SW Cove Rocks near N"2"	10/22/07	3	wet		
135-05.1	SW Cove Rocks near N"2"	10/31/07	8	dry		
135-05.1	SW Cove Rocks near N"2"	5/29/08	1	wet	3	NA
135-05.1	SW Cove Rocks near N"2"	7/28/08	1	dry		
135-05.1	SW Cove Rocks near N"2"	9/10/08	27	wet		
135-05.1	SW Cove Rocks near N"2"	12/16/08	10	wet		
135-05.1	SW Cove Rocks near N"2"	12/26/08	1	wet		
135-05.1	SW Cove Rocks near N"2"	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-05.1	SW Cove Rocks near N"2"	4/22/09	1	wet	3	NA
135-05.1	SW Cove Rocks near N"2"	6/10/09	6	wet		
135-05.1	SW Cove Rocks near N"2"	6/24/09	4	dry		
135-05.1	SW Cove Rocks near N"2"	7/22/09	1	wet		
135-05.1	SW Cove Rocks near N"2"	8/4/09	1	dry		
135-05.1	SW Cove Rocks near N"2"	8/25/09	11	wet		
135-05.1	SW Cove Rocks near N"2"	1/27/10	1	wet	1	NA
135-05.1	SW Cove Rocks near N"2"	3/18/10	1	wet		
135-05.1	SW Cove Rocks near N"2"	3/25/10	1	wet		
135-05.1	SW Cove Rocks near N"2"	5/5/10	1	wet		
135-05.1	SW Cove Rocks near N"2"	5/20/10	2	wet		
135-05.1	SW Cove Rocks near N"2"	9/20/10	1	dry		
135-05.1	SW Cove Rocks near N"2"	4/26/11	1	dry	1	NA
135-05.1	SW Cove Rocks near N"2"	5/22/11	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	2/3/00	2	dry	2	NA
135-05.2	Between Cove Rocks and Smith Reef	4/24/00	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	5/25/00	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	7/18/00	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	7/19/00	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	9/18/00	6	dry		
135-05.2	Between Cove Rocks and Smith Reef	5/29/01	2	dry	2	NA
135-05.2	Between Cove Rocks and Smith Reef	6/20/01	4	wet		
135-05.2	Between Cove Rocks and Smith Reef	8/14/01	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	8/30/01	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	9/24/01	11	wet		
135-05.2	Between Cove Rocks and Smith Reef	1/10/02	6	dry	3	10
135-05.2	Between Cove Rocks and Smith Reef	1/23/02	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	6/11/02	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	9/3/02	51	wet		
135-05.2	Between Cove Rocks and Smith Reef	9/30/02	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-05.2	Between Cove Rocks and Smith Reef	4/30/03	2	dry	4	23
135-05.2	Between Cove Rocks and Smith Reef	6/2/03	50	wet		
135-05.2	Between Cove Rocks and Smith Reef	6/6/03	51	wet		
135-05.2	Between Cove Rocks and Smith Reef	6/11/03	4	dry		
135-05.2	Between Cove Rocks and Smith Reef	8/18/03	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	10/1/03	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	3/31/04	2	wet	2	NA
135-05.2	Between Cove Rocks and Smith Reef	5/11/04	4	wet		
135-05.2	Between Cove Rocks and Smith Reef	6/21/04	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	7/7/04	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	9/13/04	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	9/21/04	11	dry		
135-05.2	Between Cove Rocks and Smith Reef	8/16/05	17	wet	3	NA
135-05.2	Between Cove Rocks and Smith Reef	10/27/05	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	7/17/06	1	dry	2	NA
135-05.2	Between Cove Rocks and Smith Reef	9/5/06	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	9/6/06	9	dry		
135-05.2	Between Cove Rocks and Smith Reef	10/16/06	1	dry		
135-05.2	Between Cove Rocks and Smith Reef	11/1/06	2	dry		
135-05.2	Between Cove Rocks and Smith Reef	1/3/07	1	wet	2	7
135-05.2	Between Cove Rocks and Smith Reef	5/1/07	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	6/7/07	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	9/12/07	40	wet		
135-05.2	Between Cove Rocks and Smith Reef	10/22/07	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	10/31/07	1	dry		
135-05.2	Between Cove Rocks and Smith Reef	5/29/08	1	wet	2	7
135-05.2	Between Cove Rocks and Smith Reef	7/28/08	1	dry		
135-05.2	Between Cove Rocks and Smith Reef	9/10/08	37	wet		
135-05.2	Between Cove Rocks and Smith Reef	12/16/08	4	wet		
135-05.2	Between Cove Rocks and Smith Reef	12/26/08	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-05.2	Between Cove Rocks and Smith Reef	4/22/09	1	wet	1	NA
135-05.2	Between Cove Rocks and Smith Reef	6/10/09	3	wet		
135-05.2	Between Cove Rocks and Smith Reef	6/24/09	3	dry		
135-05.2	Between Cove Rocks and Smith Reef	7/22/09	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	8/4/09	1	dry		
135-05.2	Between Cove Rocks and Smith Reef	8/25/09	2	wet		
135-05.2	Between Cove Rocks and Smith Reef	1/27/10	1	wet	1	NA
135-05.2	Between Cove Rocks and Smith Reef	3/18/10	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	3/25/10	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	5/5/10	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	5/20/10	1	wet		
135-05.2	Between Cove Rocks and Smith Reef	9/20/10	1	dry		
135-05.2	Between Cove Rocks and Smith Reef	4/26/11	1	dry	1	NA
135-05.2	Between Cove Rocks and Smith Reef	5/22/11	3	wet		
135-12.0	E. Cove Rocks	2/3/00	14	dry	5	NA
135-12.0	E. Cove Rocks	2/23/00	2	dry		
135-12.0	E. Cove Rocks	5/30/01	2	dry	2	NA
135-12.0	E. Cove Rocks	6/26/01	2[†]	dry		
135-12.0	E. Cove Rocks	10/4/01	4	dry		
135-12.0	E. Cove Rocks	1/10/02	6	dry	5	NA
135-12.0	E. Cove Rocks	1/23/02	4	wet		
135-12.0	E. Cove Rocks	8/18/03	4	wet	NA	NA
135-12.0	E. Cove Rocks	3/2/04	2	wet	2	NA
135-12.0	E. Cove Rocks	9/13/04	2	wet		
135-12.0	E. Cove Rocks	8/16/05	22	wet	NA	NA
135-12.0	E. Cove Rocks	2/23/06	1	wet	2	NA
135-12.0	E. Cove Rocks	7/17/06	6	dry		
135-12.0	E. Cove Rocks	7/26/06	2	dry		
135-12.0	E. Cove Rocks	10/11/06	1	wet		
135-12.0	E. Cove Rocks	1/3/07	1	wet	NA	NA
135-12.0	E. Cove Rocks	5/27/08	3	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
135-12.0	E. Cove Rocks	4/22/09	11	wet	2	NA
135-12.0	E. Cove Rocks	7/22/09	1	wet		
135-12.0	E. Cove Rocks	7/28/09	2	dry		
135-12.0	E. Cove Rocks	8/4/09	1	dry		
135-12.0	E. Cove Rocks	8/25/09	6	wet		
135-12.0	E. Cove Rocks	10/20/09	1	wet		
135-12.0	E. Cove Rocks	12/15/09	2	wet		
135-12.0	E. Cove Rocks	1/27/10	1	wet	1	NA
135-12.0	E. Cove Rocks	3/25/10	1	wet		
135-12.0	E. Cove Rocks	5/5/10	1	wet		
135-12.0	E. Cove Rocks	5/20/10	1	wet		
135-12.0	E. Cove Rocks	6/23/10	1	wet		
135-12.0	E. Cove Rocks	4/26/11	1	dry	NA	NA

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 9: LIS WB-Midshore – Outer Westcott Cove (CT-W3_011)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
135-01.6	R"32" bell	2000-2011	34	22	2	3	2
135-02.0	N. of "The Cows"	2000-2011	33	24	3	4	2
135-03.0	end of Shippan Avenue	2000-2011	32	24	3	3	3
135-03.1	E. of station 3.0	2000-2011	34	23	3	3	2
135-05.1	SW Cove Rocks near N"2"	2000-2011	35	26	3	3	3
135-05.2	Between Cove Rocks and Smith Reef	2000-2011	35	26	2	3	2
135-12.0	E. Cove Rocks	2000-2011	19	12	2	2	3

Shaded cells indicate an exceedance of water quality criteria

Table 22: Segment 10: LIS WB Midshore – Outer Stamford Harbor Bacteria Data

Waterbody ID: CT-W3_012

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **66%**

90% of samples less than: **90%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.2	N. Woolsey Rock	4/24/00	2	wet	3	NA
057-17.2	N. Woolsey Rock	6/22/00	2	dry		
057-17.2	N. Woolsey Rock	7/12/00	2	dry		
057-17.2	N. Woolsey Rock	7/16/00	18	wet		
057-17.2	N. Woolsey Rock	7/18/00	2	dry		
057-17.2	N. Woolsey Rock	7/19/00	18	dry		
057-17.2	N. Woolsey Rock	8/6/00	2	dry		
057-17.2	N. Woolsey Rock	8/7/00	4	dry		
057-17.2	N. Woolsey Rock	9/13/00	2	wet		
057-17.2	N. Woolsey Rock	9/14/00	4	wet		
057-17.2	N. Woolsey Rock	9/18/00	2	dry		
057-17.2	N. Woolsey Rock	11/12/00	8	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.2	N. Woolsey Rock	5/29/01	2	wet	2	NA
057-17.2	N. Woolsey Rock	5/30/01	2	wet		
057-17.2	N. Woolsey Rock	6/20/01	2	wet		
057-17.2	N. Woolsey Rock	8/14/01	18	wet		
057-17.2	N. Woolsey Rock	8/30/01	2	dry		
057-17.2	N. Woolsey Rock	9/9/01	2	dry		
057-17.2	N. Woolsey Rock	9/16/01	2	wet		
057-17.2	N. Woolsey Rock	9/23/01	8	wet		
057-17.2	N. Woolsey Rock	9/24/01	2	wet		
057-17.2	N. Woolsey Rock	10/2/01	2	wet		
057-17.2	N. Woolsey Rock	1/10/02	28	dry	4	NA
057-17.2	N. Woolsey Rock	3/11/02	2	dry		
057-17.2	N. Woolsey Rock	6/11/02	2	wet		
057-17.2	N. Woolsey Rock	9/3/02	28	wet		
057-17.2	N. Woolsey Rock	9/30/02	2	wet		
057-17.2	N. Woolsey Rock	12/4/02	2	dry		
057-17.2	N. Woolsey Rock	1/13/03	2	dry	4	3
057-17.2	N. Woolsey Rock	2/10/03	2	dry		
057-17.2	N. Woolsey Rock	3/11/03	2	wet		
057-17.2	N. Woolsey Rock	7/23/03	6	wet		
057-17.2	N. Woolsey Rock	8/18/03	51	wet		
057-17.2	N. Woolsey Rock	9/10/03	2	wet		
057-17.2	N. Woolsey Rock	9/24/03	14	wet		
057-17.2	N. Woolsey Rock	9/30/03	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for sampels (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.2	N. Woolsey Rock	1/6/04	2	wet	3	NA
057-17.2	N. Woolsey Rock	3/31/04	2	wet		
057-17.2	N. Woolsey Rock	5/11/04	2	wet		
057-17.2	N. Woolsey Rock	6/16/04	2	dry		
057-17.2	N. Woolsey Rock	6/20/04	2	dry		
057-17.2	N. Woolsey Rock	7/7/04	2	wet		
057-17.2	N. Woolsey Rock	7/26/04	4	wet		
057-17.2	N. Woolsey Rock	8/9/04	2	dry		
057-17.2	N. Woolsey Rock	8/17/04	4	wet		
057-17.2	N. Woolsey Rock	9/12/04	8	wet		
057-17.2	N. Woolsey Rock	9/21/04	11	dry		
057-17.2	N. Woolsey Rock	10/25/04	6	dry		
057-17.2	N. Woolsey Rock	1/25/05	2	dry	1	NA
057-17.2	N. Woolsey Rock	2/7/05	1	dry		
057-17.2	N. Woolsey Rock	4/6/05	1	dry		
057-17.2	N. Woolsey Rock	4/19/05	1	dry		
057-17.2	N. Woolsey Rock	5/18/05	1	dry		
057-17.2	N. Woolsey Rock	6/1/05	1	dry		
057-17.2	N. Woolsey Rock	6/20/05	1	dry		
057-17.2	N. Woolsey Rock	7/5/05	1	dry		
057-17.2	N. Woolsey Rock	7/11/05	1	dry		
057-17.2	N. Woolsey Rock	8/3/05	1	dry		
057-17.2	N. Woolsey Rock	8/16/05	34	wet		
057-17.2	N. Woolsey Rock	8/17/05	1	wet		
057-17.2	N. Woolsey Rock	9/19/05	1	dry		
057-17.2	N. Woolsey Rock	10/4/05	1	dry		
057-17.2	N. Woolsey Rock	10/27/05	2	wet		
057-17.2	N. Woolsey Rock	10/31/05	1	dry		
057-17.2	N. Woolsey Rock	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.2	N. Woolsey Rock	1/25/06	1	wet	1	NA
057-17.2	N. Woolsey Rock	2/22/06	1	wet		
057-17.2	N. Woolsey Rock	3/22/06	1	dry		
057-17.2	N. Woolsey Rock	5/24/06	1	dry		
057-17.2	N. Woolsey Rock	6/12/06	1	dry		
057-17.2	N. Woolsey Rock	7/10/06	1	dry		
057-17.2	N. Woolsey Rock	7/17/06	2	dry		
057-17.2	N. Woolsey Rock	8/8/06	1	dry		
057-17.2	N. Woolsey Rock	9/5/06	1	wet		
057-17.2	N. Woolsey Rock	9/6/06	2	wet		
057-17.2	N. Woolsey Rock	9/19/06	1	dry		
057-17.2	N. Woolsey Rock	10/16/06	1	dry		
057-17.2	N. Woolsey Rock	11/1/06	1	dry		
057-17.2	N. Woolsey Rock	11/15/06	1	dry		
057-17.2	N. Woolsey Rock	12/17/06	1	dry		
057-17.2	N. Woolsey Rock	1/29/07	3	dry	2	NA
057-17.2	N. Woolsey Rock	3/7/07	1	dry		
057-17.2	N. Woolsey Rock	3/27/07	1	wet		
057-17.2	N. Woolsey Rock	4/23/07	1	dry		
057-17.2	N. Woolsey Rock	5/1/07	1	wet		
057-17.2	N. Woolsey Rock	5/23/07	2	dry		
057-17.2	N. Woolsey Rock	6/12/07	1	wet		
057-17.2	N. Woolsey Rock	7/8/07	4	dry		
057-17.2	N. Woolsey Rock	7/31/07	1	dry		
057-17.2	N. Woolsey Rock	8/28/07	1	dry		
057-17.2	N. Woolsey Rock	9/23/07	2	dry		
057-17.2	N. Woolsey Rock	10/16/07	5	dry		
057-17.2	N. Woolsey Rock	10/22/07	3	wet		
057-17.2	N. Woolsey Rock	10/31/07	1	dry		
057-17.2	N. Woolsey Rock	12/6/07	1	dry		
057-17.2	N. Woolsey Rock	12/10/07	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.2	N. Woolsey Rock	1/8/08	1	dry		
057-17.2	N. Woolsey Rock	3/3/08	1	dry		
057-17.2	N. Woolsey Rock	4/23/08	1	dry		
057-17.2	N. Woolsey Rock	4/30/08	1	wet		
057-17.2	N. Woolsey Rock	5/14/08	1	dry		
057-17.2	N. Woolsey Rock	5/20/08	1	wet		
057-17.2	N. Woolsey Rock	5/29/08	2	wet		
057-17.2	N. Woolsey Rock	6/18/08	1	wet		
057-17.2	N. Woolsey Rock	7/27/08	34	dry	2	2
057-17.2	N. Woolsey Rock	8/4/08	1	wet		
057-17.2	N. Woolsey Rock	8/26/08	1	dry		
057-17.2	N. Woolsey Rock	9/10/08	32	wet		
057-17.2	N. Woolsey Rock	9/17/08	2	dry		
057-17.2	N. Woolsey Rock	10/7/08	1	wet		
057-17.2	N. Woolsey Rock	10/27/08	21	wet		
057-17.2	N. Woolsey Rock	11/24/08	1	dry		
057-17.2	N. Woolsey Rock	12/29/08	1	dry		
057-17.2	N. Woolsey Rock	2/9/09	1	dry		
057-17.2	N. Woolsey Rock	3/10/09	1	wet		
057-17.2	N. Woolsey Rock	4/22/09	1	wet		
057-17.2	N. Woolsey Rock	5/11/09	1	dry		
057-17.2	N. Woolsey Rock	6/8/09	1	dry		
057-17.2	N. Woolsey Rock	6/10/09	6	wet		
057-17.2	N. Woolsey Rock	6/22/09	1	wet		
057-17.2	N. Woolsey Rock	7/20/09	1	dry	1	NA
057-17.2	N. Woolsey Rock	8/3/09	1	dry		
057-17.2	N. Woolsey Rock	8/24/09	12	wet		
057-17.2	N. Woolsey Rock	9/1/09	1	dry		
057-17.2	N. Woolsey Rock	10/5/09	2	wet		
057-17.2	N. Woolsey Rock	11/3/09	1	dry		
057-17.2	N. Woolsey Rock	12/14/09	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.2	N. Woolsey Rock	1/19/10	1	wet	2	NA
057-17.2	N. Woolsey Rock	1/27/10	1	wet		
057-17.2	N. Woolsey Rock	2/22/10	1	dry		
057-17.2	N. Woolsey Rock	3/2/10	1	wet		
057-17.2	N. Woolsey Rock	3/18/10	5	wet		
057-17.2	N. Woolsey Rock	4/4/10	4	dry		
057-17.2	N. Woolsey Rock	4/11/10	1	wet		
057-17.2	N. Woolsey Rock	5/5/10	1	wet		
057-17.2	N. Woolsey Rock	6/9/10	1	wet		
057-17.2	N. Woolsey Rock	7/7/10	1	dry		
057-17.2	N. Woolsey Rock	7/26/10	1	wet		
057-17.2	N. Woolsey Rock	8/25/10	2	wet		
057-17.2	N. Woolsey Rock	9/20/10	1	dry		
057-17.2	N. Woolsey Rock	9/21/10	1	dry		
057-17.2	N. Woolsey Rock	9/29/10	7	wet		
057-17.2	N. Woolsey Rock	10/3/10	7	wet		
057-17.2	N. Woolsey Rock	3/15/11	1	dry	3	NA
057-17.2	N. Woolsey Rock	4/25/11	13	wet		
057-17.2	N. Woolsey Rock	5/22/11	1	wet		
057-17.2	N. Woolsey Rock	5/23/11	9	wet		
057-17.2	N. Woolsey Rock	6/8/11	1	dry		
057-17.2	N. Woolsey Rock	6/22/11	1	wet		
057-17.2	N. Woolsey Rock	7/11/11	1	dry		
057-17.2	N. Woolsey Rock	7/19/11	11	dry		
057-17.2	N. Woolsey Rock	7/25/11	1	dry		
057-17.2	N. Woolsey Rock	8/10/11	5	dry		
057-17.2	N. Woolsey Rock	8/17/11	4	dry		
057-17.2	N. Woolsey Rock	8/22/11	1	dry		
057-17.2	N. Woolsey Rock	9/1/11	26	dry		
057-17.2	N. Woolsey Rock	9/12/11	1	dry		
057-17.2	N. Woolsey Rock	9/19/11	5	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	4/24/00	2	wet	5	NA
057-17.4	S. Rocky Pt. YC	6/22/00	6	dry		
057-17.4	S. Rocky Pt. YC	7/12/00	2	dry		
057-17.4	S. Rocky Pt. YC	7/16/00	11	wet		
057-17.4	S. Rocky Pt. YC	7/18/00	8	dry		
057-17.4	S. Rocky Pt. YC	7/19/00	28	dry		
057-17.4	S. Rocky Pt. YC	8/6/00	2	dry		
057-17.4	S. Rocky Pt. YC	8/7/00	8	dry		
057-17.4	S. Rocky Pt. YC	9/13/00	6	wet		
057-17.4	S. Rocky Pt. YC	9/14/00	2	wet		
057-17.4	S. Rocky Pt. YC	9/18/00	4	dry		
057-17.4	S. Rocky Pt. YC	11/12/00	8	wet		
057-17.4	S. Rocky Pt. YC	5/29/01	4	wet	6	NA
057-17.4	S. Rocky Pt. YC	5/30/01	4	wet		
057-17.4	S. Rocky Pt. YC	6/20/01	2	wet		
057-17.4	S. Rocky Pt. YC	8/14/01	51	wet		
057-17.4	S. Rocky Pt. YC	8/30/01	14	dry		
057-17.4	S. Rocky Pt. YC	9/9/01	2	dry		
057-17.4	S. Rocky Pt. YC	9/16/01	4	wet		
057-17.4	S. Rocky Pt. YC	9/23/01	18	wet		
057-17.4	S. Rocky Pt. YC	9/24/01	28	wet		
057-17.4	S. Rocky Pt. YC	10/2/01	2	wet		
057-17.4	S. Rocky Pt. YC	1/10/02	22	dry	3	NA
057-17.4	S. Rocky Pt. YC	3/11/02	2	dry		
057-17.4	S. Rocky Pt. YC	6/11/02	2	wet		
057-17.4	S. Rocky Pt. YC	7/22/02	2	dry		
057-17.4	S. Rocky Pt. YC	9/3/02	18	wet		
057-17.4	S. Rocky Pt. YC	9/30/02	2	wet		
057-17.4	S. Rocky Pt. YC	12/4/02	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	1/13/03	2	dry	5	NA
057-17.4	S. Rocky Pt. YC	2/10/03	2	dry		
057-17.4	S. Rocky Pt. YC	7/23/03	22	wet		
057-17.4	S. Rocky Pt. YC	8/18/03	22	wet		
057-17.4	S. Rocky Pt. YC	9/24/03	4	wet		
057-17.4	S. Rocky Pt. YC	9/30/03	4	wet		
057-17.4	S. Rocky Pt. YC	1/6/04	4	wet	5	NA
057-17.4	S. Rocky Pt. YC	3/31/04	36	wet		
057-17.4	S. Rocky Pt. YC	5/11/04	22	wet		
057-17.4	S. Rocky Pt. YC	6/16/04	2	dry		
057-17.4	S. Rocky Pt. YC	6/20/04	2	dry		
057-17.4	S. Rocky Pt. YC	7/7/04	2	wet		
057-17.4	S. Rocky Pt. YC	7/26/04	6	wet		
057-17.4	S. Rocky Pt. YC	8/9/04	2	dry		
057-17.4	S. Rocky Pt. YC	8/17/04	4	wet		
057-17.4	S. Rocky Pt. YC	9/12/04	11	wet		
057-17.4	S. Rocky Pt. YC	9/21/04	8	dry		
057-17.4	S. Rocky Pt. YC	10/25/04	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	1/25/05	3	dry		
057-17.4	S. Rocky Pt. YC	2/7/05	1	dry		
057-17.4	S. Rocky Pt. YC	4/6/05	1	dry		
057-17.4	S. Rocky Pt. YC	4/19/05	1	dry		
057-17.4	S. Rocky Pt. YC	5/18/05	1	dry		
057-17.4	S. Rocky Pt. YC	6/1/05	2	dry		
057-17.4	S. Rocky Pt. YC	6/20/05	1	dry		
057-17.4	S. Rocky Pt. YC	7/5/05	1	dry		
057-17.4	S. Rocky Pt. YC	7/11/05	1	dry	1	NA
057-17.4	S. Rocky Pt. YC	8/3/05	1	dry		
057-17.4	S. Rocky Pt. YC	8/16/05	29	wet		
057-17.4	S. Rocky Pt. YC	8/17/05	1	wet		
057-17.4	S. Rocky Pt. YC	9/19/05	1	dry		
057-17.4	S. Rocky Pt. YC	10/4/05	1	dry		
057-17.4	S. Rocky Pt. YC	10/27/05	3	wet		
057-17.4	S. Rocky Pt. YC	10/31/05	1	dry		
057-17.4	S. Rocky Pt. YC	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	1/25/06	1	wet	2	NA
057-17.4	S. Rocky Pt. YC	2/22/06	1	wet		
057-17.4	S. Rocky Pt. YC	3/22/06	1	dry		
057-17.4	S. Rocky Pt. YC	5/24/06	1	dry		
057-17.4	S. Rocky Pt. YC	6/12/06	1	dry		
057-17.4	S. Rocky Pt. YC	7/10/06	2	dry		
057-17.4	S. Rocky Pt. YC	7/17/06	11	dry		
057-17.4	S. Rocky Pt. YC	8/8/06	1	dry		
057-17.4	S. Rocky Pt. YC	8/31/06	15	wet		
057-17.4	S. Rocky Pt. YC	9/5/06	3	wet		
057-17.4	S. Rocky Pt. YC	9/6/06	4	wet		
057-17.4	S. Rocky Pt. YC	9/19/06	4	dry		
057-17.4	S. Rocky Pt. YC	10/16/06	1	dry		
057-17.4	S. Rocky Pt. YC	11/1/06	3	dry		
057-17.4	S. Rocky Pt. YC	11/15/06	5	dry		
057-17.4	S. Rocky Pt. YC	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	1/29/07	1	dry	2	NA
057-17.4	S. Rocky Pt. YC	3/7/07	6	dry		
057-17.4	S. Rocky Pt. YC	3/27/07	1	wet		
057-17.4	S. Rocky Pt. YC	4/23/07	1	dry		
057-17.4	S. Rocky Pt. YC	5/1/07	1	wet		
057-17.4	S. Rocky Pt. YC	5/23/07	1	dry		
057-17.4	S. Rocky Pt. YC	6/12/07	2	wet		
057-17.4	S. Rocky Pt. YC	7/8/07	17	dry		
057-17.4	S. Rocky Pt. YC	7/31/07	1	dry		
057-17.4	S. Rocky Pt. YC	8/28/07	1	dry		
057-17.4	S. Rocky Pt. YC	9/23/07	5	dry		
057-17.4	S. Rocky Pt. YC	10/16/07	1	dry		
057-17.4	S. Rocky Pt. YC	10/22/07	1	wet		
057-17.4	S. Rocky Pt. YC	10/31/07	22	dry		
057-17.4	S. Rocky Pt. YC	12/6/07	1	dry		
057-17.4	S. Rocky Pt. YC	12/10/07	15	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	1/8/08	1	dry	2	NA
057-17.4	S. Rocky Pt. YC	3/3/08	1	dry		
057-17.4	S. Rocky Pt. YC	4/23/08	1	dry		
057-17.4	S. Rocky Pt. YC	4/30/08	3	wet		
057-17.4	S. Rocky Pt. YC	5/14/08	1	dry		
057-17.4	S. Rocky Pt. YC	5/20/08	1	wet		
057-17.4	S. Rocky Pt. YC	5/29/08	2	wet		
057-17.4	S. Rocky Pt. YC	6/18/08	1	wet		
057-17.4	S. Rocky Pt. YC	7/27/08	7	dry		
057-17.4	S. Rocky Pt. YC	8/4/08	2	wet		
057-17.4	S. Rocky Pt. YC	8/26/08	1	dry		
057-17.4	S. Rocky Pt. YC	9/10/08	31	wet		
057-17.4	S. Rocky Pt. YC	9/17/08	1	dry		
057-17.4	S. Rocky Pt. YC	10/7/08	1	wet		
057-17.4	S. Rocky Pt. YC	10/27/08	20	wet		
057-17.4	S. Rocky Pt. YC	11/24/08	1	dry		
057-17.4	S. Rocky Pt. YC	12/16/08	12	wet		
057-17.4	S. Rocky Pt. YC	12/29/08	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	2/9/09	1	dry	2	NA
057-17.4	S. Rocky Pt. YC	3/10/09	1	wet		
057-17.4	S. Rocky Pt. YC	4/22/09	2	wet		
057-17.4	S. Rocky Pt. YC	5/11/09	1	dry		
057-17.4	S. Rocky Pt. YC	6/8/09	1	dry		
057-17.4	S. Rocky Pt. YC	6/10/09	6	wet		
057-17.4	S. Rocky Pt. YC	6/22/09	6	wet		
057-17.4	S. Rocky Pt. YC	7/20/09	1	dry		
057-17.4	S. Rocky Pt. YC	8/3/09	1	dry		
057-17.4	S. Rocky Pt. YC	8/24/09	8	wet		
057-17.4	S. Rocky Pt. YC	9/1/09	1	dry		
057-17.4	S. Rocky Pt. YC	10/5/09	1	wet		
057-17.4	S. Rocky Pt. YC	11/3/09	3	dry		
057-17.4	S. Rocky Pt. YC	12/14/09	2	wet		
057-17.4	S. Rocky Pt. YC	1/19/10	2	wet	2	NA
057-17.4	S. Rocky Pt. YC	1/27/10	1	wet		
057-17.4	S. Rocky Pt. YC	2/22/10	1	dry		
057-17.4	S. Rocky Pt. YC	3/2/10	1	wet		
057-17.4	S. Rocky Pt. YC	3/18/10	2	wet		
057-17.4	S. Rocky Pt. YC	4/4/10	18	dry		
057-17.4	S. Rocky Pt. YC	4/11/10	1	wet		
057-17.4	S. Rocky Pt. YC	5/5/10	2	wet		
057-17.4	S. Rocky Pt. YC	6/9/10	1	wet		
057-17.4	S. Rocky Pt. YC	7/7/10	1	dry		
057-17.4	S. Rocky Pt. YC	7/26/10	2	wet		
057-17.4	S. Rocky Pt. YC	8/25/10	2	wet		
057-17.4	S. Rocky Pt. YC	9/20/10	1	dry		
057-17.4	S. Rocky Pt. YC	9/21/10	1	dry		
057-17.4	S. Rocky Pt. YC	9/29/10	13	wet		
057-17.4	S. Rocky Pt. YC	10/3/10	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.4	S. Rocky Pt. YC	4/25/11	21	wet	6	21
057-17.4	S. Rocky Pt. YC	5/22/11	79	wet		
057-17.4	S. Rocky Pt. YC	5/23/11	1	wet		
057-17.4	S. Rocky Pt. YC	6/8/11	2	dry		
057-17.4	S. Rocky Pt. YC	6/22/11	4	wet		
057-17.4	S. Rocky Pt. YC	7/11/11	5	dry		
057-17.4	S. Rocky Pt. YC	7/19/11	81	dry		
057-17.4	S. Rocky Pt. YC	7/25/11	1	dry		
057-17.4	S. Rocky Pt. YC	8/10/11	8	dry		
057-17.4	S. Rocky Pt. YC	8/17/11	25	dry		
057-17.4	S. Rocky Pt. YC	8/22/11	4	dry		
057-17.4	S. Rocky Pt. YC	9/1/11	46	dry		
057-17.4	S. Rocky Pt. YC	9/12/11	1	dry		
057-17.4	S. Rocky Pt. YC	9/19/11	1	dry		
057-17.6	East Woolsey Rock	4/24/00	2	wet	3	NA
057-17.6	East Woolsey Rock	6/22/00	4	dry		
057-17.6	East Woolsey Rock	7/12/00	2	dry		
057-17.6	East Woolsey Rock	7/16/00	28	wet		
057-17.6	East Woolsey Rock	7/18/00	2	dry		
057-17.6	East Woolsey Rock	7/19/00	2	dry		
057-17.6	East Woolsey Rock	8/6/00	6	dry		
057-17.6	East Woolsey Rock	9/13/00	2	wet		
057-17.6	East Woolsey Rock	9/14/00	2	wet		
057-17.6	East Woolsey Rock	9/18/00	2	dry		
057-17.6	East Woolsey Rock	11/12/00	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	5/29/01	2	wet	2	NA
057-17.6	East Woolsey Rock	5/30/01	2	wet		
057-17.6	East Woolsey Rock	6/20/01	4	wet		
057-17.6	East Woolsey Rock	8/14/01	2	wet		
057-17.6	East Woolsey Rock	8/30/01	2	dry		
057-17.6	East Woolsey Rock	9/9/01	2	dry		
057-17.6	East Woolsey Rock	9/16/01	2	wet		
057-17.6	East Woolsey Rock	9/23/01	11	wet		
057-17.6	East Woolsey Rock	9/24/01	2	wet		
057-17.6	East Woolsey Rock	10/2/01	3†	wet		
057-17.6	East Woolsey Rock	1/10/02	22	dry	3	NA
057-17.6	East Woolsey Rock	3/11/02	2	dry		
057-17.6	East Woolsey Rock	6/11/02	2	wet		
057-17.6	East Woolsey Rock	7/8/02	2	dry		
057-17.6	East Woolsey Rock	7/22/02	2	dry		
057-17.6	East Woolsey Rock	9/3/02	8	wet		
057-17.6	East Woolsey Rock	9/30/02	2	wet		
057-17.6	East Woolsey Rock	12/4/02	4	dry		
057-17.6	East Woolsey Rock	1/13/03	2	dry	2	NA
057-17.6	East Woolsey Rock	2/10/03	2	dry		
057-17.6	East Woolsey Rock	3/11/03	2	wet		
057-17.6	East Woolsey Rock	7/23/03	22	wet		
057-17.6	East Woolsey Rock	8/18/03	2	wet		
057-17.6	East Woolsey Rock	9/10/03	2	wet		
057-17.6	East Woolsey Rock	9/24/03	2	wet		
057-17.6	East Woolsey Rock	9/30/03	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	1/6/04	2	wet	3	NA
057-17.6	East Woolsey Rock	3/31/04	2	wet		
057-17.6	East Woolsey Rock	4/29/04	2	dry		
057-17.6	East Woolsey Rock	5/11/04	2	wet		
057-17.6	East Woolsey Rock	6/16/04	2	dry		
057-17.6	East Woolsey Rock	6/20/04	2	dry		
057-17.6	East Woolsey Rock	7/7/04	2	wet		
057-17.6	East Woolsey Rock	7/26/04	4	wet		
057-17.6	East Woolsey Rock	8/9/04	2	dry		
057-17.6	East Woolsey Rock	8/17/04	8	wet		
057-17.6	East Woolsey Rock	9/12/04	8	wet		
057-17.6	East Woolsey Rock	9/21/04	11	dry		
057-17.6	East Woolsey Rock	10/25/04	2	dry		
057-17.6	East Woolsey Rock	1/25/05	1	dry	1	NA
057-17.6	East Woolsey Rock	2/7/05	1	dry		
057-17.6	East Woolsey Rock	4/6/05	1	dry		
057-17.6	East Woolsey Rock	4/19/05	1	dry		
057-17.6	East Woolsey Rock	5/18/05	1	dry		
057-17.6	East Woolsey Rock	6/1/05	1	dry		
057-17.6	East Woolsey Rock	6/20/05	1	dry		
057-17.6	East Woolsey Rock	7/5/05	1	dry		
057-17.6	East Woolsey Rock	7/11/05	1	dry		
057-17.6	East Woolsey Rock	8/3/05	1	dry		
057-17.6	East Woolsey Rock	8/16/05	14	wet		
057-17.6	East Woolsey Rock	8/17/05	1	wet		
057-17.6	East Woolsey Rock	9/19/05	1	dry		
057-17.6	East Woolsey Rock	10/4/05	1	dry		
057-17.6	East Woolsey Rock	10/26/05	3	wet		
057-17.6	East Woolsey Rock	10/27/05	6	wet		
057-17.6	East Woolsey Rock	10/31/05	1	dry		
057-17.6	East Woolsey Rock	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	1/25/06	2	wet	1	NA
057-17.6	East Woolsey Rock	2/22/06	1	wet		
057-17.6	East Woolsey Rock	3/22/06	1	dry		
057-17.6	East Woolsey Rock	5/24/06	1	dry		
057-17.6	East Woolsey Rock	6/12/06	1	dry		
057-17.6	East Woolsey Rock	7/10/06	1	dry		
057-17.6	East Woolsey Rock	7/17/06	1	dry		
057-17.6	East Woolsey Rock	8/8/06	2	dry		
057-17.6	East Woolsey Rock	8/31/06	21	wet		
057-17.6	East Woolsey Rock	9/5/06	2	wet		
057-17.6	East Woolsey Rock	9/6/06	2	wet		
057-17.6	East Woolsey Rock	9/19/06	1	dry		
057-17.6	East Woolsey Rock	10/16/06	1	dry		
057-17.6	East Woolsey Rock	11/1/06	1	dry		
057-17.6	East Woolsey Rock	11/15/06	1	dry		
057-17.6	East Woolsey Rock	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	1/29/07	1	dry	1	NA
057-17.6	East Woolsey Rock	3/7/07	1	dry		
057-17.6	East Woolsey Rock	3/27/07	1	wet		
057-17.6	East Woolsey Rock	4/23/07	2	dry		
057-17.6	East Woolsey Rock	5/1/07	1	wet		
057-17.6	East Woolsey Rock	5/23/07	1	dry		
057-17.6	East Woolsey Rock	6/12/07	2	wet		
057-17.6	East Woolsey Rock	7/8/07	2	dry		
057-17.6	East Woolsey Rock	7/31/07	1	dry		
057-17.6	East Woolsey Rock	8/28/07	1	dry		
057-17.6	East Woolsey Rock	9/23/07	1	dry		
057-17.6	East Woolsey Rock	10/16/07	2	dry		
057-17.6	East Woolsey Rock	10/22/07	1	wet		
057-17.6	East Woolsey Rock	10/31/07	1	dry		
057-17.6	East Woolsey Rock	12/6/07	1	dry		
057-17.6	East Woolsey Rock	12/10/07	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	1/8/08	1	dry	1	NA
057-17.6	East Woolsey Rock	3/3/08	1	dry		
057-17.6	East Woolsey Rock	4/23/08	1	dry		
057-17.6	East Woolsey Rock	4/30/08	1	wet		
057-17.6	East Woolsey Rock	5/14/08	1	dry		
057-17.6	East Woolsey Rock	5/20/08	1	wet		
057-17.6	East Woolsey Rock	5/29/08	3	wet		
057-17.6	East Woolsey Rock	6/18/08	1	wet		
057-17.6	East Woolsey Rock	7/27/08	1	dry		
057-17.6	East Woolsey Rock	8/4/08	2	wet		
057-17.6	East Woolsey Rock	8/26/08	1	dry		
057-17.6	East Woolsey Rock	9/10/08	1	wet		
057-17.6	East Woolsey Rock	9/17/08	1	dry		
057-17.6	East Woolsey Rock	10/7/08	1	wet		
057-17.6	East Woolsey Rock	10/27/08	9	wet		
057-17.6	East Woolsey Rock	11/24/08	1	dry		
057-17.6	East Woolsey Rock	12/16/08	6	wet		
057-17.6	East Woolsey Rock	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	2/9/09	2	dry	2	NA
057-17.6	East Woolsey Rock	3/10/09	1	wet		
057-17.6	East Woolsey Rock	4/22/09	1	wet		
057-17.6	East Woolsey Rock	5/11/09	1	dry		
057-17.6	East Woolsey Rock	6/8/09	1	dry		
057-17.6	East Woolsey Rock	6/10/09	1	wet		
057-17.6	East Woolsey Rock	6/22/09	3	wet		
057-17.6	East Woolsey Rock	7/20/09	1	dry		
057-17.6	East Woolsey Rock	8/3/09	1	dry		
057-17.6	East Woolsey Rock	8/24/09	24	wet		
057-17.6	East Woolsey Rock	9/1/09	1	dry		
057-17.6	East Woolsey Rock	10/5/09	4	wet		
057-17.6	East Woolsey Rock	11/3/09	1	dry		
057-17.6	East Woolsey Rock	12/14/09	1	wet		
057-17.6	East Woolsey Rock	1/19/10	2	wet	1	NA
057-17.6	East Woolsey Rock	1/27/10	1	wet		
057-17.6	East Woolsey Rock	2/22/10	1	dry		
057-17.6	East Woolsey Rock	3/2/10	1	wet		
057-17.6	East Woolsey Rock	3/18/10	7	wet		
057-17.6	East Woolsey Rock	4/4/10	2	dry		
057-17.6	East Woolsey Rock	4/11/10	1	wet		
057-17.6	East Woolsey Rock	5/5/10	1	wet		
057-17.6	East Woolsey Rock	6/9/10	1	wet		
057-17.6	East Woolsey Rock	7/7/10	1	dry		
057-17.6	East Woolsey Rock	7/26/10	1	wet		
057-17.6	East Woolsey Rock	8/25/10	1	wet		
057-17.6	East Woolsey Rock	9/20/10	1	dry		
057-17.6	East Woolsey Rock	9/21/10	1	dry		
057-17.6	East Woolsey Rock	9/29/10	1	wet		
057-17.6	East Woolsey Rock	10/3/10	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.6	East Woolsey Rock	3/15/11	1	dry	1	NA
057-17.6	East Woolsey Rock	4/25/11	2	wet		
057-17.6	East Woolsey Rock	5/22/11	1	wet		
057-17.6	East Woolsey Rock	5/23/11	1	wet		
057-17.6	East Woolsey Rock	6/8/11	1	dry		
057-17.6	East Woolsey Rock	6/22/11	1	wet		
057-17.6	East Woolsey Rock	7/11/11	1	dry		
057-17.6	East Woolsey Rock	7/19/11	1	dry		
057-17.6	East Woolsey Rock	7/25/11	1	dry		
057-17.6	East Woolsey Rock	8/3/11	1	dry		
057-17.6	East Woolsey Rock	8/10/11	4	dry		
057-17.6	East Woolsey Rock	8/17/11	2	dry		
057-17.6	East Woolsey Rock	8/22/11	1	dry		
057-17.6	East Woolsey Rock	9/1/11	1	dry		
057-17.6	East Woolsey Rock	9/12/11	1	dry		
057-17.6	East Woolsey Rock	9/19/11	1	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	4/24/00	2	wet	4	NA
135-01.0	entrance to harbor Gong "1"/N"2"	7/19/00	2	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	9/14/00	18	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	9/18/00	6	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	5/29/01	4	dry	6	NA
135-01.0	entrance to harbor Gong "1"/N"2"	6/20/01	6	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	8/14/01	18	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	8/30/01	14	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	9/24/01	2	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	1/10/02	6	dry	4	10
135-01.0	entrance to harbor Gong "1"/N"2"	1/23/02	2	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	6/11/02	2	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	9/3/02	51	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	9/30/02	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.0	entrance to harbor Gong "1"/N"2"	8/18/03	18	wet	6	NA
135-01.0	entrance to harbor Gong "1"/N"2"	10/1/03	2	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	3/31/04	6	wet	3	NA
135-01.0	entrance to harbor Gong "1"/N"2"	5/11/04	2	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	6/21/04	2	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	7/7/04	2	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	9/13/04	4	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	9/21/04	14	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	8/16/05	49	wet	**41* (66%)**	**90**
135-01.0	entrance to harbor Gong "1"/N"2"	10/27/05	34	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	7/17/06	1	dry	2	7
135-01.0	entrance to harbor Gong "1"/N"2"	10/16/06	9	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	11/1/06	1	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	1/3/07	3	wet	7	12
135-01.0	entrance to harbor Gong "1"/N"2"	9/12/07	12	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	10/22/07	12	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	10/31/07	5	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	5/29/08	2	wet	4	4
135-01.0	entrance to harbor Gong "1"/N"2"	7/28/08	1	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	9/10/08	81	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	12/16/08	6	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	12/22/08	1	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	12/26/08	4	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	12/29/08	7	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	4/22/09	7	wet	2	NA
135-01.0	entrance to harbor Gong "1"/N"2"	6/10/09	7	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	7/22/09	1	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	8/4/09	1	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	8/25/09	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.0	entrance to harbor Gong "1"/N"2"	1/27/10	1	wet	2	NA
135-01.0	entrance to harbor Gong "1"/N"2"	3/25/10	1	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	5/5/10	1	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	5/20/10	1	wet		
135-01.0	entrance to harbor Gong "1"/N"2"	9/20/10	17	dry		
135-01.0	entrance to harbor Gong "1"/N"2"	4/26/11	1	dry	NA	NA
135-01.4	west end of breakwater monitors approved area	4/24/00	2	wet	3	NA
135-01.4	west end of breakwater monitors approved area	7/19/00	18	dry		
135-01.4	west end of breakwater monitors approved area	9/14/00	2	wet		
135-01.4	west end of breakwater monitors approved area	9/18/00	2	dry		
135-01.4	west end of breakwater monitors approved area	5/29/01	2	dry	5	10
135-01.4	west end of breakwater monitors approved area	6/20/01	2	wet		
135-01.4	west end of breakwater monitors approved area	8/14/01	11	dry		
135-01.4	west end of breakwater monitors approved area	8/30/01	50	dry		
135-01.4	west end of breakwater monitors approved area	9/24/01	2	wet		
135-01.4	west end of breakwater monitors approved area	1/10/02	22	dry	7	15
135-01.4	west end of breakwater monitors approved area	6/11/02	2	wet		
135-01.4	west end of breakwater monitors approved area	9/3/02	51	wet		
135-01.4	west end of breakwater monitors approved area	9/30/02	2	dry		
135-01.4	west end of breakwater monitors approved area	8/18/03	36	wet	22	40
135-01.4	west end of breakwater monitors approved area	10/1/03	14	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.4	west end of breakwater monitors approved area	3/31/04	11	wet	4	7
135-01.4	west end of breakwater monitors approved area	5/11/04	4	wet		
135-01.4	west end of breakwater monitors approved area	6/21/04	2	dry		
135-01.4	west end of breakwater monitors approved area	7/7/04	2	dry		
135-01.4	west end of breakwater monitors approved area	9/13/04	2	wet		
135-01.4	west end of breakwater monitors approved area	9/21/04	50	dry		
135-01.4	west end of breakwater monitors approved area	8/16/05	63	wet	NA	90
135-01.4	west end of breakwater monitors approved area	7/17/06	4	dry	9	62
135-01.4	west end of breakwater monitors approved area	8/31/06	81	wet		
135-01.4	west end of breakwater monitors approved area	10/16/06	1	dry		
135-01.4	west end of breakwater monitors approved area	11/1/06	18	dry		
135-01.4	west end of breakwater monitors approved area	1/3/07	1	wet	4	15
135-01.4	west end of breakwater monitors approved area	9/12/07	4	wet		
135-01.4	west end of breakwater monitors approved area	10/22/07	1	wet		
135-01.4	west end of breakwater monitors approved area	10/31/07	39	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.4	west end of breakwater monitors approved area	5/29/08	1	wet	3	NA
135-01.4	west end of breakwater monitors approved area	7/28/08	1	dry		
135-01.4	west end of breakwater monitors approved area	9/10/08	28	wet		
135-01.4	west end of breakwater monitors approved area	12/16/08	26	wet		
135-01.4	west end of breakwater monitors approved area	12/26/08	2	wet		
135-01.4	west end of breakwater monitors approved area	12/29/08	1	dry		
135-01.4	west end of breakwater monitors approved area	4/22/09	2	wet	2	NA
135-01.4	west end of breakwater monitors approved area	6/10/09	20	wet		
135-01.4	west end of breakwater monitors approved area	6/24/09	1	dry		
135-01.4	west end of breakwater monitors approved area	7/22/09	1	wet		
135-01.4	west end of breakwater monitors approved area	8/4/09	1	dry		
135-01.4	west end of breakwater monitors approved area	1/27/10	2	wet	2	NA
135-01.4	west end of breakwater monitors approved area	3/25/10	7	wet		
135-01.4	west end of breakwater monitors approved area	5/5/10	1	wet		
135-01.4	west end of breakwater monitors approved area	5/20/10	1	wet		
135-01.4	west end of breakwater monitors approved area	9/20/10	1	dry		
135-01.4	west end of breakwater monitors approved area	4/26/11	1	dry	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.5	W. Todd Rock	4/24/00	2	wet	3	NA
135-01.5	W. Todd Rock	7/18/00	4	dry		
135-01.5	W. Todd Rock	7/19/00	2	dry		
135-01.5	W. Todd Rock	9/14/00	2	wet		
135-01.5	W. Todd Rock	9/18/00	18	dry		
135-01.5	W. Todd Rock	5/29/01	2	dry	4	NA
135-01.5	W. Todd Rock	6/20/01	9	wet		
135-01.5	W. Todd Rock	8/14/01	28	dry		
135-01.5	W. Todd Rock	8/30/01	2	dry		
135-01.5	W. Todd Rock	9/24/01	2	wet		
135-01.5	W. Todd Rock	1/10/02	2	dry	5	15
135-01.5	W. Todd Rock	6/11/02	2	wet		
135-01.5	W. Todd Rock	9/3/02	50	wet		
135-01.5	W. Todd Rock	9/30/02	6	dry		
135-01.5	W. Todd Rock	8/18/03	36	wet	20	40
135-01.5	W. Todd Rock	10/1/03	11	dry		
135-01.5	W. Todd Rock	3/31/04	14	wet	4	NA
135-01.5	W. Todd Rock	5/11/04	2	wet		
135-01.5	W. Todd Rock	6/21/04	2	dry		
135-01.5	W. Todd Rock	7/7/04	2	dry		
135-01.5	W. Todd Rock	9/13/04	4	wet		
135-01.5	W. Todd Rock	9/21/04	11	dry		
135-01.5	W. Todd Rock	8/16/05	17	wet	6	16
135-01.5	W. Todd Rock	10/27/05	2	wet		
135-01.5	W. Todd Rock	7/17/06	5	dry	3	7
135-01.5	W. Todd Rock	8/31/06	81	wet		
135-01.5	W. Todd Rock	9/5/06	1	wet		
135-01.5	W. Todd Rock	9/6/06	4	dry		
135-01.5	W. Todd Rock	10/16/06	1	dry		
135-01.5	W. Todd Rock	11/1/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.5	W. Todd Rock	1/3/07	1	wet	2	NA
135-01.5	W. Todd Rock	5/1/07	1	wet		
135-01.5	W. Todd Rock	6/7/07	2	wet		
135-01.5	W. Todd Rock	9/12/07	6	wet		
135-01.5	W. Todd Rock	10/22/07	1	wet		
135-01.5	W. Todd Rock	10/31/07	16	dry		
135-01.5	W. Todd Rock	5/29/08	1	wet	5	7
135-01.5	W. Todd Rock	7/28/08	6	dry		
135-01.5	W. Todd Rock	9/10/08	50	wet		
135-01.5	W. Todd Rock	12/16/08	8	wet		
135-01.5	W. Todd Rock	12/26/08	4	wet		
135-01.5	W. Todd Rock	12/29/08	1	dry		
135-01.5	W. Todd Rock	4/22/09	3	wet	2	NA
135-01.5	W. Todd Rock	6/10/09	3	wet		
135-01.5	W. Todd Rock	7/22/09	1	wet		
135-01.5	W. Todd Rock	8/4/09	1	dry		
135-01.5	W. Todd Rock	8/25/09	2	wet		
135-01.5	W. Todd Rock	1/27/10	1	wet	2	NA
135-01.5	W. Todd Rock	3/18/10	16	wet		
135-01.5	W. Todd Rock	3/25/10	1	wet		
135-01.5	W. Todd Rock	5/5/10	1	wet		
135-01.5	W. Todd Rock	5/20/10	1	wet		
135-01.5	W. Todd Rock	9/20/10	1	dry		
135-01.5	W. Todd Rock	4/26/11	1	dry	2	NA
135-01.5	W. Todd Rock	5/22/11	4	wet		
135-01.7	S. channel - W. R"32"	4/24/00	2	wet	2	NA
135-01.7	S. channel - W. R"32"	7/18/00	2	dry		
135-01.7	S. channel - W. R"32"	7/19/00	11	dry		
135-01.7	S. channel - W. R"32"	9/14/00	2	wet		
135-01.7	S. channel - W. R"32"	9/18/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.7	S. channel - W. R"32"	5/29/01	2	dry	3	11
135-01.7	S. channel - W. R"32"	6/20/01	2	wet		
135-01.7	S. channel - W. R"32"	8/14/01	2	dry		
135-01.7	S. channel - W. R"32"	8/30/01	18	dry		
135-01.7	S. channel - W. R"32"	9/24/01	2	wet		
135-01.7	S. channel - W. R"32"	1/10/02	2	dry	4	35
135-01.7	S. channel - W. R"32"	6/11/02	2	wet		
135-01.7	S. channel - W. R"32"	9/3/02	50	wet		
135-01.7	S. channel - W. R"32"	9/30/02	2	dry		
135-01.7	S. channel - W. R"32"	8/18/03	2	wet	2	N/A
135-01.7	S. channel - W. R"32"	10/1/03	2	dry		
135-01.7	S. channel - W. R"32"	3/31/04	2	wet	2	NA
135-01.7	S. channel - W. R"32"	5/11/04	2	wet		
135-01.7	S. channel - W. R"32"	6/21/04	2	dry		
135-01.7	S. channel - W. R"32"	7/7/04	2	dry		
135-01.7	S. channel - W. R"32"	9/13/04	2	wet		
135-01.7	S. channel - W. R"32"	9/21/04	6	dry		
135-01.7	S. channel - W. R"32"	8/16/05	4	wet	3	NA
135-01.7	S. channel - W. R"32"	10/26/05	7	wet		
135-01.7	S. channel - W. R"32"	10/27/05	1	wet		
135-01.7	S. channel - W. R"32"	7/17/06	1	dry	2	NA
135-01.7	S. channel - W. R"32"	8/31/06	29	wet		
135-01.7	S. channel - W. R"32"	9/5/06	1	wet		
135-01.7	S. channel - W. R"32"	9/6/06	1	dry		
135-01.7	S. channel - W. R"32"	10/16/06	1	dry		
135-01.7	S. channel - W. R"32"	11/1/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.7	S. channel - W. R"32"	1/3/07	1	wet	1	NA
135-01.7	S. channel - W. R"32"	5/1/07	1	wet		
135-01.7	S. channel - W. R"32"	6/7/07	1	wet		
135-01.7	S. channel - W. R"32"	9/12/07	9	wet		
135-01.7	S. channel - W. R"32"	10/22/07	1	wet		
135-01.7	S. channel - W. R"32"	10/31/07	1	dry		
135-01.7	S. channel - W. R"32"	5/29/08	1	wet	2	NA
135-01.7	S. channel - W. R"32"	7/28/08	1	dry		
135-01.7	S. channel - W. R"32"	9/10/08	1	wet		
135-01.7	S. channel - W. R"32"	12/16/08	6	wet		
135-01.7	S. channel - W. R"32"	12/26/08	1	wet		
135-01.7	S. channel - W. R"32"	12/29/08	2	dry		
135-01.7	S. channel - W. R"32"	4/22/09	1	wet	2	NA
135-01.7	S. channel - W. R"32"	6/10/09	5	wet		
135-01.7	S. channel - W. R"32"	6/24/09	4	dry		
135-01.7	S. channel - W. R"32"	7/22/09	1	wet		
135-01.7	S. channel - W. R"32"	8/4/09	1	dry		
135-01.7	S. channel - W. R"32"	8/25/09	1	wet		
135-01.7	S. channel - W. R"32"	1/27/10	1	wet	1	NA
135-01.7	S. channel - W. R"32"	3/18/10	5	wet		
135-01.7	S. channel - W. R"32"	3/25/10	1	wet		
135-01.7	S. channel - W. R"32"	5/5/10	1	wet		
135-01.7	S. channel - W. R"32"	5/20/10	1	wet		
135-01.7	S. channel - W. R"32"	9/20/10	1	dry		
135-01.7	S. channel - W. R"32"	4/26/11	1	dry	1	NA
135-01.7	S. channel - W. R"32"	5/22/11	1	wet		
135-01.8	S. Harbor Ledge	4/24/00	2	wet	3	NA
135-01.8	S. Harbor Ledge	7/18/00	4	dry		
135-01.8	S. Harbor Ledge	7/19/00	11	dry		
135-01.8	S. Harbor Ledge	9/14/00	2	wet		
135-01.8	S. Harbor Ledge	9/18/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.8	S. Harbor Ledge	5/29/01	2	dry	5	10
135-01.8	S. Harbor Ledge	6/20/01	2	wet		
135-01.8	S. Harbor Ledge	8/14/01	50	dry		
135-01.8	S. Harbor Ledge	8/30/01	11	dry		
135-01.8	S. Harbor Ledge	9/24/01	2	wet		
135-01.8	S. Harbor Ledge	1/10/02	4	dry	5	15
135-01.8	S. Harbor Ledge	6/11/02	2	wet		
135-01.8	S. Harbor Ledge	9/3/02	51	wet		
135-01.8	S. Harbor Ledge	9/30/02	2	dry		
135-01.8	S. Harbor Ledge	8/18/03	18	wet	5	NA
135-01.8	S. Harbor Ledge	10/1/03	2	dry		
135-01.8	S. Harbor Ledge	3/31/04	2	wet	3	NA
135-01.8	S. Harbor Ledge	5/11/04	2	wet		
135-01.8	S. Harbor Ledge	6/21/04	2	dry		
135-01.8	S. Harbor Ledge	7/7/04	2	dry		
135-01.8	S. Harbor Ledge	9/13/04	2	wet		
135-01.8	S. Harbor Ledge	9/21/04	22	dry		
135-01.8	S. Harbor Ledge	8/16/05	24	wet	14	NA
135-01.8	S. Harbor Ledge	10/27/05	8	wet		
135-01.8	S. Harbor Ledge	7/17/06	4	dry	3	7
135-01.8	S. Harbor Ledge	8/31/06	32	wet		
135-01.8	S. Harbor Ledge	9/5/06	1	wet		
135-01.8	S. Harbor Ledge	9/6/06	1	dry		
135-01.8	S. Harbor Ledge	10/16/06	1	dry		
135-01.8	S. Harbor Ledge	11/1/06	4	dry		
135-01.8	S. Harbor Ledge	1/3/07	1	wet	3	NA
135-01.8	S. Harbor Ledge	5/1/07	1	wet		
135-01.8	S. Harbor Ledge	6/7/07	3	wet		
135-01.8	S. Harbor Ledge	9/12/07	9	wet		
135-01.8	S. Harbor Ledge	10/22/07	1	wet		
135-01.8	S. Harbor Ledge	10/31/07	17	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
135-01.8	S. Harbor Ledge	5/29/08	2	wet	4	7
135-01.8	S. Harbor Ledge	7/28/08	3	dry		
135-01.8	S. Harbor Ledge	9/10/08	48	wet		
135-01.8	S. Harbor Ledge	12/16/08	10	wet		
135-01.8	S. Harbor Ledge	12/26/08	1	wet		
135-01.8	S. Harbor Ledge	12/29/08	1	dry		
135-01.8	S. Harbor Ledge	4/22/09	2	wet	2	NA
135-01.8	S. Harbor Ledge	6/10/09	1	wet		
135-01.8	S. Harbor Ledge	7/22/09	1	wet		
135-01.8	S. Harbor Ledge	8/4/09	1	dry		
135-01.8	S. Harbor Ledge	8/25/09	16	wet		
135-01.8	S. Harbor Ledge	1/27/10	1	wet	1	NA
135-01.8	S. Harbor Ledge	3/18/10	1	wet		
135-01.8	S. Harbor Ledge	3/25/10	1	wet		
135-01.8	S. Harbor Ledge	5/5/10	1	wet		
135-01.8	S. Harbor Ledge	5/20/10	1	wet		
135-01.8	S. Harbor Ledge	9/20/10	1	dry		
135-01.8	S. Harbor Ledge	4/26/11	1	dry	2	NA
135-01.8	S. Harbor Ledge	5/22/11	3	wet		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 10: LIS WB-Midshore – Outer Stamford Harbor (CT-W3_012)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
135-01.0	entrance to harbor Gong "1"/N"2"	2000-2011	29	20	4	4	3
135-01.4	west end of breakwater monitors approved area	2000-2011	26	21	4	4	4
135-01.5	W. Todd Rock	2000-2011	33	22	3	3	3
135-01.7	S. channel - W. R"32"	2000-2011	34	23	2	2	2
135-01.8	S. Harbor Ledge	2000-2011	33	22	3	3	3
057-17.2	N. Woolsey Rock	2000-2011	71	87	2	3	2
057-17.4	S. Rocky Pt. YC	2000-2011	71	87	3	4	2
057-17.6	East Woolsey Rock	2000-2011	75	90	2	2	1
Shaded cells indicate an exceedance of water quality criteria							

Table 23: Segment 11: LIS WB Midshore – Outer Cos Cob Harbor Bacteria Data

Waterbody ID: CT-W3_013

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% of samples less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **NA**

90% of samples less than **11%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	1/2/00	6	dry	6	NA
057-10.2	Hen and Chickens	2/16/00	2	wet		
057-10.2	Hen and Chickens	4/16/00	2	dry		
057-10.2	Hen and Chickens	6/22/00	2	dry		
057-10.2	Hen and Chickens	7/4/00	6	wet		
057-10.2	Hen and Chickens	7/16/00	8	wet		
057-10.2	Hen and Chickens	7/30/00	14	wet		
057-10.2	Hen and Chickens	8/6/00	22	dry		
057-10.2	Hen and Chickens	8/7/00	2	dry		
057-10.2	Hen and Chickens	9/13/00	18	wet		
057-10.2	Hen and Chickens	9/17/00	2	wet		
057-10.2	Hen and Chickens	11/12/00	11	wet		
057-10.2	Hen and Chickens	12/5/00	36	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	1/9/01	8	wet	**7* (NA)**	**11**
057-10.2	Hen and Chickens	3/25/01	2	wet		
057-10.2	Hen and Chickens	4/5/01	2	dry		
057-10.2	Hen and Chickens	5/30/01	2	wet		
057-10.2	Hen and Chickens	6/20/01	8	wet		
057-10.2	Hen and Chickens	7/12/01	36	wet		
057-10.2	Hen and Chickens	7/25/01	8	dry		
057-10.2	Hen and Chickens	8/14/01	28	wet		
057-10.2	Hen and Chickens	8/19/01	2	dry		
057-10.2	Hen and Chickens	9/9/01	22	dry		
057-10.2	Hen and Chickens	9/16/01	2	wet		
057-10.2	Hen and Chickens	9/23/01	51	wet		
057-10.2	Hen and Chickens	9/24/01	36	wet		
057-10.2	Hen and Chickens	10/2/01	2	wet		
057-10.2	Hen and Chickens	1/6/02	8	dry	4	NA
057-10.2	Hen and Chickens	1/27/02	2	dry		
057-10.2	Hen and Chickens	3/17/02	2	dry		
057-10.2	Hen and Chickens	3/31/02	2	dry		
057-10.2	Hen and Chickens	4/21/02	6	wet		
057-10.2	Hen and Chickens	5/12/02	4	wet		
057-10.2	Hen and Chickens	6/9/02	8	wet		
057-10.2	Hen and Chickens	6/16/02	51	wet		
057-10.2	Hen and Chickens	6/23/02	4	dry		
057-10.2	Hen and Chickens	6/30/02	2	dry		
057-10.2	Hen and Chickens	7/22/02	8	dry		
057-10.2	Hen and Chickens	8/4/02	2	wet		
057-10.2	Hen and Chickens	8/18/02	14	wet		
057-10.2	Hen and Chickens	9/8/02	2	dry		
057-10.2	Hen and Chickens	9/29/02	2	wet		
057-10.2	Hen and Chickens	10/20/02	4	dry		
057-10.2	Hen and Chickens	11/3/02	2	dry		
057-10.2	Hen and Chickens	12/16/02	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	1/13/03	2	dry	5	NA
057-10.2	Hen and Chickens	2/24/03	11	wet		
057-10.2	Hen and Chickens	3/11/03	2	wet		
057-10.2	Hen and Chickens	3/26/03	2	wet		
057-10.2	Hen and Chickens	4/13/03	2	wet		
057-10.2	Hen and Chickens	4/30/03	2	dry		
057-10.2	Hen and Chickens	5/28/03	18	wet		
057-10.2	Hen and Chickens	6/8/03	18	wet		
057-10.2	Hen and Chickens	6/13/03	22	wet		
057-10.2	Hen and Chickens	8/19/03	18	wet		
057-10.2	Hen and Chickens	9/10/03	4	wet		
057-10.2	Hen and Chickens	9/24/03	8	wet		
057-10.2	Hen and Chickens	1/6/04	4	wet	4	NA
057-10.2	Hen and Chickens	4/7/04	2	dry		
057-10.2	Hen and Chickens	4/29/04	2	dry		
057-10.2	Hen and Chickens	6/16/04	2	dry		
057-10.2	Hen and Chickens	6/20/04	2	dry		
057-10.2	Hen and Chickens	7/7/04	2	wet		
057-10.2	Hen and Chickens	7/26/04	4	wet		
057-10.2	Hen and Chickens	8/17/04	8	wet		
057-10.2	Hen and Chickens	9/12/04	22	wet		
057-10.2	Hen and Chickens	9/21/04	51	dry		
057-10.2	Hen and Chickens	10/25/04	4	dry		
057-10.2	Hen and Chickens	11/7/04	2	wet		
057-10.2	Hen and Chickens	12/9/04	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	2/7/05	1	dry		
057-10.2	Hen and Chickens	4/6/05	1	dry		
057-10.2	Hen and Chickens	5/18/05	1	dry		
057-10.2	Hen and Chickens	6/1/05	1	dry		
057-10.2	Hen and Chickens	6/20/05	2	dry		
057-10.2	Hen and Chickens	7/5/05	4	dry		
057-10.2	Hen and Chickens	7/11/05	1	dry		
057-10.2	Hen and Chickens	8/3/05	2	dry	2	NA
057-10.2	Hen and Chickens	8/17/05	6	wet		
057-10.2	Hen and Chickens	9/19/05	1	dry		
057-10.2	Hen and Chickens	10/4/05	1	dry		
057-10.2	Hen and Chickens	10/26/05	10	wet		
057-10.2	Hen and Chickens	10/27/05	7	wet		
057-10.2	Hen and Chickens	10/31/05	1	dry		
057-10.2	Hen and Chickens	11/14/05	1	dry		
057-10.2	Hen and Chickens	1/25/06	1	wet		
057-10.2	Hen and Chickens	2/22/06	1	wet		
057-10.2	Hen and Chickens	3/22/06	1	dry		
057-10.2	Hen and Chickens	5/24/06	1	dry		
057-10.2	Hen and Chickens	6/12/06	1	dry		
057-10.2	Hen and Chickens	7/10/06	5	dry		
057-10.2	Hen and Chickens	8/8/06	1	dry		
057-10.2	Hen and Chickens	8/31/06	26	wet		
057-10.2	Hen and Chickens	9/5/06	1	wet	2	NA
057-10.2	Hen and Chickens	9/6/06	33	wet		
057-10.2	Hen and Chickens	9/12/06	2	dry		
057-10.2	Hen and Chickens	9/19/06	3	dry		
057-10.2	Hen and Chickens	9/28/06	5	dry		
057-10.2	Hen and Chickens	10/16/06	1	dry		
057-10.2	Hen and Chickens	11/1/06	6	dry		
057-10.2	Hen and Chickens	11/15/06	6	dry		
057-10.2	Hen and Chickens	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	1/29/07	3	dry	2	NA
057-10.2	Hen and Chickens	3/7/07	1	dry		
057-10.2	Hen and Chickens	3/27/07	1	wet		
057-10.2	Hen and Chickens	4/23/07	1	dry		
057-10.2	Hen and Chickens	5/1/07	1	wet		
057-10.2	Hen and Chickens	5/23/07	1	dry		
057-10.2	Hen and Chickens	6/12/07	1	wet		
057-10.2	Hen and Chickens	7/8/07	33	dry		
057-10.2	Hen and Chickens	7/31/07	1	dry		
057-10.2	Hen and Chickens	8/28/07	1	dry		
057-10.2	Hen and Chickens	9/23/07	11	dry		
057-10.2	Hen and Chickens	10/16/07	1	dry		
057-10.2	Hen and Chickens	10/22/07	1	wet		
057-10.2	Hen and Chickens	10/31/07	6	dry		
057-10.2	Hen and Chickens	12/6/07	1	dry		
057-10.2	Hen and Chickens	12/10/07	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	1/8/08	1	dry	1	NA
057-10.2	Hen and Chickens	3/3/08	1	dry		
057-10.2	Hen and Chickens	4/23/08	1	dry		
057-10.2	Hen and Chickens	4/30/08	1	wet		
057-10.2	Hen and Chickens	5/14/08	1	dry		
057-10.2	Hen and Chickens	5/20/08	1	wet		
057-10.2	Hen and Chickens	5/29/08	3	wet		
057-10.2	Hen and Chickens	6/18/08	1	wet		
057-10.2	Hen and Chickens	6/30/08	1	wet		
057-10.2	Hen and Chickens	7/27/08	4	dry		
057-10.2	Hen and Chickens	8/4/08	1	wet		
057-10.2	Hen and Chickens	8/26/08	1	dry		
057-10.2	Hen and Chickens	9/10/08	22	wet		
057-10.2	Hen and Chickens	9/17/08	1	dry		
057-10.2	Hen and Chickens	10/7/08	1	wet		
057-10.2	Hen and Chickens	10/27/08	5	wet		
057-10.2	Hen and Chickens	11/24/08	1	dry		
057-10.2	Hen and Chickens	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	2/9/09	1	dry		
057-10.2	Hen and Chickens	3/10/09	1	wet		
057-10.2	Hen and Chickens	4/22/09	1	wet		
057-10.2	Hen and Chickens	5/11/09	1	dry		
057-10.2	Hen and Chickens	6/8/09	1	dry		
057-10.2	Hen and Chickens	6/10/09	2	wet		
057-10.2	Hen and Chickens	6/22/09	3	wet		
057-10.2	Hen and Chickens	7/20/09	1	dry		
057-10.2	Hen and Chickens	8/3/09	1	dry	1	NA
057-10.2	Hen and Chickens	8/17/09	1	dry		
057-10.2	Hen and Chickens	8/24/09	14	wet		
057-10.2	Hen and Chickens	9/1/09	1	dry		
057-10.2	Hen and Chickens	10/5/09	1	wet		
057-10.2	Hen and Chickens	11/3/09	1	wet		
057-10.2	Hen and Chickens	12/1/09	1	wet		
057-10.2	Hen and Chickens	12/14/09	1	wet		
057-10.2	Hen and Chickens	12/28/09	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.2	Hen and Chickens	1/19/10	1	wet	1	NA
057-10.2	Hen and Chickens	1/27/10	1	wet		
057-10.2	Hen and Chickens	2/22/10	1	dry		
057-10.2	Hen and Chickens	3/2/10	1	wet		
057-10.2	Hen and Chickens	3/18/10	1	wet		
057-10.2	Hen and Chickens	4/4/10	1	dry		
057-10.2	Hen and Chickens	4/11/10	1	wet		
057-10.2	Hen and Chickens	5/5/10	1	wet		
057-10.2	Hen and Chickens	6/9/10	1	wet		
057-10.2	Hen and Chickens	7/7/10	2	dry		
057-10.2	Hen and Chickens	7/26/10	2	wet		
057-10.2	Hen and Chickens	8/25/10	3	wet		
057-10.2	Hen and Chickens	9/20/10	1	dry		
057-10.2	Hen and Chickens	9/21/10	1	dry		
057-10.2	Hen and Chickens	9/29/10	4	wet		
057-10.2	Hen and Chickens	10/3/10	4	wet		
057-10.2	Hen and Chickens	3/15/11	1	dry	4	NA
057-10.2	Hen and Chickens	4/25/11	4	wet		
057-10.2	Hen and Chickens	5/22/11	4	wet		
057-10.2	Hen and Chickens	5/23/11	5	wet		
057-10.2	Hen and Chickens	6/8/11	1	dry		
057-10.2	Hen and Chickens	6/22/11	4	wet		
057-10.2	Hen and Chickens	7/11/11	1	dry		
057-10.2	Hen and Chickens	7/19/11	26	dry		
057-10.2	Hen and Chickens	7/25/11	1	dry		
057-10.2	Hen and Chickens	8/10/11	11	dry		
057-10.2	Hen and Chickens	8/17/11	7	dry		
057-10.2	Hen and Chickens	8/22/11	5	dry		
057-10.2	Hen and Chickens	9/1/11	8	dry		
057-10.2	Hen and Chickens	9/12/11	2	dry		
057-10.2	Hen and Chickens	9/19/11	5	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-16.0	S. Flat Neck Pt. Pond outflow	4/24/00	2	wet	3	NA
057-16.0	S. Flat Neck Pt. Pond outflow	6/22/00	4	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/16/00	22	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/18/00	4	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/19/00	8	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/6/00	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/7/00	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/13/00	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/14/00	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/18/00	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	11/12/00	14	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/29/01	4	wet	2	NA
057-16.0	S. Flat Neck Pt. Pond outflow	5/30/01	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	6/20/01	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	8/14/01	11	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/9/01	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/16/01	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/23/01	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/24/01	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/2/01	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	1/10/02	18	dry	4	NA
057-16.0	S. Flat Neck Pt. Pond outflow	3/11/02	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/11/02	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/8/02	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/22/02	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/3/02	14	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	12/4/02	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-16.0	S. Flat Neck Pt. Pond outflow	1/13/03	2	dry	3	NA
057-16.0	S. Flat Neck Pt. Pond outflow	2/10/03	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	3/11/03	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/23/03	22	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	8/18/03	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/10/03	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/24/03	14	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/30/03	4	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	1/6/04	2	wet	3	NA
057-16.0	S. Flat Neck Pt. Pond outflow	3/31/04	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	4/29/04	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	5/11/04	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	6/16/04	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/20/04	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/7/04	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/26/04	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	8/9/04	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/17/04	11	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/12/04	14	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/21/04	8	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/25/04	4	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	11/7/04	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-16.0	S. Flat Neck Pt. Pond outflow	1/25/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	2/7/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	4/6/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	4/19/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	5/18/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/1/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/20/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/5/05	3	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/11/05	3	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/3/05	1	dry	2	NA
057-16.0	S. Flat Neck Pt. Pond outflow	8/16/05	13	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	8/17/05	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/19/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/4/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/24/05	5	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/26/05	15	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/27/05	3	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/31/05	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-16.0	S. Flat Neck Pt. Pond outflow	1/25/06	1	wet	1	NA
057-16.0	S. Flat Neck Pt. Pond outflow	2/22/06	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	3/22/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	5/24/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/12/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/10/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/8/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/31/06	10	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/5/06	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/6/06	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/12/06	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/19/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/16/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	11/1/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	11/15/06	5	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	12/17/06	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	1/29/07	1	dry	1	NA
057-16.0	S. Flat Neck Pt. Pond outflow	3/7/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	3/27/07	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	4/23/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	5/1/07	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/23/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/12/07	3	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/8/07	3	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/31/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/28/07	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/23/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/16/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/22/07	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/31/07	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	12/6/07	3	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	12/10/07	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-16.0	S. Flat Neck Pt. Pond outflow	1/8/08	1	dry	1	NA
057-16.0	S. Flat Neck Pt. Pond outflow	3/3/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	4/23/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	4/30/08	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/14/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	5/20/08	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/29/08	4	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	6/18/08	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/27/08	3	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/4/08	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	8/26/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/10/08	13	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/17/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/7/08	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/27/08	6	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	11/24/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	12/29/08	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	2/9/09	1	dry	2	NA
057-16.0	S. Flat Neck Pt. Pond outflow	3/10/09	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	4/22/09	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/11/09	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/8/09	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/10/09	4	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	6/22/09	3	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/20/09	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/3/09	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/24/09	5	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/1/09	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	10/5/09	4	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	11/3/09	4	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	12/14/09	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-16.0	S. Flat Neck Pt. Pond outflow	1/19/10	1	wet	1	NA
057-16.0	S. Flat Neck Pt. Pond outflow	1/27/10	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	2/22/10	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	3/2/10	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	3/18/10	2	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	4/4/10	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	4/11/10	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/5/10	3	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	6/9/10	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/7/10	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/26/10	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	8/25/10	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	9/20/10	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/21/10	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/29/10	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	10/3/10	4	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	3/15/11	1	dry	2	NA
057-16.0	S. Flat Neck Pt. Pond outflow	4/25/11	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	5/22/11	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	6/8/11	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	6/22/11	1	wet		
057-16.0	S. Flat Neck Pt. Pond outflow	7/11/11	7	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/19/11	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	7/25/11	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/3/11	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/10/11	22	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/17/11	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	8/22/11	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/1/11	2	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/12/11	1	dry		
057-16.0	S. Flat Neck Pt. Pond outflow	9/19/11	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	4/24/00	2	wet	3	NA
057-17.0	S. Greenwich Pt.	6/22/00	6	dry		
057-17.0	S. Greenwich Pt.	7/16/00	8	wet		
057-17.0	S. Greenwich Pt.	7/18/00	2	dry		
057-17.0	S. Greenwich Pt.	7/19/00	6	dry		
057-17.0	S. Greenwich Pt.	8/6/00	2	dry		
057-17.0	S. Greenwich Pt.	8/7/00	2	dry		
057-17.0	S. Greenwich Pt.	9/13/00	2	wet		
057-17.0	S. Greenwich Pt.	9/14/00	2	wet		
057-17.0	S. Greenwich Pt.	9/18/00	2	dry		
057-17.0	S. Greenwich Pt.	11/12/00	11	wet		
057-17.0	S. Greenwich Pt.	5/29/01	2	wet	3	NA
057-17.0	S. Greenwich Pt.	5/30/01	6	wet		
057-17.0	S. Greenwich Pt.	6/20/01	2	wet		
057-17.0	S. Greenwich Pt.	8/14/01	11	wet		
057-17.0	S. Greenwich Pt.	8/30/01	4	dry		
057-17.0	S. Greenwich Pt.	9/9/01	2	dry		
057-17.0	S. Greenwich Pt.	9/16/01	2	wet		
057-17.0	S. Greenwich Pt.	9/23/01	2	wet		
057-17.0	S. Greenwich Pt.	9/24/01	4	wet		
057-17.0	S. Greenwich Pt.	1/10/02	9	dry	4	NA
057-17.0	S. Greenwich Pt.	3/11/02	2	dry		
057-17.0	S. Greenwich Pt.	6/11/02	2	wet		
057-17.0	S. Greenwich Pt.	7/8/02	6	dry		
057-17.0	S. Greenwich Pt.	7/22/02	22	dry		
057-17.0	S. Greenwich Pt.	9/3/02	4	wet		
057-17.0	S. Greenwich Pt.	9/30/02	2	wet		
057-17.0	S. Greenwich Pt.	12/4/02	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	1/13/03	4	dry	3	3
057-17.0	S. Greenwich Pt.	2/10/03	2	dry		
057-17.0	S. Greenwich Pt.	3/11/03	2	wet		
057-17.0	S. Greenwich Pt.	7/23/03	50	wet		
057-17.0	S. Greenwich Pt.	8/18/03	2	wet		
057-17.0	S. Greenwich Pt.	9/10/03	2	wet		
057-17.0	S. Greenwich Pt.	9/24/03	4	wet		
057-17.0	S. Greenwich Pt.	9/30/03	2	wet		
057-17.0	S. Greenwich Pt.	1/6/04	4	wet	3	NA
057-17.0	S. Greenwich Pt.	3/31/04	2	wet		
057-17.0	S. Greenwich Pt.	4/29/04	2	dry		
057-17.0	S. Greenwich Pt.	5/11/04	6	wet		
057-17.0	S. Greenwich Pt.	6/16/04	2	dry		
057-17.0	S. Greenwich Pt.	6/20/04	2	dry		
057-17.0	S. Greenwich Pt.	7/7/04	2	wet		
057-17.0	S. Greenwich Pt.	7/26/04	2	wet		
057-17.0	S. Greenwich Pt.	8/9/04	2	dry		
057-17.0	S. Greenwich Pt.	8/17/04	4	wet		
057-17.0	S. Greenwich Pt.	9/12/04	8	wet		
057-17.0	S. Greenwich Pt.	9/21/04	14	dry		
057-17.0	S. Greenwich Pt.	10/25/04	4	dry		
057-17.0	S. Greenwich Pt.	11/7/04	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	1/25/05	6	dry		
057-17.0	S. Greenwich Pt.	2/7/05	1	dry		
057-17.0	S. Greenwich Pt.	4/6/05	1	dry		
057-17.0	S. Greenwich Pt.	4/19/05	1	dry		
057-17.0	S. Greenwich Pt.	5/18/05	1	dry		
057-17.0	S. Greenwich Pt.	6/1/05	1	dry		
057-17.0	S. Greenwich Pt.	6/20/05	1	dry		
057-17.0	S. Greenwich Pt.	7/11/05	1	dry		
057-17.0	S. Greenwich Pt.	8/3/05	1	dry	2	NA
057-17.0	S. Greenwich Pt.	8/16/05	20	wet		
057-17.0	S. Greenwich Pt.	8/17/05	4	wet		
057-17.0	S. Greenwich Pt.	9/19/05	1	dry		
057-17.0	S. Greenwich Pt.	10/4/05	1	dry		
057-17.0	S. Greenwich Pt.	10/26/05	1	wet		
057-17.0	S. Greenwich Pt.	10/27/05	3	wet		
057-17.0	S. Greenwich Pt.	10/31/05	1	dry		
057-17.0	S. Greenwich Pt.	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	1/25/06	1	wet		
057-17.0	S. Greenwich Pt.	2/22/06	1	wet		
057-17.0	S. Greenwich Pt.	3/22/06	1	dry		
057-17.0	S. Greenwich Pt.	5/24/06	1	dry		
057-17.0	S. Greenwich Pt.	6/12/06	1	dry		
057-17.0	S. Greenwich Pt.	7/10/06	1	dry		
057-17.0	S. Greenwich Pt.	7/17/06	1	dry		
057-17.0	S. Greenwich Pt.	8/8/06	1	dry		
057-17.0	S. Greenwich Pt.	8/31/06	10	wet	1	NA
057-17.0	S. Greenwich Pt.	9/5/06	1	wet		
057-17.0	S. Greenwich Pt.	9/6/06	3	wet		
057-17.0	S. Greenwich Pt.	9/12/06	1	dry		
057-17.0	S. Greenwich Pt.	9/19/06	1	dry		
057-17.0	S. Greenwich Pt.	10/16/06	1	dry		
057-17.0	S. Greenwich Pt.	11/1/06	2	dry		
057-17.0	S. Greenwich Pt.	11/15/06	2	dry		
057-17.0	S. Greenwich Pt.	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	1/29/07	1	dry	1	NA
057-17.0	S. Greenwich Pt.	3/7/07	1	dry		
057-17.0	S. Greenwich Pt.	3/27/07	1	wet		
057-17.0	S. Greenwich Pt.	4/23/07	1	dry		
057-17.0	S. Greenwich Pt.	5/1/07	1	wet		
057-17.0	S. Greenwich Pt.	5/23/07	1	dry		
057-17.0	S. Greenwich Pt.	6/12/07	1	wet		
057-17.0	S. Greenwich Pt.	7/8/07	6	dry		
057-17.0	S. Greenwich Pt.	7/31/07	1	dry		
057-17.0	S. Greenwich Pt.	8/28/07	1	dry		
057-17.0	S. Greenwich Pt.	9/23/07	1	dry		
057-17.0	S. Greenwich Pt.	10/16/07	2	dry		
057-17.0	S. Greenwich Pt.	10/22/07	1	wet		
057-17.0	S. Greenwich Pt.	10/31/07	1	dry		
057-17.0	S. Greenwich Pt.	12/6/07	1	dry		
057-17.0	S. Greenwich Pt.	12/10/07	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	1/8/08	1	dry	1	NA
057-17.0	S. Greenwich Pt.	3/3/08	1	dry		
057-17.0	S. Greenwich Pt.	4/23/08	1	dry		
057-17.0	S. Greenwich Pt.	4/30/08	1	wet		
057-17.0	S. Greenwich Pt.	5/14/08	1	dry		
057-17.0	S. Greenwich Pt.	5/20/08	1	wet		
057-17.0	S. Greenwich Pt.	5/29/08	1	wet		
057-17.0	S. Greenwich Pt.	6/18/08	1	wet		
057-17.0	S. Greenwich Pt.	7/27/08	2	dry		
057-17.0	S. Greenwich Pt.	8/4/08	3	wet		
057-17.0	S. Greenwich Pt.	8/26/08	2	dry		
057-17.0	S. Greenwich Pt.	9/10/08	13	wet		
057-17.0	S. Greenwich Pt.	9/17/08	1	dry		
057-17.0	S. Greenwich Pt.	10/7/08	1	wet		
057-17.0	S. Greenwich Pt.	10/27/08	4	wet		
057-17.0	S. Greenwich Pt.	11/24/08	1	dry		
057-17.0	S. Greenwich Pt.	12/29/08	1	dry		
057-17.0	S. Greenwich Pt.	2/9/09	1	dry	2	NA
057-17.0	S. Greenwich Pt.	3/10/09	1	wet		
057-17.0	S. Greenwich Pt.	4/22/09	1	wet		
057-17.0	S. Greenwich Pt.	5/11/09	1	dry		
057-17.0	S. Greenwich Pt.	6/8/09	1	dry		
057-17.0	S. Greenwich Pt.	6/10/09	12	wet		
057-17.0	S. Greenwich Pt.	6/22/09	2	wet		
057-17.0	S. Greenwich Pt.	7/20/09	1	dry		
057-17.0	S. Greenwich Pt.	8/3/09	1	dry		
057-17.0	S. Greenwich Pt.	8/24/09	4	wet		
057-17.0	S. Greenwich Pt.	9/1/09	1	dry		
057-17.0	S. Greenwich Pt.	10/5/09	1	wet		
057-17.0	S. Greenwich Pt.	11/3/09	4	dry		
057-17.0	S. Greenwich Pt.	12/14/09	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-17.0	S. Greenwich Pt.	1/19/10	1	wet		
057-17.0	S. Greenwich Pt.	1/27/10	1	wet		
057-17.0	S. Greenwich Pt.	2/22/10	1	dry		
057-17.0	S. Greenwich Pt.	3/2/10	1	wet		
057-17.0	S. Greenwich Pt.	3/18/10	1	wet		
057-17.0	S. Greenwich Pt.	4/4/10	2	dry		
057-17.0	S. Greenwich Pt.	4/11/10	1	wet		
057-17.0	S. Greenwich Pt.	5/5/10	4	wet	1	NA
057-17.0	S. Greenwich Pt.	6/9/10	1	wet		
057-17.0	S. Greenwich Pt.	7/7/10	1	dry		
057-17.0	S. Greenwich Pt.	7/26/10	1	wet		
057-17.0	S. Greenwich Pt.	9/20/10	1	dry		
057-17.0	S. Greenwich Pt.	9/21/10	1	dry		
057-17.0	S. Greenwich Pt.	9/29/10	1	wet		
057-17.0	S. Greenwich Pt.	10/3/10	6	wet		
057-17.0	S. Greenwich Pt.	3/15/11	1	dry		
057-17.0	S. Greenwich Pt.	4/25/11	1	wet		
057-17.0	S. Greenwich Pt.	5/22/11	8	wet		
057-17.0	S. Greenwich Pt.	6/8/11	2	dry		
057-17.0	S. Greenwich Pt.	6/22/11	1	wet		
057-17.0	S. Greenwich Pt.	7/11/11	1	dry		
057-17.0	S. Greenwich Pt.	7/19/11	1	dry		
057-17.0	S. Greenwich Pt.	7/25/11	1	dry	1	NA
057-17.0	S. Greenwich Pt.	8/3/11	1	dry		
057-17.0	S. Greenwich Pt.	8/10/11	6	dry		
057-17.0	S. Greenwich Pt.	8/17/11	2	dry		
057-17.0	S. Greenwich Pt.	8/22/11	1	dry		
057-17.0	S. Greenwich Pt.	9/1/11	1	dry		
057-17.0	S. Greenwich Pt.	9/12/11	2	dry		
057-17.0	S. Greenwich Pt.	9/19/11	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	1/2/00	11	dry	4	NA
057-21.0	Newfoundland Reef	2/8/00	6	dry		
057-21.0	Newfoundland Reef	2/16/00	4	wet		
057-21.0	Newfoundland Reef	4/16/00	2	wet		
057-21.0	Newfoundland Reef	5/7/00	2	wet		
057-21.0	Newfoundland Reef	6/22/00	4	dry		
057-21.0	Newfoundland Reef	7/4/00	2	wet		
057-21.0	Newfoundland Reef	7/16/00	36	wet		
057-21.0	Newfoundland Reef	8/6/00	2	dry		
057-21.0	Newfoundland Reef	8/7/00	11	dry		
057-21.0	Newfoundland Reef	9/13/00	2	wet		
057-21.0	Newfoundland Reef	9/17/00	2	wet		
057-21.0	Newfoundland Reef	10/25/00	2	dry		
057-21.0	Newfoundland Reef	11/12/00	28	wet		
057-21.0	Newfoundland Reef	11/20/00	2	wet		
057-21.0	Newfoundland Reef	12/5/00	11	dry		
057-21.0	Newfoundland Reef	1/9/01	2	wet	4	NA
057-21.0	Newfoundland Reef	2/20/01	2	dry		
057-21.0	Newfoundland Reef	3/25/01	2	wet		
057-21.0	Newfoundland Reef	4/5/01	2	dry		
057-21.0	Newfoundland Reef	4/17/01	11	dry		
057-21.0	Newfoundland Reef	7/12/01	8	wet		
057-21.0	Newfoundland Reef	8/14/01	28	wet		
057-21.0	Newfoundland Reef	9/9/01	2	dry		
057-21.0	Newfoundland Reef	9/16/01	6	wet		
057-21.0	Newfoundland Reef	9/23/01	14	wet		
057-21.0	Newfoundland Reef	10/2/01	11	wet		
057-21.0	Newfoundland Reef	11/7/01	2	dry		
057-21.0	Newfoundland Reef	11/25/01	2	wet		
057-21.0	Newfoundland Reef	12/2/01	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	1/6/02	18	dry		
057-21.0	Newfoundland Reef	1/27/02	2	dry		
057-21.0	Newfoundland Reef	3/17/02	2	dry		
057-21.0	Newfoundland Reef	3/31/02	2	dry		
057-21.0	Newfoundland Reef	4/21/02	2	wet		
057-21.0	Newfoundland Reef	5/12/02	2	wet		
057-21.0	Newfoundland Reef	6/9/02	11	wet		
057-21.0	Newfoundland Reef	6/16/02	50	wet		
057-21.0	Newfoundland Reef	6/23/02	2	dry	3	NA
057-21.0	Newfoundland Reef	6/30/02	2	dry		
057-21.0	Newfoundland Reef	8/4/02	4	wet		
057-21.0	Newfoundland Reef	8/18/02	8	wet		
057-21.0	Newfoundland Reef	9/8/02	2	dry		
057-21.0	Newfoundland Reef	9/29/02	2	wet		
057-21.0	Newfoundland Reef	10/20/02	6	dry		
057-21.0	Newfoundland Reef	11/3/02	2	dry		
057-21.0	Newfoundland Reef	12/16/02	6	wet		
057-21.0	Newfoundland Reef	1/13/03	2	dry		
057-21.0	Newfoundland Reef	2/24/03	2	wet		
057-21.0	Newfoundland Reef	3/11/03	2	wet		
057-21.0	Newfoundland Reef	3/26/03	2	wet		
057-21.0	Newfoundland Reef	4/13/03	2	wet		
057-21.0	Newfoundland Reef	4/30/03	2	dry		
057-21.0	Newfoundland Reef	5/28/03	6	wet		
057-21.0	Newfoundland Reef	6/8/03	8	wet	5	**11**
057-21.0	Newfoundland Reef	6/13/03	50	wet		
057-21.0	Newfoundland Reef	7/23/03	50	wet		
057-21.0	Newfoundland Reef	8/19/03	51	wet		
057-21.0	Newfoundland Reef	9/10/03	2	wet		
057-21.0	Newfoundland Reef	9/24/03	14	wet		
057-21.0	Newfoundland Reef	11/3/03	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	1/6/04	2	wet	4	4
057-21.0	Newfoundland Reef	3/15/04	2	dry		
057-21.0	Newfoundland Reef	4/7/04	2	dry		
057-21.0	Newfoundland Reef	4/29/04	2	dry		
057-21.0	Newfoundland Reef	6/16/04	2	dry		
057-21.0	Newfoundland Reef	6/20/04	2	dry		
057-21.0	Newfoundland Reef	7/7/04	2	wet		
057-21.0	Newfoundland Reef	7/26/04	2	wet		
057-21.0	Newfoundland Reef	8/17/04	14	wet		
057-21.0	Newfoundland Reef	9/12/04	36	wet		
057-21.0	Newfoundland Reef	9/21/04	51	dry		
057-21.0	Newfoundland Reef	10/25/04	4	dry		
057-21.0	Newfoundland Reef	11/7/04	11	wet		
057-21.0	Newfoundland Reef	12/9/04	4	wet		
057-21.0	Newfoundland Reef	2/2/05	1	dry	2	NA
057-21.0	Newfoundland Reef	4/6/05	1	dry		
057-21.0	Newfoundland Reef	5/18/05	2	dry		
057-21.0	Newfoundland Reef	6/1/05	1	dry		
057-21.0	Newfoundland Reef	6/20/05	1	dry		
057-21.0	Newfoundland Reef	7/5/05	1	dry		
057-21.0	Newfoundland Reef	7/11/05	2	dry		
057-21.0	Newfoundland Reef	8/3/05	1	dry		
057-21.0	Newfoundland Reef	10/4/05	1	dry		
057-21.0	Newfoundland Reef	10/24/05	12	wet		
057-21.0	Newfoundland Reef	10/26/05	14	wet		
057-21.0	Newfoundland Reef	10/31/05	1	dry		
057-21.0	Newfoundland Reef	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	1/25/06	1	wet	2	NA
057-21.0	Newfoundland Reef	2/22/06	1	wet		
057-21.0	Newfoundland Reef	5/24/06	1	dry		
057-21.0	Newfoundland Reef	6/12/06	2	dry		
057-21.0	Newfoundland Reef	7/10/06	1	dry		
057-21.0	Newfoundland Reef	9/6/06	1	wet		
057-21.0	Newfoundland Reef	9/12/06	3	dry		
057-21.0	Newfoundland Reef	9/19/06	1	dry		
057-21.0	Newfoundland Reef	9/28/06	1	dry		
057-21.0	Newfoundland Reef	10/16/06	3	dry		
057-21.0	Newfoundland Reef	11/1/06	4	dry		
057-21.0	Newfoundland Reef	11/15/06	9	dry		
057-21.0	Newfoundland Reef	11/20/06	2	dry		
057-21.0	Newfoundland Reef	12/17/06	1	dry		
057-21.0	Newfoundland Reef	1/29/07	1	dry	2	NA
057-21.0	Newfoundland Reef	3/7/07	1	dry		
057-21.0	Newfoundland Reef	3/13/07	1	wet		
057-21.0	Newfoundland Reef	3/27/07	1	wet		
057-21.0	Newfoundland Reef	4/23/07	1	dry		
057-21.0	Newfoundland Reef	5/1/07	1	wet		
057-21.0	Newfoundland Reef	5/23/07	3	dry		
057-21.0	Newfoundland Reef	6/12/07	9	wet		
057-21.0	Newfoundland Reef	7/8/07	20	dry		
057-21.0	Newfoundland Reef	7/31/07	1	dry		
057-21.0	Newfoundland Reef	8/28/07	2	dry		
057-21.0	Newfoundland Reef	9/23/07	1	dry		
057-21.0	Newfoundland Reef	10/16/07	1	dry		
057-21.0	Newfoundland Reef	10/22/07	3	wet		
057-21.0	Newfoundland Reef	10/31/07	4	dry		
057-21.0	Newfoundland Reef	11/5/07	1	dry		
057-21.0	Newfoundland Reef	12/6/07	13	dry		
057-21.0	Newfoundland Reef	12/10/07	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	1/8/08	1	dry	1	NA
057-21.0	Newfoundland Reef	3/3/08	1	dry		
057-21.0	Newfoundland Reef	4/23/08	1	dry		
057-21.0	Newfoundland Reef	4/30/08	1	wet		
057-21.0	Newfoundland Reef	5/14/08	1	dry		
057-21.0	Newfoundland Reef	5/20/08	1	wet		
057-21.0	Newfoundland Reef	5/29/08	2	wet		
057-21.0	Newfoundland Reef	6/18/08	1	wet		
057-21.0	Newfoundland Reef	7/27/08	2	dry		
057-21.0	Newfoundland Reef	8/4/08	1	wet		
057-21.0	Newfoundland Reef	8/26/08	1	dry		
057-21.0	Newfoundland Reef	9/10/08	9	wet		
057-21.0	Newfoundland Reef	9/17/08	1	dry		
057-21.0	Newfoundland Reef	10/7/08	3	wet		
057-21.0	Newfoundland Reef	10/27/08	6	wet		
057-21.0	Newfoundland Reef	11/2/08	1	dry		
057-21.0	Newfoundland Reef	11/24/08	1	dry		
057-21.0	Newfoundland Reef	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	2/9/09	1	dry	2	NA
057-21.0	Newfoundland Reef	3/10/09	1	wet		
057-21.0	Newfoundland Reef	4/22/09	1	wet		
057-21.0	Newfoundland Reef	5/11/09	1	dry		
057-21.0	Newfoundland Reef	6/8/09	1	dry		
057-21.0	Newfoundland Reef	6/10/09	5	wet		
057-21.0	Newfoundland Reef	6/22/09	4	wet		
057-21.0	Newfoundland Reef	7/20/09	2	dry		
057-21.0	Newfoundland Reef	8/3/09	2	dry		
057-21.0	Newfoundland Reef	8/24/09	8	wet		
057-21.0	Newfoundland Reef	9/1/09	1	dry		
057-21.0	Newfoundland Reef	10/5/09	2	wet		
057-21.0	Newfoundland Reef	11/3/09	4	wet		
057-21.0	Newfoundland Reef	12/1/09	1	wet		
057-21.0	Newfoundland Reef	12/14/09	6	wet		
057-21.0	Newfoundland Reef	12/28/09	3	wet		
057-21.0	Newfoundland Reef	1/19/10	1	wet	2	NA
057-21.0	Newfoundland Reef	1/27/10	1	wet		
057-21.0	Newfoundland Reef	2/22/10	1	dry		
057-21.0	Newfoundland Reef	3/2/10	1	wet		
057-21.0	Newfoundland Reef	3/18/10	2	wet		
057-21.0	Newfoundland Reef	4/4/10	1	dry		
057-21.0	Newfoundland Reef	4/11/10	1	wet		
057-21.0	Newfoundland Reef	5/5/10	5	wet		
057-21.0	Newfoundland Reef	6/9/10	1	wet		
057-21.0	Newfoundland Reef	7/7/10	4	dry		
057-21.0	Newfoundland Reef	7/26/10	1	wet		
057-21.0	Newfoundland Reef	8/25/10	5	wet		
057-21.0	Newfoundland Reef	9/20/10	1	dry		
057-21.0	Newfoundland Reef	9/21/10	1	dry		
057-21.0	Newfoundland Reef	9/29/10	13	wet		
057-21.0	Newfoundland Reef	10/3/10	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-21.0	Newfoundland Reef	3/15/11	1	dry	3	NA
057-21.0	Newfoundland Reef	4/25/11	5	wet		
057-21.0	Newfoundland Reef	5/22/11	4	wet		
057-21.0	Newfoundland Reef	6/22/11	1	wet		
057-21.0	Newfoundland Reef	7/11/11	2	dry		
057-21.0	Newfoundland Reef	7/19/11	1	dry		
057-21.0	Newfoundland Reef	7/25/11	1	dry		
057-21.0	Newfoundland Reef	8/3/11	1	dry		
057-21.0	Newfoundland Reef	8/10/11	6	dry		
057-21.0	Newfoundland Reef	8/17/11	4	dry		
057-21.0	Newfoundland Reef	8/22/11	6	dry		
057-21.0	Newfoundland Reef	9/1/11	34	dry		
057-21.0	Newfoundland Reef	9/12/11	2	dry		
057-21.0	Newfoundland Reef	9/19/11	6	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	1/2/00	11	dry	3	NA
057-22.1	R"2A" - W. Flat Neck Pt.	2/8/00	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	2/16/00	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/16/00	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/7/00	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/22/00	4	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/30/00	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	8/7/00	4	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/25/00	4	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/12/00	6	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	11/20/00	4	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	12/5/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	1/9/01	22	wet	3	NA
057-22.1	R"2A" - W. Flat Neck Pt.	2/20/01	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	3/25/01	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/5/01	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/17/01	6	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/12/01	6	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	11/7/01	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/25/01	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	12/2/01	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	1/6/02	22	dry	4	NA
057-22.1	R"2A" - W. Flat Neck Pt.	1/27/02	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	3/17/02	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	3/31/02	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/21/02	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/12/02	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/9/02	6	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/16/02	18	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/23/02	4	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/30/02	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/4/02	28	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	8/18/02	8	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/8/02	11	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/29/02	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	10/20/02	6	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/3/02	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	1/13/03	2	dry	5	NA
057-22.1	R"2A" - W. Flat Neck Pt.	2/24/03	8	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	3/11/03	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	3/26/03	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/13/03	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/30/03	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	5/28/03	6	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/8/03	14	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/13/03	18	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/23/03	18	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/24/03	18	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	11/3/03	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	1/6/04	4	wet	4	NA
057-22.1	R"2A" - W. Flat Neck Pt.	3/15/04	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/7/04	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/29/04	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/16/04	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/20/04	50	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/7/04	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/26/04	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	8/17/04	11	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/12/04	8	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/21/04	11	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/7/04	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	12/9/04	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	2/2/05	1	dry	2	NA
057-22.1	R"2A" - W. Flat Neck Pt.	4/6/05	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	5/18/05	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/1/05	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/20/05	3	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/5/05	3	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/11/05	24	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/3/05	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/4/05	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/24/05	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	10/31/05	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/14/05	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	1/25/06	1	wet	1	NA
057-22.1	R"2A" - W. Flat Neck Pt.	2/22/06	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	3/22/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	5/24/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/12/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/10/06	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/8/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/6/06	4	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/12/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/19/06	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/16/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/1/06	4	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/15/06	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/20/06	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	1/29/07	1	dry	2	NA
057-22.1	R"2A" - W. Flat Neck Pt.	3/7/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	3/13/07	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	3/27/07	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/23/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	5/1/07	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/23/07	3	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/12/07	6	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/8/07	14	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/31/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/28/07	14	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/23/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/16/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/22/07	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	10/31/07	11	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/5/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	12/6/07	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	12/10/07	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	1/8/08	1	dry	2	NA
057-22.1	R"2A" - W. Flat Neck Pt.	3/3/08	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/23/08	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/30/08	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/14/08	5	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	5/20/08	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/29/08	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/18/08	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/27/08	9	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/4/08	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	8/26/08	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/10/08	9	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/17/08	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/7/08	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	10/27/08	3	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	11/2/08	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	11/24/08	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	2/9/09	1	dry	2	NA
057-22.1	R"2A" - W. Flat Neck Pt.	3/10/09	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/22/09	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/11/09	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/8/09	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/10/09	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/22/09	12	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/20/09	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/3/09	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/24/09	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/1/09	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	10/5/09	4	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	11/3/09	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	12/1/09	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	12/14/09	4	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	12/28/09	21	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	1/19/10	1	wet	1	NA
057-22.1	R"2A" - W. Flat Neck Pt.	1/27/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	2/22/10	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	3/2/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	3/18/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	4/4/10	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	4/11/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/5/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/9/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/7/10	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/26/10	4	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	8/25/10	7	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	9/20/10	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/21/10	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/29/10	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	10/3/10	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-22.1	R"2A" - W. Flat Neck Pt.	3/15/11	1	dry	2	NA
057-22.1	R"2A" - W. Flat Neck Pt.	4/25/11	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	5/22/11	2	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	6/8/11	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	6/22/11	1	wet		
057-22.1	R"2A" - W. Flat Neck Pt.	7/11/11	5	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/19/11	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	7/25/11	20	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/3/11	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/10/11	9	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/17/11	2	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	8/22/11	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/1/11	1	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/12/11	4	dry		
057-22.1	R"2A" - W. Flat Neck Pt.	9/19/11	9	dry		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 11: LIS WB-Midshore – Outer Cos Cob Harbor (CT-W3_013)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-10.2	Hen and Chickens	2000-2011	89	95	3	4	2
057-16.0	S. Flat Neck Pt. Pond outflow	2000-2011	73	89	2	2	2
057-17.0	S. Greenwich Pt.	2000-2011	71	90	2	2	2
057-21.0	Newfoundland Reef	2000-2011	86	98	3	4	2
057-22.1	R"2A" - W. Flat Neck Pt.	2000-2011	74	98	2	3	2

Shaded cells indicate an exceedance of water quality criteria

Table 24: Segment 12: LIS WB Midshore – Captain Harbor Bacteria Data

Waterbody ID: CT-W3_015-I

Characteristics: Saltwater, Class SA, Shellfishing Harvesting for Direct Human Consumption, Recreation, Habitat for Marine Fish and other Aquatic Life and Wildlife, Industrial Water Supply, and Navigation

Impairment: Shellfish Harvesting (*fecal coliform bacteria)*

Water Quality Criteria for fecal coliform:

Geometric Mean: 14 colonies/100 mL

90% less than: 31 colonies/100 mL

Percent Reduction to meet TMDL:

Geometric Mean: **7%**

90% less than: **40%**

Data: 2000 - 2011 from CT DEEP targeted sampling efforts, 2012 TMDL Cycle

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	1/2/00	22	dry	12	19
057-08.1	Great Capt.Rocks	1/6/00	6	wet		
057-08.1	Great Capt.Rocks	2/16/00	14	wet		
057-08.1	Great Capt.Rocks	4/16/00	51	dry		
057-08.1	Great Capt.Rocks	4/23/00	51	wet		
057-08.1	Great Capt.Rocks	5/17/00	2	wet		
057-08.1	Great Capt.Rocks	6/22/00	8	dry		
057-08.1	Great Capt.Rocks	7/4/00	2	wet		
057-08.1	Great Capt.Rocks	7/16/00	2	wet		
057-08.1	Great Capt.Rocks	7/30/00	51	wet		
057-08.1	Great Capt.Rocks	8/6/00	51	dry		
057-08.1	Great Capt.Rocks	9/13/00	18	wet		
057-08.1	Great Capt.Rocks	9/17/00	6	wet		
057-08.1	Great Capt.Rocks	9/20/00	51	wet		
057-08.1	Great Capt.Rocks	11/12/00	28	wet		
057-08.1	Great Capt.Rocks	11/29/00	28	wet		

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	12/5/00	2	dry		
057-08.1	Great Capt.Rocks	1/9/01	6	wet	14	36
057-08.1	Great Capt.Rocks	5/30/01	51	wet		
057-08.1	Great Capt.Rocks	6/20/01	2	wet		
057-08.1	Great Capt.Rocks	7/12/01	51	wet		
057-08.1	Great Capt.Rocks	7/25/01	14	dry		
057-08.1	Great Capt.Rocks	8/14/01	51	wet		
057-08.1	Great Capt.Rocks	8/19/01	2	dry		
057-08.1	Great Capt.Rocks	9/9/01	36	dry		
057-08.1	Great Capt.Rocks	9/16/01	8	wet		
057-08.1	Great Capt.Rocks	9/23/01	51	wet		
057-08.1	Great Capt.Rocks	9/24/01	50	wet		
057-08.1	Great Capt.Rocks	10/2/01	18	wet		
057-08.1	Great Capt.Rocks	11/25/01	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	1/6/02	6	dry		
057-08.1	Great Capt.Rocks	1/27/02	2	dry		
057-08.1	Great Capt.Rocks	3/17/02	2	dry		
057-08.1	Great Capt.Rocks	4/21/02	8	wet		
057-08.1	Great Capt.Rocks	5/5/02	22	dry		
057-08.1	Great Capt.Rocks	5/12/02	2	wet		
057-08.1	Great Capt.Rocks	5/19/02	51	wet		
057-08.1	Great Capt.Rocks	6/9/02	28	wet		
057-08.1	Great Capt.Rocks	6/16/02	28	wet		
057-08.1	Great Capt.Rocks	6/23/02	2	dry		
057-08.1	Great Capt.Rocks	6/30/02	36	dry	8	10
057-08.1	Great Capt.Rocks	7/8/02	2	dry		
057-08.1	Great Capt.Rocks	7/22/02	2	dry		
057-08.1	Great Capt.Rocks	8/4/02	4	wet		
057-08.1	Great Capt.Rocks	8/18/02	36	wet		
057-08.1	Great Capt.Rocks	9/8/02	2	dry		
057-08.1	Great Capt.Rocks	9/29/02	51	wet		
057-08.1	Great Capt.Rocks	10/20/02	18	dry		
057-08.1	Great Capt.Rocks	11/3/02	2	dry		
057-08.1	Great Capt.Rocks	12/16/02	51	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	1/13/03	11	dry	**15* (7%)**	**40**
057-08.1	Great Capt.Rocks	2/24/03	51	wet		
057-08.1	Great Capt.Rocks	3/11/03	2	wet		
057-08.1	Great Capt.Rocks	3/26/03	22	wet		
057-08.1	Great Capt.Rocks	4/13/03	2	wet		
057-08.1	Great Capt.Rocks	4/30/03	2	dry		
057-08.1	Great Capt.Rocks	5/28/03	18	wet		
057-08.1	Great Capt.Rocks	6/8/03	51	wet		
057-08.1	Great Capt.Rocks	6/13/03	51	wet		
057-08.1	Great Capt.Rocks	7/23/03	51	wet		
057-08.1	Great Capt.Rocks	8/19/03	51	wet		
057-08.1	Great Capt.Rocks	9/10/03	2	wet		
057-08.1	Great Capt.Rocks	9/24/03	51	wet		
057-08.1	Great Capt.Rocks	9/30/03	51	wet		
057-08.1	Great Capt.Rocks	1/6/04	11	wet	7	13
057-08.1	Great Capt.Rocks	3/15/04	2	dry		
057-08.1	Great Capt.Rocks	4/7/04	2	dry		
057-08.1	Great Capt.Rocks	4/29/04	2	dry		
057-08.1	Great Capt.Rocks	6/16/04	2	dry		
057-08.1	Great Capt.Rocks	6/20/04	6	dry		
057-08.1	Great Capt.Rocks	7/7/04	2	wet		
057-08.1	Great Capt.Rocks	7/26/04	18	wet		
057-08.1	Great Capt.Rocks	8/17/04	51	wet		
057-08.1	Great Capt.Rocks	9/12/04	51	wet		
057-08.1	Great Capt.Rocks	9/21/04	51	dry		
057-08.1	Great Capt.Rocks	10/25/04	22	dry		
057-08.1	Great Capt.Rocks	11/7/04	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	4/6/05	1	dry	4	NA
057-08.1	Great Capt.Rocks	5/18/05	5	dry		
057-08.1	Great Capt.Rocks	6/1/05	4	dry		
057-08.1	Great Capt.Rocks	6/20/05	1	dry		
057-08.1	Great Capt.Rocks	7/5/05	17	dry		
057-08.1	Great Capt.Rocks	7/11/05	17	dry		
057-08.1	Great Capt.Rocks	8/3/05	1	dry		
057-08.1	Great Capt.Rocks	8/17/05	13	wet		
057-08.1	Great Capt.Rocks	9/19/05	1	dry		
057-08.1	Great Capt.Rocks	10/4/05	1	dry		
057-08.1	Great Capt.Rocks	10/31/05	6	dry		
057-08.1	Great Capt.Rocks	11/14/05	35	dry		
057-08.1	Great Capt.Rocks	1/25/06	1	wet	2	NA
057-08.1	Great Capt.Rocks	2/22/06	1	wet		
057-08.1	Great Capt.Rocks	3/22/06	3	dry		
057-08.1	Great Capt.Rocks	5/24/06	1	dry		
057-08.1	Great Capt.Rocks	6/12/06	1	dry		
057-08.1	Great Capt.Rocks	7/10/06	1	dry		
057-08.1	Great Capt.Rocks	8/8/06	4	dry		
057-08.1	Great Capt.Rocks	9/12/06	11	dry		
057-08.1	Great Capt.Rocks	9/19/06	1	dry		
057-08.1	Great Capt.Rocks	10/16/06	1	dry		
057-08.1	Great Capt.Rocks	11/1/06	6	dry		
057-08.1	Great Capt.Rocks	11/15/06	19	dry		
057-08.1	Great Capt.Rocks	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	1/29/07	2	dry		
057-08.1	Great Capt.Rocks	3/7/07	2	dry		
057-08.1	Great Capt.Rocks	3/27/07	1	wet		
057-08.1	Great Capt.Rocks	4/23/07	1	dry		
057-08.1	Great Capt.Rocks	5/23/07	8	dry		
057-08.1	Great Capt.Rocks	6/12/07	1	wet		
057-08.1	Great Capt.Rocks	6/17/07	2	dry		
057-08.1	Great Capt.Rocks	7/8/07	1	dry		
057-08.1	Great Capt.Rocks	7/31/07	1	dry	3	NA
057-08.1	Great Capt.Rocks	8/28/07	1	dry		
057-08.1	Great Capt.Rocks	9/23/07	1	dry		
057-08.1	Great Capt.Rocks	10/16/07	23	dry		
057-08.1	Great Capt.Rocks	10/22/07	3	wet		
057-08.1	Great Capt.Rocks	10/31/07	81	dry		
057-08.1	Great Capt.Rocks	11/5/07	1	dry		
057-08.1	Great Capt.Rocks	12/6/07	1	dry		
057-08.1	Great Capt.Rocks	12/10/07	27	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and 90% less than maximum calculated (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	1/8/08	1	dry		
057-08.1	Great Capt.Rocks	3/3/08	1	dry		
057-08.1	Great Capt.Rocks	4/23/08	1	dry		
057-08.1	Great Capt.Rocks	4/30/08	1	wet		
057-08.1	Great Capt.Rocks	5/14/08	1	dry		
057-08.1	Great Capt.Rocks	5/20/08	1	wet		
057-08.1	Great Capt.Rocks	5/29/08	16	wet		
057-08.1	Great Capt.Rocks	6/18/08	1	wet		
057-08.1	Great Capt.Rocks	6/30/08	5	wet		
057-08.1	Great Capt.Rocks	7/27/08	31	dry	3	1
057-08.1	Great Capt.Rocks	8/4/08	10	wet		
057-08.1	Great Capt.Rocks	8/26/08	1	dry		
057-08.1	Great Capt.Rocks	9/10/08	41	wet		
057-08.1	Great Capt.Rocks	9/17/08	1	dry		
057-08.1	Great Capt.Rocks	10/7/08	15	wet		
057-08.1	Great Capt.Rocks	10/27/08	3	wet		
057-08.1	Great Capt.Rocks	11/2/08	3	dry		
057-08.1	Great Capt.Rocks	11/24/08	1	dry		
057-08.1	Great Capt.Rocks	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	2/9/09	3	dry	4	8
057-08.1	Great Capt.Rocks	3/10/09	1	wet		
057-08.1	Great Capt.Rocks	4/22/09	29	wet		
057-08.1	Great Capt.Rocks	5/11/09	1	dry		
057-08.1	Great Capt.Rocks	6/8/09	1	dry		
057-08.1	Great Capt.Rocks	6/10/09	2	wet		
057-08.1	Great Capt.Rocks	6/22/09	30	wet		
057-08.1	Great Capt.Rocks	7/20/09	1	dry		
057-08.1	Great Capt.Rocks	8/3/09	2	dry		
057-08.1	Great Capt.Rocks	8/17/09	4	dry		
057-08.1	Great Capt.Rocks	8/24/09	81	wet		
057-08.1	Great Capt.Rocks	9/1/09	1	dry		
057-08.1	Great Capt.Rocks	10/5/09	1	wet		
057-08.1	Great Capt.Rocks	11/3/09	2	wet		
057-08.1	Great Capt.Rocks	12/1/09	1	wet		
057-08.1	Great Capt.Rocks	12/14/09	70	wet		
057-08.1	Great Capt.Rocks	12/28/09	57	wet		
057-08.1	Great Capt.Rocks	1/19/10	3	wet	3	NA
057-08.1	Great Capt.Rocks	1/27/10	2	wet		
057-08.1	Great Capt.Rocks	2/22/10	1	dry		
057-08.1	Great Capt.Rocks	3/2/10	1	wet		
057-08.1	Great Capt.Rocks	4/4/10	20	dry		
057-08.1	Great Capt.Rocks	4/11/10	1	wet		
057-08.1	Great Capt.Rocks	5/5/10	7	wet		
057-08.1	Great Capt.Rocks	6/9/10	1	wet		
057-08.1	Great Capt.Rocks	7/7/10	1	dry		
057-08.1	Great Capt.Rocks	7/26/10	7	wet		
057-08.1	Great Capt.Rocks	8/25/10	54	wet		
057-08.1	Great Capt.Rocks	9/20/10	1	dry		
057-08.1	Great Capt.Rocks	9/21/10	1	dry		
057-08.1	Great Capt.Rocks	10/3/10	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and 90% less than maximum calculated (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.1	Great Capt.Rocks	3/15/11	1	dry	**15* (7%)**	**40**
057-08.1	Great Capt.Rocks	4/25/11	54	wet		
057-08.1	Great Capt.Rocks	5/23/11	7	wet		
057-08.1	Great Capt.Rocks	6/8/11	46	dry		
057-08.1	Great Capt.Rocks	6/22/11	12	wet		
057-08.1	Great Capt.Rocks	7/11/11	4	dry		
057-08.1	Great Capt.Rocks	7/19/11	81	dry		
057-08.1	Great Capt.Rocks	7/25/11	1	dry		
057-08.1	Great Capt.Rocks	8/10/11	76	dry		
057-08.1	Great Capt.Rocks	8/17/11	81	dry		
057-08.1	Great Capt.Rocks	8/22/11	43	dry		
057-08.1	Great Capt.Rocks	9/12/11	5	dry		
057-08.1	Great Capt.Rocks	9/15/11	40	dry		
057-08.1	Great Capt.Rocks	9/19/11	11	dry		
057-08.2	S. Bowers Island	1/2/00	22	dry	9	8
057-08.2	S. Bowers Island	1/6/00	2	wet		
057-08.2	S. Bowers Island	2/16/00	2	wet		
057-08.2	S. Bowers Island	4/16/00	2	dry		
057-08.2	S. Bowers Island	4/23/00	6	wet		
057-08.2	S. Bowers Island	5/17/00	6	wet		
057-08.2	S. Bowers Island	6/22/00	4	dry		
057-08.2	S. Bowers Island	7/4/00	18	wet		
057-08.2	S. Bowers Island	7/16/00	18	wet		
057-08.2	S. Bowers Island	7/30/00	51	wet		
057-08.2	S. Bowers Island	8/6/00	6	dry		
057-08.2	S. Bowers Island	9/13/00	51	wet		
057-08.2	S. Bowers Island	9/17/00	2	wet		
057-08.2	S. Bowers Island	9/20/00	51	wet		
057-08.2	S. Bowers Island	11/12/00	22	wet		
057-08.2	S. Bowers Island	11/29/00	8	wet		
057-08.2	S. Bowers Island	12/5/00	14	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	1/9/01	18	wet	6	NA
057-08.2	S. Bowers Island	3/25/01	2	wet		
057-08.2	S. Bowers Island	6/20/01	14	wet		
057-08.2	S. Bowers Island	7/12/01	4	wet		
057-08.2	S. Bowers Island	7/25/01	2	dry		
057-08.2	S. Bowers Island	8/14/01	14	wet		
057-08.2	S. Bowers Island	8/19/01	18	dry		
057-08.2	S. Bowers Island	9/9/01	6	dry		
057-08.2	S. Bowers Island	9/16/01	4	wet		
057-08.2	S. Bowers Island	9/24/01	4	wet		
057-08.2	S. Bowers Island	10/2/01	4	wet		
057-08.2	S. Bowers Island	11/7/01	6	dry		
057-08.2	S. Bowers Island	11/25/01	11	wet		
057-08.2	S. Bowers Island	12/2/01	11	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	1/6/02	2	dry		
057-08.2	S. Bowers Island	1/27/02	2	dry		
057-08.2	S. Bowers Island	3/17/02	2	dry		
057-08.2	S. Bowers Island	3/31/02	2	dry		
057-08.2	S. Bowers Island	4/21/02	11	wet		
057-08.2	S. Bowers Island	5/5/02	2	dry		
057-08.2	S. Bowers Island	5/12/02	6	wet		
057-08.2	S. Bowers Island	6/16/02	51	wet		
057-08.2	S. Bowers Island	6/23/02	6	dry		
057-08.2	S. Bowers Island	6/30/02	2	dry	4	1
057-08.2	S. Bowers Island	7/8/02	2	dry		
057-08.2	S. Bowers Island	7/22/02	2	dry		
057-08.2	S. Bowers Island	8/4/02	6	wet		
057-08.2	S. Bowers Island	8/18/02	11	wet		
057-08.2	S. Bowers Island	9/8/02	2	dry		
057-08.2	S. Bowers Island	9/29/02	11	wet		
057-08.2	S. Bowers Island	10/20/02	14	dry		
057-08.2	S. Bowers Island	11/3/02	4	dry		
057-08.2	S. Bowers Island	12/16/02	36	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	1/13/03	18	dry	9	NA
057-08.2	S. Bowers Island	2/24/03	22	wet		
057-08.2	S. Bowers Island	3/11/03	2	wet		
057-08.2	S. Bowers Island	3/26/03	4	wet		
057-08.2	S. Bowers Island	4/13/03	2	wet		
057-08.2	S. Bowers Island	4/30/03	2	dry		
057-08.2	S. Bowers Island	5/28/03	22	wet		
057-08.2	S. Bowers Island	6/8/03	28	wet		
057-08.2	S. Bowers Island	6/13/03	28	wet		
057-08.2	S. Bowers Island	7/23/03	51	wet		
057-08.2	S. Bowers Island	8/19/03	28	wet		
057-08.2	S. Bowers Island	9/10/03	2	wet		
057-08.2	S. Bowers Island	9/24/03	11	wet		
057-08.2	S. Bowers Island	1/6/04	14	wet	5	NA
057-08.2	S. Bowers Island	3/15/04	2	dry		
057-08.2	S. Bowers Island	4/7/04	2	dry		
057-08.2	S. Bowers Island	4/29/04	2	dry		
057-08.2	S. Bowers Island	6/16/04	2	dry		
057-08.2	S. Bowers Island	6/20/04	6	dry		
057-08.2	S. Bowers Island	7/7/04	2	wet		
057-08.2	S. Bowers Island	7/26/04	2	wet		
057-08.2	S. Bowers Island	8/17/04	11	wet		
057-08.2	S. Bowers Island	9/12/04	50	wet		
057-08.2	S. Bowers Island	9/21/04	22	dry		
057-08.2	S. Bowers Island	10/25/04	6	dry		
057-08.2	S. Bowers Island	11/7/04	2	wet		
057-08.2	S. Bowers Island	12/9/04	14	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	2/2/05	1	dry	2	NA
057-08.2	S. Bowers Island	4/6/05	1	dry		
057-08.2	S. Bowers Island	5/18/05	1	dry		
057-08.2	S. Bowers Island	6/1/05	1	dry		
057-08.2	S. Bowers Island	6/20/05	2	dry		
057-08.2	S. Bowers Island	7/5/05	3	dry		
057-08.2	S. Bowers Island	7/11/05	1	dry		
057-08.2	S. Bowers Island	8/3/05	1	dry		
057-08.2	S. Bowers Island	8/17/05	14	wet		
057-08.2	S. Bowers Island	9/19/05	1	dry		
057-08.2	S. Bowers Island	10/4/05	1	dry		
057-08.2	S. Bowers Island	10/31/05	1	dry		
057-08.2	S. Bowers Island	11/14/05	3	dry		
057-08.2	S. Bowers Island	1/25/06	1	wet	3	3
057-08.2	S. Bowers Island	2/22/06	1	wet		
057-08.2	S. Bowers Island	3/22/06	1	dry		
057-08.2	S. Bowers Island	5/24/06	1	dry		
057-08.2	S. Bowers Island	6/12/06	2	dry		
057-08.2	S. Bowers Island	7/10/06	3	dry		
057-08.2	S. Bowers Island	8/8/06	1	dry		
057-08.2	S. Bowers Island	8/31/06	34	wet		
057-08.2	S. Bowers Island	9/12/06	5	dry		
057-08.2	S. Bowers Island	9/19/06	16	dry		
057-08.2	S. Bowers Island	9/28/06	2	dry		
057-08.2	S. Bowers Island	11/1/06	37	dry		
057-08.2	S. Bowers Island	11/15/06	19	dry		
057-08.2	S. Bowers Island	11/20/06	1	dry		
057-08.2	S. Bowers Island	12/17/06	3	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	1/29/07	1	dry		
057-08.2	S. Bowers Island	3/7/07	1	dry		
057-08.2	S. Bowers Island	3/27/07	1	wet		
057-08.2	S. Bowers Island	4/23/07	1	dry		
057-08.2	S. Bowers Island	5/23/07	1	dry		
057-08.2	S. Bowers Island	6/12/07	1	wet		
057-08.2	S. Bowers Island	6/17/07	1	dry		
057-08.2	S. Bowers Island	7/8/07	17	dry		
057-08.2	S. Bowers Island	7/31/07	1	dry	2	NA
057-08.2	S. Bowers Island	8/28/07	6	dry		
057-08.2	S. Bowers Island	9/23/07	5	dry		
057-08.2	S. Bowers Island	10/16/07	2	dry		
057-08.2	S. Bowers Island	10/22/07	2	wet		
057-08.2	S. Bowers Island	10/31/07	14	dry		
057-08.2	S. Bowers Island	11/5/07	1	dry		
057-08.2	S. Bowers Island	12/6/07	1	dry		
057-08.2	S. Bowers Island	12/10/07	8	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	1/8/08	1	dry		
057-08.2	S. Bowers Island	3/3/08	1	dry		
057-08.2	S. Bowers Island	4/23/08	1	dry		
057-08.2	S. Bowers Island	4/30/08	1	wet		
057-08.2	S. Bowers Island	5/14/08	1	dry		
057-08.2	S. Bowers Island	5/20/08	1	wet		
057-08.2	S. Bowers Island	5/29/08	4	wet		
057-08.2	S. Bowers Island	6/18/08	2	wet		
057-08.2	S. Bowers Island	6/30/08	16	wet		
057-08.2	S. Bowers Island	7/27/08	2	dry	2	NA
057-08.2	S. Bowers Island	8/4/08	3	wet		
057-08.2	S. Bowers Island	8/26/08	1	dry		
057-08.2	S. Bowers Island	9/10/08	35	wet		
057-08.2	S. Bowers Island	9/17/08	1	dry		
057-08.2	S. Bowers Island	10/7/08	3	wet		
057-08.2	S. Bowers Island	10/27/08	4	wet		
057-08.2	S. Bowers Island	11/2/08	1	dry		
057-08.2	S. Bowers Island	11/24/08	1	dry		
057-08.2	S. Bowers Island	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	2/9/09	2	dry	3	NA
057-08.2	S. Bowers Island	3/10/09	1	wet		
057-08.2	S. Bowers Island	4/22/09	5	wet		
057-08.2	S. Bowers Island	5/11/09	1	dry		
057-08.2	S. Bowers Island	6/1/09	2	dry		
057-08.2	S. Bowers Island	6/8/09	1	dry		
057-08.2	S. Bowers Island	6/10/09	4	wet		
057-08.2	S. Bowers Island	6/22/09	6	wet		
057-08.2	S. Bowers Island	7/20/09	37	dry		
057-08.2	S. Bowers Island	8/3/09	2	dry		
057-08.2	S. Bowers Island	8/17/09	1	dry		
057-08.2	S. Bowers Island	8/24/09	9	wet		
057-08.2	S. Bowers Island	9/1/09	3	dry		
057-08.2	S. Bowers Island	10/5/09	2	wet		
057-08.2	S. Bowers Island	11/3/09	2	dry		
057-08.2	S. Bowers Island	12/1/09	1	wet		
057-08.2	S. Bowers Island	12/14/09	12	wet		
057-08.2	S. Bowers Island	12/28/09	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	1/19/10	1	wet	2	NA
057-08.2	S. Bowers Island	1/27/10	1	wet		
057-08.2	S. Bowers Island	2/22/10	1	dry		
057-08.2	S. Bowers Island	3/2/10	1	wet		
057-08.2	S. Bowers Island	4/4/10	12	dry		
057-08.2	S. Bowers Island	4/11/10	1	wet		
057-08.2	S. Bowers Island	5/5/10	3	wet		
057-08.2	S. Bowers Island	6/9/10	1	wet		
057-08.2	S. Bowers Island	7/7/10	1	dry		
057-08.2	S. Bowers Island	7/26/10	1	wet		
057-08.2	S. Bowers Island	8/4/10	1	dry		
057-08.2	S. Bowers Island	8/19/10	2	dry		
057-08.2	S. Bowers Island	8/25/10	4	wet		
057-08.2	S. Bowers Island	9/13/10	1	dry		
057-08.2	S. Bowers Island	9/20/10	3	dry		
057-08.2	S. Bowers Island	9/21/10	1	dry		
057-08.2	S. Bowers Island	9/29/10	3	wet		
057-08.2	S. Bowers Island	10/3/10	2	wet		
057-08.2	S. Bowers Island	11/2/10	1	dry		
057-08.2	S. Bowers Island	11/18/10	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.2	S. Bowers Island	3/15/11	1	dry		
057-08.2	S. Bowers Island	4/25/11	5	wet		
057-08.2	S. Bowers Island	5/9/11	2	dry		
057-08.2	S. Bowers Island	5/23/11	13	wet		
057-08.2	S. Bowers Island	6/8/11	2	dry		
057-08.2	S. Bowers Island	6/22/11	2	wet		
057-08.2	S. Bowers Island	6/29/11	6	wet		
057-08.2	S. Bowers Island	7/11/11	3	dry	7	3
057-08.2	S. Bowers Island	7/19/11	79	dry		
057-08.2	S. Bowers Island	7/25/11	11	dry		
057-08.2	S. Bowers Island	8/10/11	11	dry		
057-08.2	S. Bowers Island	8/17/11	20	dry		
057-08.2	S. Bowers Island	8/22/11	81	dry		
057-08.2	S. Bowers Island	9/12/11	4	dry		
057-08.2	S. Bowers Island	9/19/11	5	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	1/2/00	4	dry		
057-08.3	between Jones Rock and Great Capt.	1/6/00	6	wet		
057-08.3	between Jones Rock and Great Capt.	2/16/00	2	wet		
057-08.3	between Jones Rock and Great Capt.	4/16/00	2	dry		
057-08.3	between Jones Rock and Great Capt.	4/23/00	8	wet		
057-08.3	between Jones Rock and Great Capt.	5/17/00	2	wet		
057-08.3	between Jones Rock and Great Capt.	6/22/00	11	dry		
057-08.3	between Jones Rock and Great Capt.	7/4/00	8	wet		
057-08.3	between Jones Rock and Great Capt.	7/16/00	11	wet	6	NA
057-08.3	between Jones Rock and Great Capt.	7/30/00	14	wet		
057-08.3	between Jones Rock and Great Capt.	8/6/00	11	dry		
057-08.3	between Jones Rock and Great Capt.	9/13/00	6	wet		
057-08.3	between Jones Rock and Great Capt.	9/17/00	4	wet		
057-08.3	between Jones Rock and Great Capt.	9/20/00	51	wet		
057-08.3	between Jones Rock and Great Capt.	11/12/00	28	wet		
057-08.3	between Jones Rock and Great Capt.	11/29/00	2	wet		
057-08.3	between Jones Rock and Great Capt.	12/5/00	4	dry		
057-08.3	between Jones Rock and Great Capt.	1/9/01	11	wet		
057-08.3	between Jones Rock and Great Capt.	3/25/01	2	wet		
057-08.3	between Jones Rock and Great Capt.	5/30/01	4	wet		
057-08.3	between Jones Rock and Great Capt.	6/20/01	4	wet		
057-08.3	between Jones Rock and Great Capt.	7/12/01	2	wet		
057-08.3	between Jones Rock and Great Capt.	8/14/01	36	wet		
057-08.3	between Jones Rock and Great Capt.	8/19/01	6	dry	5	NA
057-08.3	between Jones Rock and Great Capt.	9/9/01	2	dry		
057-08.3	between Jones Rock and Great Capt.	9/16/01	14	wet		
057-08.3	between Jones Rock and Great Capt.	9/23/01	18	wet		
057-08.3	between Jones Rock and Great Capt.	9/24/01	6	wet		
057-08.3	between Jones Rock and Great Capt.	10/2/01	8	wet		
057-08.3	between Jones Rock and Great Capt.	11/25/01	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	1/6/02	4	dry		
057-08.3	between Jones Rock and Great Capt.	1/27/02	2	dry		
057-08.3	between Jones Rock and Great Capt.	3/17/02	2	dry		
057-08.3	between Jones Rock and Great Capt.	3/31/02	6	dry		
057-08.3	between Jones Rock and Great Capt.	4/21/02	4	wet		
057-08.3	between Jones Rock and Great Capt.	5/5/02	2	dry		
057-08.3	between Jones Rock and Great Capt.	5/12/02	2	wet		
057-08.3	between Jones Rock and Great Capt.	5/19/02	51	wet		
057-08.3	between Jones Rock and Great Capt.	6/9/02	4	wet		
057-08.3	between Jones Rock and Great Capt.	6/16/02	14	wet		
057-08.3	between Jones Rock and Great Capt.	6/23/02	2	dry	4	NA
057-08.3	between Jones Rock and Great Capt.	6/30/02	11	dry		
057-08.3	between Jones Rock and Great Capt.	7/8/02	2	dry		
057-08.3	between Jones Rock and Great Capt.	7/22/02	6	dry		
057-08.3	between Jones Rock and Great Capt.	8/4/02	2	wet		
057-08.3	between Jones Rock and Great Capt.	8/18/02	8	wet		
057-08.3	between Jones Rock and Great Capt.	9/8/02	2	dry		
057-08.3	between Jones Rock and Great Capt.	9/29/02	11	wet		
057-08.3	between Jones Rock and Great Capt.	10/20/02	11	dry		
057-08.3	between Jones Rock and Great Capt.	11/3/02	2	dry		
057-08.3	between Jones Rock and Great Capt.	12/16/02	51	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	1/13/03	2	dry	9	19
057-08.3	between Jones Rock and Great Capt.	2/24/03	28	wet		
057-08.3	between Jones Rock and Great Capt.	3/11/03	2	wet		
057-08.3	between Jones Rock and Great Capt.	3/26/03	2	wet		
057-08.3	between Jones Rock and Great Capt.	4/13/03	2	wet		
057-08.3	between Jones Rock and Great Capt.	4/30/03	4	dry		
057-08.3	between Jones Rock and Great Capt.	5/28/03	11	wet		
057-08.3	between Jones Rock and Great Capt.	6/6/03	51	wet		
057-08.3	between Jones Rock and Great Capt.	6/8/03	14	wet		
057-08.3	between Jones Rock and Great Capt.	6/13/03	51	wet		
057-08.3	between Jones Rock and Great Capt.	8/19/03	51	wet		
057-08.3	between Jones Rock and Great Capt.	9/10/03	4	wet		
057-08.3	between Jones Rock and Great Capt.	9/24/03	51	wet		
057-08.3	between Jones Rock and Great Capt.	9/30/03	8	wet		
057-08.3	between Jones Rock and Great Capt.	1/6/04	8	wet	4	7
057-08.3	between Jones Rock and Great Capt.	4/7/04	2	dry		
057-08.3	between Jones Rock and Great Capt.	4/29/04	2	dry		
057-08.3	between Jones Rock and Great Capt.	6/16/04	2	dry		
057-08.3	between Jones Rock and Great Capt.	6/20/04	2	dry		
057-08.3	between Jones Rock and Great Capt.	7/7/04	2	wet		
057-08.3	between Jones Rock and Great Capt.	7/26/04	2	wet		
057-08.3	between Jones Rock and Great Capt.	8/17/04	4	wet		
057-08.3	between Jones Rock and Great Capt.	9/12/04	36	wet		
057-08.3	between Jones Rock and Great Capt.	9/21/04	51	dry		
057-08.3	between Jones Rock and Great Capt.	10/25/04	2	dry		
057-08.3	between Jones Rock and Great Capt.	11/7/04	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	4/6/05	1	dry	1	NA
057-08.3	between Jones Rock and Great Capt.	5/18/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/1/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/20/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/5/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/11/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	8/3/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	8/17/05	4	wet		
057-08.3	between Jones Rock and Great Capt.	9/19/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/4/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/31/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	11/14/05	1	dry		
057-08.3	between Jones Rock and Great Capt.	1/25/06	2	wet	2	NA
057-08.3	between Jones Rock and Great Capt.	2/22/06	1	wet		
057-08.3	between Jones Rock and Great Capt.	3/22/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	5/24/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/12/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/10/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	8/8/06	5	dry		
057-08.3	between Jones Rock and Great Capt.	9/6/06	16	wet		
057-08.3	between Jones Rock and Great Capt.	9/12/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	9/19/06	7	dry		
057-08.3	between Jones Rock and Great Capt.	9/28/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/16/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	11/1/06	3	dry		
057-08.3	between Jones Rock and Great Capt.	11/15/06	3	dry		
057-08.3	between Jones Rock and Great Capt.	11/20/06	1	dry		
057-08.3	between Jones Rock and Great Capt.	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	1/29/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	3/7/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	3/27/07	1	wet		
057-08.3	between Jones Rock and Great Capt.	4/23/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	5/23/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/12/07	1	wet		
057-08.3	between Jones Rock and Great Capt.	6/17/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/8/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/31/07	1	dry	1	NA
057-08.3	between Jones Rock and Great Capt.	8/28/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	9/23/07	3	dry		
057-08.3	between Jones Rock and Great Capt.	10/16/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/22/07	1	wet		
057-08.3	between Jones Rock and Great Capt.	10/31/07	4	dry		
057-08.3	between Jones Rock and Great Capt.	11/5/07	1	dry		
057-08.3	between Jones Rock and Great Capt.	12/6/07	5	dry		
057-08.3	between Jones Rock and Great Capt.	12/10/07	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	1/8/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	3/3/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	4/23/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	4/30/08	1	wet		
057-08.3	between Jones Rock and Great Capt.	5/14/08	2	dry		
057-08.3	between Jones Rock and Great Capt.	5/20/08	1	wet		
057-08.3	between Jones Rock and Great Capt.	5/29/08	1	wet		
057-08.3	between Jones Rock and Great Capt.	6/18/08	1	wet		
057-08.3	between Jones Rock and Great Capt.	6/30/08	5	wet		
057-08.3	between Jones Rock and Great Capt.	7/27/08	3	dry	2	NA
057-08.3	between Jones Rock and Great Capt.	8/4/08	3	wet		
057-08.3	between Jones Rock and Great Capt.	8/26/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	9/10/08	23	wet		
057-08.3	between Jones Rock and Great Capt.	9/17/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/7/08	1	wet		
057-08.3	between Jones Rock and Great Capt.	10/27/08	10	wet		
057-08.3	between Jones Rock and Great Capt.	11/2/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	11/24/08	1	dry		
057-08.3	between Jones Rock and Great Capt.	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	2/9/09	1	dry		
057-08.3	between Jones Rock and Great Capt.	3/10/09	1	wet		
057-08.3	between Jones Rock and Great Capt.	4/22/09	6	wet		
057-08.3	between Jones Rock and Great Capt.	5/11/09	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/8/09	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/10/09	2	wet		
057-08.3	between Jones Rock and Great Capt.	6/22/09	4	wet		
057-08.3	between Jones Rock and Great Capt.	7/20/09	1	dry		
057-08.3	between Jones Rock and Great Capt.	8/3/09	8	dry	3	NA
057-08.3	between Jones Rock and Great Capt.	8/17/09	2	dry		
057-08.3	between Jones Rock and Great Capt.	8/24/09	21	wet		
057-08.3	between Jones Rock and Great Capt.	9/1/09	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/5/09	3	wet		
057-08.3	between Jones Rock and Great Capt.	11/3/09	2	dry		
057-08.3	between Jones Rock and Great Capt.	12/1/09	3	wet		
057-08.3	between Jones Rock and Great Capt.	12/14/09	7	wet		
057-08.3	between Jones Rock and Great Capt.	12/28/09	27	wet		
057-08.3	between Jones Rock and Great Capt.	1/19/10	1	wet		
057-08.3	between Jones Rock and Great Capt.	1/27/10	1	wet		
057-08.3	between Jones Rock and Great Capt.	2/22/10	1	dry		
057-08.3	between Jones Rock and Great Capt.	3/2/10	1	wet		
057-08.3	between Jones Rock and Great Capt.	4/4/10	1	dry		
057-08.3	between Jones Rock and Great Capt.	4/11/10	1	wet		
057-08.3	between Jones Rock and Great Capt.	5/5/10	1	wet		
057-08.3	between Jones Rock and Great Capt.	6/9/10	1	wet	1	NA
057-08.3	between Jones Rock and Great Capt.	7/7/10	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/26/10	2	wet		
057-08.3	between Jones Rock and Great Capt.	8/25/10	3	wet		
057-08.3	between Jones Rock and Great Capt.	9/20/10	1	dry		
057-08.3	between Jones Rock and Great Capt.	9/21/10	1	dry		
057-08.3	between Jones Rock and Great Capt.	10/3/10	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.3	between Jones Rock and Great Capt.	3/15/11	1	dry	4	NA
057-08.3	between Jones Rock and Great Capt.	4/25/11	5	wet		
057-08.3	between Jones Rock and Great Capt.	5/23/11	9	wet		
057-08.3	between Jones Rock and Great Capt.	6/8/11	1	dry		
057-08.3	between Jones Rock and Great Capt.	6/22/11	1	wet		
057-08.3	between Jones Rock and Great Capt.	7/11/11	9	dry		
057-08.3	between Jones Rock and Great Capt.	7/19/11	1	dry		
057-08.3	between Jones Rock and Great Capt.	7/25/11	1	dry		
057-08.3	between Jones Rock and Great Capt.	8/10/11	15	dry		
057-08.3	between Jones Rock and Great Capt.	8/17/11	81	dry		
057-08.3	between Jones Rock and Great Capt.	8/22/11	13	dry		
057-08.3	between Jones Rock and Great Capt.	9/12/11	1	dry		
057-08.3	between Jones Rock and Great Capt.	9/15/11	9	dry		
057-08.3	between Jones Rock and Great Capt.	9/19/11	1	dry		
057-08.6	Four Foot Rocks	1/2/00	4	dry	5	3
057-08.6	Four Foot Rocks	1/6/00	2	wet		
057-08.6	Four Foot Rocks	2/16/00	2	wet		
057-08.6	Four Foot Rocks	4/16/00	2	dry		
057-08.6	Four Foot Rocks	4/23/00	51	wet		
057-08.6	Four Foot Rocks	5/17/00	2	wet		
057-08.6	Four Foot Rocks	6/22/00	22	dry		
057-08.6	Four Foot Rocks	7/4/00	4	wet		
057-08.6	Four Foot Rocks	7/16/00	2	wet		
057-08.6	Four Foot Rocks	7/30/00	6	wet		
057-08.6	Four Foot Rocks	8/6/00	4	dry		
057-08.6	Four Foot Rocks	9/13/00	6	wet		
057-08.6	Four Foot Rocks	9/17/00	2	wet		
057-08.6	Four Foot Rocks	9/20/00	51	wet		
057-08.6	Four Foot Rocks	11/12/00	14	wet		
057-08.6	Four Foot Rocks	11/29/00	6	wet		
057-08.6	Four Foot Rocks	12/5/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	1/9/01	2	wet		
057-08.6	Four Foot Rocks	3/25/01	2	wet		
057-08.6	Four Foot Rocks	5/30/01	4	wet		
057-08.6	Four Foot Rocks	6/20/01	2	wet		
057-08.6	Four Foot Rocks	7/12/01	2	wet		
057-08.6	Four Foot Rocks	7/25/01	14	dry		
057-08.6	Four Foot Rocks	8/14/01	14	wet		
057-08.6	Four Foot Rocks	8/19/01	4	dry	5	3
057-08.6	Four Foot Rocks	9/9/01	36	dry		
057-08.6	Four Foot Rocks	9/16/01	2	wet		
057-08.6	Four Foot Rocks	9/23/01	51	wet		
057-08.6	Four Foot Rocks	9/24/01	28	wet		
057-08.6	Four Foot Rocks	10/2/01	4	wet		
057-08.6	Four Foot Rocks	11/7/01	2	dry		
057-08.6	Four Foot Rocks	11/25/01	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	1/6/02	2	dry	4	NA
057-08.6	Four Foot Rocks	1/27/02	2	dry		
057-08.6	Four Foot Rocks	3/17/02	4	dry		
057-08.6	Four Foot Rocks	3/31/02	2	dry		
057-08.6	Four Foot Rocks	4/21/02	6	wet		
057-08.6	Four Foot Rocks	5/5/02	2	dry		
057-08.6	Four Foot Rocks	5/12/02	2	wet		
057-08.6	Four Foot Rocks	5/19/02	36	wet		
057-08.6	Four Foot Rocks	6/9/02	18	wet		
057-08.6	Four Foot Rocks	6/16/02	11	wet		
057-08.6	Four Foot Rocks	6/23/02	4	dry		
057-08.6	Four Foot Rocks	7/8/02	2	dry		
057-08.6	Four Foot Rocks	7/22/02	2	dry		
057-08.6	Four Foot Rocks	8/4/02	2	wet		
057-08.6	Four Foot Rocks	8/18/02	4	wet		
057-08.6	Four Foot Rocks	9/8/02	4	dry		
057-08.6	Four Foot Rocks	9/29/02	4	wet		
057-08.6	Four Foot Rocks	10/20/02	14	dry		
057-08.6	Four Foot Rocks	11/3/02	2	dry		
057-08.6	Four Foot Rocks	12/16/02	51	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	1/13/03	2	dry		
057-08.6	Four Foot Rocks	2/24/03	18	wet		
057-08.6	Four Foot Rocks	3/11/03	2	wet		
057-08.6	Four Foot Rocks	3/26/03	2	wet		
057-08.6	Four Foot Rocks	4/13/03	2	wet		
057-08.6	Four Foot Rocks	4/30/03	2	dry		
057-08.6	Four Foot Rocks	5/28/03	14	wet	8	21
057-08.6	Four Foot Rocks	6/8/03	51	wet		
057-08.6	Four Foot Rocks	6/13/03	51	wet		
057-08.6	Four Foot Rocks	7/23/03	50	wet		
057-08.6	Four Foot Rocks	8/19/03	51	wet		
057-08.6	Four Foot Rocks	9/10/03	4	wet		
057-08.6	Four Foot Rocks	9/24/03	11	wet		
057-08.6	Four Foot Rocks	1/6/04	2	wet		
057-08.6	Four Foot Rocks	3/15/04	2	dry		
057-08.6	Four Foot Rocks	4/7/04	2	dry		
057-08.6	Four Foot Rocks	6/16/04	2	dry		
057-08.6	Four Foot Rocks	6/20/04	2	dry		
057-08.6	Four Foot Rocks	7/7/04	2	wet		
057-08.6	Four Foot Rocks	7/26/04	2	wet	4	NA
057-08.6	Four Foot Rocks	8/17/04	11	wet		
057-08.6	Four Foot Rocks	9/12/04	18	wet		
057-08.6	Four Foot Rocks	9/21/04	51	dry		
057-08.6	Four Foot Rocks	10/25/04	8	dry		
057-08.6	Four Foot Rocks	11/7/04	4	wet		
057-08.6	Four Foot Rocks	12/9/04	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	2/2/05	1	dry	2	NA
057-08.6	Four Foot Rocks	4/6/05	1	dry		
057-08.6	Four Foot Rocks	5/18/05	1	dry		
057-08.6	Four Foot Rocks	6/1/05	1	dry		
057-08.6	Four Foot Rocks	6/20/05	1	dry		
057-08.6	Four Foot Rocks	7/5/05	1	dry		
057-08.6	Four Foot Rocks	7/11/05	2	dry		
057-08.6	Four Foot Rocks	8/3/05	1	dry		
057-08.6	Four Foot Rocks	8/17/05	13	wet		
057-08.6	Four Foot Rocks	9/19/05	9	dry		
057-08.6	Four Foot Rocks	10/4/05	1	dry		
057-08.6	Four Foot Rocks	10/31/05	1	dry		
057-08.6	Four Foot Rocks	11/14/05	3	dry		
057-08.6	Four Foot Rocks	1/25/06	2	wet	1	NA
057-08.6	Four Foot Rocks	2/22/06	1	wet		
057-08.6	Four Foot Rocks	3/22/06	1	dry		
057-08.6	Four Foot Rocks	5/24/06	1	dry		
057-08.6	Four Foot Rocks	6/12/06	1	dry		
057-08.6	Four Foot Rocks	7/10/06	1	dry		
057-08.6	Four Foot Rocks	8/8/06	1	dry		
057-08.6	Four Foot Rocks	9/12/06	1	dry		
057-08.6	Four Foot Rocks	9/19/06	1	dry		
057-08.6	Four Foot Rocks	9/28/06	1	dry		
057-08.6	Four Foot Rocks	11/1/06	6	dry		
057-08.6	Four Foot Rocks	11/15/06	3	dry		
057-08.6	Four Foot Rocks	11/20/06	4	dry		
057-08.6	Four Foot Rocks	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	1/29/07	1	dry		
057-08.6	Four Foot Rocks	3/7/07	4	dry		
057-08.6	Four Foot Rocks	3/27/07	1	wet		
057-08.6	Four Foot Rocks	4/23/07	1	dry		
057-08.6	Four Foot Rocks	5/23/07	1	dry		
057-08.6	Four Foot Rocks	6/12/07	1	wet		
057-08.6	Four Foot Rocks	6/17/07	1	dry		
057-08.6	Four Foot Rocks	7/8/07	1	dry		
057-08.6	Four Foot Rocks	7/31/07	1	dry	1	NA
057-08.6	Four Foot Rocks	8/28/07	1	dry		
057-08.6	Four Foot Rocks	9/23/07	1	dry		
057-08.6	Four Foot Rocks	10/16/07	1	dry		
057-08.6	Four Foot Rocks	10/22/07	2	wet		
057-08.6	Four Foot Rocks	10/31/07	1	dry		
057-08.6	Four Foot Rocks	11/5/07	1	dry		
057-08.6	Four Foot Rocks	12/6/07	4	dry		
057-08.6	Four Foot Rocks	12/10/07	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	1/8/08	1	dry		
057-08.6	Four Foot Rocks	3/3/08	1	dry		
057-08.6	Four Foot Rocks	4/23/08	1	dry		
057-08.6	Four Foot Rocks	4/30/08	4	wet		
057-08.6	Four Foot Rocks	5/14/08	1	dry		
057-08.6	Four Foot Rocks	5/20/08	2	wet		
057-08.6	Four Foot Rocks	5/29/08	2	wet		
057-08.6	Four Foot Rocks	6/18/08	1	wet		
057-08.6	Four Foot Rocks	6/30/08	1	wet		
057-08.6	Four Foot Rocks	7/27/08	3	dry	1	NA
057-08.6	Four Foot Rocks	8/4/08	1	wet		
057-08.6	Four Foot Rocks	8/26/08	1	dry		
057-08.6	Four Foot Rocks	9/10/08	9	wet		
057-08.6	Four Foot Rocks	9/17/08	1	dry		
057-08.6	Four Foot Rocks	10/7/08	1	wet		
057-08.6	Four Foot Rocks	10/27/08	2	wet		
057-08.6	Four Foot Rocks	11/2/08	1	dry		
057-08.6	Four Foot Rocks	11/24/08	1	dry		
057-08.6	Four Foot Rocks	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	2/9/09	1	dry	2	1
057-08.6	Four Foot Rocks	3/10/09	1	wet		
057-08.6	Four Foot Rocks	4/22/09	4	wet		
057-08.6	Four Foot Rocks	5/11/09	1	dry		
057-08.6	Four Foot Rocks	6/1/09	1	dry		
057-08.6	Four Foot Rocks	6/8/09	1	dry		
057-08.6	Four Foot Rocks	6/10/09	3	wet		
057-08.6	Four Foot Rocks	6/22/09	9	wet		
057-08.6	Four Foot Rocks	7/20/09	1	dry		
057-08.6	Four Foot Rocks	8/3/09	1	dry		
057-08.6	Four Foot Rocks	8/17/09	1	dry		
057-08.6	Four Foot Rocks	8/24/09	81	wet		
057-08.6	Four Foot Rocks	9/1/09	1	dry		
057-08.6	Four Foot Rocks	10/5/09	1	wet		
057-08.6	Four Foot Rocks	11/3/09	1	dry		
057-08.6	Four Foot Rocks	12/1/09	1	wet		
057-08.6	Four Foot Rocks	12/14/09	5	wet		
057-08.6	Four Foot Rocks	12/28/09	37	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	1/19/10	1	wet	2	NA
057-08.6	Four Foot Rocks	1/27/10	1	wet		
057-08.6	Four Foot Rocks	2/22/10	3	dry		
057-08.6	Four Foot Rocks	3/2/10	1	wet		
057-08.6	Four Foot Rocks	4/4/10	8	dry		
057-08.6	Four Foot Rocks	4/11/10	1	wet		
057-08.6	Four Foot Rocks	5/5/10	1	wet		
057-08.6	Four Foot Rocks	6/9/10	1	wet		
057-08.6	Four Foot Rocks	7/7/10	1	dry		
057-08.6	Four Foot Rocks	7/26/10	1	wet		
057-08.6	Four Foot Rocks	8/4/10	3	dry		
057-08.6	Four Foot Rocks	8/19/10	10	dry		
057-08.6	Four Foot Rocks	8/25/10	56	wet		
057-08.6	Four Foot Rocks	9/13/10	1	dry		
057-08.6	Four Foot Rocks	9/20/10	1	dry		
057-08.6	Four Foot Rocks	9/21/10	1	dry		
057-08.6	Four Foot Rocks	9/29/10	28	wet		
057-08.6	Four Foot Rocks	10/3/10	1	wet		
057-08.6	Four Foot Rocks	11/2/10	1	dry		
057-08.6	Four Foot Rocks	11/18/10	15	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.6	Four Foot Rocks	3/15/11	1	dry	4	3
057-08.6	Four Foot Rocks	4/25/11	3	wet		
057-08.6	Four Foot Rocks	5/9/11	1	dry		
057-08.6	Four Foot Rocks	5/23/11	8	wet		
057-08.6	Four Foot Rocks	6/8/11	1	dry		
057-08.6	Four Foot Rocks	6/22/11	2	wet		
057-08.6	Four Foot Rocks	6/29/11	1	wet		
057-08.6	Four Foot Rocks	7/11/11	3	dry		
057-08.6	Four Foot Rocks	7/19/11	31	dry		
057-08.6	Four Foot Rocks	7/25/11	1	dry		
057-08.6	Four Foot Rocks	8/10/11	16	dry		
057-08.6	Four Foot Rocks	8/17/11	81	dry		
057-08.6	Four Foot Rocks	8/22/11	4	dry		
057-08.6	Four Foot Rocks	9/12/11	1	dry		
057-08.6	Four Foot Rocks	9/15/11	31	dry		
057-08.6	Four Foot Rocks	9/19/11	1	dry		
057-08.7	S. Grassy Rock	1/2/00	4	dry	7	2
057-08.7	S. Grassy Rock	1/6/00	2	wet		
057-08.7	S. Grassy Rock	2/16/00	6	wet		
057-08.7	S. Grassy Rock	4/16/00	2	dry		
057-08.7	S. Grassy Rock	4/23/00	14	wet		
057-08.7	S. Grassy Rock	5/17/00	4	wet		
057-08.7	S. Grassy Rock	6/22/00	8	dry		
057-08.7	S. Grassy Rock	7/4/00	2	wet		
057-08.7	S. Grassy Rock	7/16/00	51	wet		
057-08.7	S. Grassy Rock	7/30/00	8	wet		
057-08.7	S. Grassy Rock	8/6/00	2	dry		
057-08.7	S. Grassy Rock	9/13/00	11	wet		
057-08.7	S. Grassy Rock	9/17/00	28	wet		
057-08.7	S. Grassy Rock	9/20/00	51	wet		
057-08.7	S. Grassy Rock	11/12/00	18	wet		
057-08.7	S. Grassy Rock	11/29/00	6	wet		
057-08.7	S. Grassy Rock	12/5/00	11	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	1/9/01	22	wet		
057-08.7	S. Grassy Rock	3/25/01	2	wet		
057-08.7	S. Grassy Rock	5/30/01	8	wet		
057-08.7	S. Grassy Rock	7/12/01	51	wet		
057-08.7	S. Grassy Rock	7/25/01	2	dry		
057-08.7	S. Grassy Rock	8/12/01	14	wet		
057-08.7	S. Grassy Rock	8/14/01	28	wet		
057-08.7	S. Grassy Rock	8/19/01	2	dry	9	3
057-08.7	S. Grassy Rock	9/9/01	6	dry		
057-08.7	S. Grassy Rock	9/16/01	2	wet		
057-08.7	S. Grassy Rock	9/23/01	28	wet		
057-08.7	S. Grassy Rock	10/2/01	4	wet		
057-08.7	S. Grassy Rock	11/7/01	36	dry		
057-08.7	S. Grassy Rock	11/25/01	14	wet		
057-08.7	S. Grassy Rock	12/2/01	14	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and 90% less than maximum calculated (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	1/6/02	2	dry		
057-08.7	S. Grassy Rock	1/27/02	2	dry		
057-08.7	S. Grassy Rock	3/17/02	2	dry		
057-08.7	S. Grassy Rock	3/31/02	2	dry		
057-08.7	S. Grassy Rock	4/21/02	2	wet		
057-08.7	S. Grassy Rock	5/5/02	2	dry		
057-08.7	S. Grassy Rock	5/12/02	2	wet		
057-08.7	S. Grassy Rock	5/19/02	11	wet		
057-08.7	S. Grassy Rock	6/9/02	28	wet		
057-08.7	S. Grassy Rock	6/16/02	51	wet		
057-08.7	S. Grassy Rock	6/23/02	2	dry	4	4
057-08.7	S. Grassy Rock	6/30/02	4	dry		
057-08.7	S. Grassy Rock	7/8/02	4	dry		
057-08.7	S. Grassy Rock	7/22/02	2	dry		
057-08.7	S. Grassy Rock	8/4/02	4	wet		
057-08.7	S. Grassy Rock	8/18/02	8	wet		
057-08.7	S. Grassy Rock	9/8/02	2	dry		
057-08.7	S. Grassy Rock	9/29/02	36	wet		
057-08.7	S. Grassy Rock	10/20/02	36	dry		
057-08.7	S. Grassy Rock	11/3/02	2	dry		
057-08.7	S. Grassy Rock	12/16/02	18	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	2/24/03	36	wet	10	32
057-08.7	S. Grassy Rock	3/11/03	2	wet		
057-08.7	S. Grassy Rock	3/26/03	2	wet		
057-08.7	S. Grassy Rock	4/13/03	2	wet		
057-08.7	S. Grassy Rock	4/30/03	2	dry		
057-08.7	S. Grassy Rock	5/28/03	22	wet		
057-08.7	S. Grassy Rock	6/8/03	51	wet		
057-08.7	S. Grassy Rock	6/13/03	18	wet		
057-08.7	S. Grassy Rock	7/23/03	51	wet		
057-08.7	S. Grassy Rock	8/19/03	51	wet		
057-08.7	S. Grassy Rock	9/10/03	2	wet		
057-08.7	S. Grassy Rock	9/24/03	51	wet		
057-08.7	S. Grassy Rock	1/6/04	22	wet	6	5
057-08.7	S. Grassy Rock	3/15/04	2	dry		
057-08.7	S. Grassy Rock	4/29/04	2	dry		
057-08.7	S. Grassy Rock	6/16/04	2	dry		
057-08.7	S. Grassy Rock	6/20/04	18	dry		
057-08.7	S. Grassy Rock	7/7/04	2	wet		
057-08.7	S. Grassy Rock	7/26/04	2	wet		
057-08.7	S. Grassy Rock	8/17/04	2	wet		
057-08.7	S. Grassy Rock	9/12/04	51	wet		
057-08.7	S. Grassy Rock	9/21/04	50	dry		
057-08.7	S. Grassy Rock	10/25/04	4	dry		
057-08.7	S. Grassy Rock	11/7/04	11	wet		
057-08.7	S. Grassy Rock	12/9/04	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	2/2/05	1	dry	1	NA
057-08.7	S. Grassy Rock	4/6/05	1	dry		
057-08.7	S. Grassy Rock	5/18/05	1	dry		
057-08.7	S. Grassy Rock	6/1/05	1	dry		
057-08.7	S. Grassy Rock	6/20/05	1	dry		
057-08.7	S. Grassy Rock	7/5/05	1	dry		
057-08.7	S. Grassy Rock	7/11/05	5	dry		
057-08.7	S. Grassy Rock	8/3/05	1	dry		
057-08.7	S. Grassy Rock	8/17/05	3	wet		
057-08.7	S. Grassy Rock	9/19/05	1	dry		
057-08.7	S. Grassy Rock	10/4/05	1	dry		
057-08.7	S. Grassy Rock	10/31/05	1	dry		
057-08.7	S. Grassy Rock	11/14/05	1	dry		
057-08.7	S. Grassy Rock	1/25/06	1	wet	2	NA
057-08.7	S. Grassy Rock	2/22/06	1	wet		
057-08.7	S. Grassy Rock	3/22/06	1	dry		
057-08.7	S. Grassy Rock	5/24/06	1	dry		
057-08.7	S. Grassy Rock	6/12/06	1	dry		
057-08.7	S. Grassy Rock	7/10/06	1	dry		
057-08.7	S. Grassy Rock	8/8/06	1	dry		
057-08.7	S. Grassy Rock	9/19/06	4	dry		
057-08.7	S. Grassy Rock	11/1/06	3	dry		
057-08.7	S. Grassy Rock	11/15/06	6	dry		
057-08.7	S. Grassy Rock	11/20/06	4	dry		
057-08.7	S. Grassy Rock	12/17/06	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	1/29/07	1	dry		
057-08.7	S. Grassy Rock	3/7/07	1	dry		
057-08.7	S. Grassy Rock	3/27/07	1	wet		
057-08.7	S. Grassy Rock	4/23/07	1	dry		
057-08.7	S. Grassy Rock	5/23/07	1	dry		
057-08.7	S. Grassy Rock	6/12/07	1	wet		
057-08.7	S. Grassy Rock	6/17/07	1	dry		
057-08.7	S. Grassy Rock	7/8/07	1	dry		
057-08.7	S. Grassy Rock	7/31/07	1	dry	2	NA
057-08.7	S. Grassy Rock	8/28/07	1	dry		
057-08.7	S. Grassy Rock	9/23/07	1	dry		
057-08.7	S. Grassy Rock	10/16/07	2	dry		
057-08.7	S. Grassy Rock	10/22/07	3	wet		
057-08.7	S. Grassy Rock	10/31/07	27	dry		
057-08.7	S. Grassy Rock	11/5/07	2	dry		
057-08.7	S. Grassy Rock	12/6/07	13	dry		
057-08.7	S. Grassy Rock	12/10/07	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	1/8/08	1	dry		
057-08.7	S. Grassy Rock	3/3/08	1	dry		
057-08.7	S. Grassy Rock	4/23/08	1	dry		
057-08.7	S. Grassy Rock	4/30/08	2	wet		
057-08.7	S. Grassy Rock	5/14/08	1	dry		
057-08.7	S. Grassy Rock	5/20/08	1	wet		
057-08.7	S. Grassy Rock	5/29/08	1	wet		
057-08.7	S. Grassy Rock	6/18/08	1	wet		
057-08.7	S. Grassy Rock	6/30/08	6	wet		
057-08.7	S. Grassy Rock	7/27/08	28	dry	2	NA
057-08.7	S. Grassy Rock	8/4/08	1	wet		
057-08.7	S. Grassy Rock	8/26/08	1	dry		
057-08.7	S. Grassy Rock	9/10/08	32	wet		
057-08.7	S. Grassy Rock	9/17/08	1	dry		
057-08.7	S. Grassy Rock	10/7/08	3	wet		
057-08.7	S. Grassy Rock	10/27/08	1	wet		
057-08.7	S. Grassy Rock	11/2/08	3	dry		
057-08.7	S. Grassy Rock	11/24/08	1	dry		
057-08.7	S. Grassy Rock	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	2/9/09	1	dry	4	7
057-08.7	S. Grassy Rock	3/10/09	1	wet		
057-08.7	S. Grassy Rock	4/22/09	9	wet		
057-08.7	S. Grassy Rock	5/11/09	1	dry		
057-08.7	S. Grassy Rock	6/1/09	1	dry		
057-08.7	S. Grassy Rock	6/8/09	4	dry		
057-08.7	S. Grassy Rock	6/10/09	6	wet		
057-08.7	S. Grassy Rock	6/22/09	11	wet		
057-08.7	S. Grassy Rock	7/20/09	1	dry		
057-08.7	S. Grassy Rock	8/3/09	1	dry		
057-08.7	S. Grassy Rock	8/17/09	2	dry		
057-08.7	S. Grassy Rock	8/24/09	81	wet		
057-08.7	S. Grassy Rock	9/1/09	1	dry		
057-08.7	S. Grassy Rock	10/5/09	1	wet		
057-08.7	S. Grassy Rock	11/3/09	10	wet		
057-08.7	S. Grassy Rock	12/1/09	11	wet		
057-08.7	S. Grassy Rock	12/14/09	34	wet		
057-08.7	S. Grassy Rock	12/28/09	43	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.7	S. Grassy Rock	1/19/10	1	wet	2	NA
057-08.7	S. Grassy Rock	1/27/10	2	wet		
057-08.7	S. Grassy Rock	2/22/10	1	dry		
057-08.7	S. Grassy Rock	3/2/10	1	wet		
057-08.7	S. Grassy Rock	4/4/10	19	dry		
057-08.7	S. Grassy Rock	4/11/10	1	wet		
057-08.7	S. Grassy Rock	5/5/10	2	wet		
057-08.7	S. Grassy Rock	6/9/10	1	wet		
057-08.7	S. Grassy Rock	7/7/10	2	dry		
057-08.7	S. Grassy Rock	7/26/10	9	wet		
057-08.7	S. Grassy Rock	8/4/10	1	dry		
057-08.7	S. Grassy Rock	8/19/10	1	dry		
057-08.7	S. Grassy Rock	8/25/10	1	wet		
057-08.7	S. Grassy Rock	9/13/10	1	dry		
057-08.7	S. Grassy Rock	9/20/10	1	dry		
057-08.7	S. Grassy Rock	9/21/10	1	dry		
057-08.7	S. Grassy Rock	9/29/10	8	wet		
057-08.7	S. Grassy Rock	10/3/10	3	wet		
057-08.7	S. Grassy Rock	11/2/10	1	dry		
057-08.7	S. Grassy Rock	11/18/10	19	wet		
057-08.7	S. Grassy Rock	3/15/11	1	dry	5	17
057-08.7	S. Grassy Rock	4/25/11	1	wet		
057-08.7	S. Grassy Rock	5/9/11	1	dry		
057-08.7	S. Grassy Rock	5/23/11	9	wet		
057-08.7	S. Grassy Rock	6/29/11	35	wet		
057-08.7	S. Grassy Rock	7/19/11	74	dry		
057-08.7	S. Grassy Rock	7/25/11	1	dry		
057-08.7	S. Grassy Rock	8/17/11	31	dry		
057-08.7	S. Grassy Rock	8/22/11	4	dry		
057-08.7	S. Grassy Rock	9/12/11	4	dry		
057-08.7	S. Grassy Rock	9/19/11	5	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	1/2/00	4	dry		
057-08.8	S. Otter Rocks	1/6/00	11	wet		
057-08.8	S. Otter Rocks	2/16/00	11	wet		
057-08.8	S. Otter Rocks	4/16/00	2	dry		
057-08.8	S. Otter Rocks	4/23/00	8	wet		
057-08.8	S. Otter Rocks	5/17/00	4	wet		
057-08.8	S. Otter Rocks	6/22/00	22	dry		
057-08.8	S. Otter Rocks	7/4/00	50	wet		
057-08.8	S. Otter Rocks	7/16/00	14	wet	11	19
057-08.8	S. Otter Rocks	7/30/00	51	wet		
057-08.8	S. Otter Rocks	8/6/00	4	dry		
057-08.8	S. Otter Rocks	9/13/00	51	wet		
057-08.8	S. Otter Rocks	9/17/00	2	wet		
057-08.8	S. Otter Rocks	9/20/00	50	wet		
057-08.8	S. Otter Rocks	11/12/00	36	wet		
057-08.8	S. Otter Rocks	11/29/00	8	wet		
057-08.8	S. Otter Rocks	12/5/00	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	1/9/01	22	wet	9	NA
057-08.8	S. Otter Rocks	3/25/01	6	wet		
057-08.8	S. Otter Rocks	5/30/01	8	wet		
057-08.8	S. Otter Rocks	7/12/01	11	wet		
057-08.8	S. Otter Rocks	7/25/01	6	dry		
057-08.8	S. Otter Rocks	8/12/01	36	wet		
057-08.8	S. Otter Rocks	8/14/01	22	wet		
057-08.8	S. Otter Rocks	8/19/01	11	dry		
057-08.8	S. Otter Rocks	9/9/01	2	dry		
057-08.8	S. Otter Rocks	9/16/01	14	wet		
057-08.8	S. Otter Rocks	9/23/01	11	wet		
057-08.8	S. Otter Rocks	9/24/01	14	wet		
057-08.8	S. Otter Rocks	10/2/01	8	wet		
057-08.8	S. Otter Rocks	11/7/01	22	dry		
057-08.8	S. Otter Rocks	11/25/01	2	wet		
057-08.8	S. Otter Rocks	12/2/01	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction samples for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	1/6/02	4	dry	5	NA
057-08.8	S. Otter Rocks	1/27/02	2	dry		
057-08.8	S. Otter Rocks	3/17/02	2	dry		
057-08.8	S. Otter Rocks	3/31/02	2	dry		
057-08.8	S. Otter Rocks	4/21/02	2	wet		
057-08.8	S. Otter Rocks	5/5/02	2	dry		
057-08.8	S. Otter Rocks	5/12/02	8	wet		
057-08.8	S. Otter Rocks	5/19/02	6	wet		
057-08.8	S. Otter Rocks	6/9/02	18	wet		
057-08.8	S. Otter Rocks	6/16/02	50	wet		
057-08.8	S. Otter Rocks	6/23/02	14	dry		
057-08.8	S. Otter Rocks	6/30/02	4†	dry		
057-08.8	S. Otter Rocks	7/8/02	4	dry		
057-08.8	S. Otter Rocks	7/22/02	2	dry		
057-08.8	S. Otter Rocks	8/4/02	4	wet		
057-08.8	S. Otter Rocks	8/18/02	18	wet		
057-08.8	S. Otter Rocks	9/8/02	4	dry		
057-08.8	S. Otter Rocks	9/29/02	8	wet		
057-08.8	S. Otter Rocks	10/20/02	18	dry		
057-08.8	S. Otter Rocks	12/16/02	28	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	1/13/03	2	dry	8	11
057-08.8	S. Otter Rocks	2/24/03	28	wet		
057-08.8	S. Otter Rocks	3/11/03	2	wet		
057-08.8	S. Otter Rocks	3/26/03	2	wet		
057-08.8	S. Otter Rocks	4/13/03	2	wet		
057-08.8	S. Otter Rocks	4/30/03	2	dry		
057-08.8	S. Otter Rocks	5/28/03	36	wet		
057-08.8	S. Otter Rocks	6/8/03	28	wet		
057-08.8	S. Otter Rocks	6/13/03	14	wet		
057-08.8	S. Otter Rocks	7/23/03	51	wet		
057-08.8	S. Otter Rocks	8/19/03	18	wet		
057-08.8	S. Otter Rocks	9/10/03	2	wet		
057-08.8	S. Otter Rocks	9/24/03	36	wet		
057-08.8	S. Otter Rocks	9/30/03	14	wet		
057-08.8	S. Otter Rocks	1/6/04	6	wet	4	5
057-08.8	S. Otter Rocks	3/15/04	2	dry		
057-08.8	S. Otter Rocks	4/7/04	2	dry		
057-08.8	S. Otter Rocks	4/29/04	2	dry		
057-08.8	S. Otter Rocks	6/16/04	2	dry		
057-08.8	S. Otter Rocks	6/20/04	2	dry		
057-08.8	S. Otter Rocks	7/7/04	6	wet		
057-08.8	S. Otter Rocks	7/26/04	2	wet		
057-08.8	S. Otter Rocks	8/17/04	6	wet		
057-08.8	S. Otter Rocks	9/12/04	51	wet		
057-08.8	S. Otter Rocks	9/21/04	36	dry		
057-08.8	S. Otter Rocks	10/25/04	6	dry		
057-08.8	S. Otter Rocks	11/7/04	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	4/6/05	1	dry	2	NA
057-08.8	S. Otter Rocks	5/18/05	1	dry		
057-08.8	S. Otter Rocks	6/1/05	1	dry		
057-08.8	S. Otter Rocks	6/20/05	3	dry		
057-08.8	S. Otter Rocks	7/5/05	1	dry		
057-08.8	S. Otter Rocks	7/11/05	3	dry		
057-08.8	S. Otter Rocks	8/3/05	1	dry		
057-08.8	S. Otter Rocks	8/17/05	11	wet		
057-08.8	S. Otter Rocks	9/19/05	2	dry		
057-08.8	S. Otter Rocks	10/4/05	1	dry		
057-08.8	S. Otter Rocks	10/31/05	3	dry		
057-08.8	S. Otter Rocks	11/14/05	1	dry		
057-08.8	S. Otter Rocks	1/25/06	2	wet	2	NA
057-08.8	S. Otter Rocks	2/22/06	1	wet		
057-08.8	S. Otter Rocks	3/22/06	1	dry		
057-08.8	S. Otter Rocks	5/24/06	1	dry		
057-08.8	S. Otter Rocks	6/12/06	2	dry		
057-08.8	S. Otter Rocks	7/10/06	15	dry		
057-08.8	S. Otter Rocks	8/8/06	1	dry		
057-08.8	S. Otter Rocks	9/19/06	5	dry		
057-08.8	S. Otter Rocks	9/28/06	9	dry		
057-08.8	S. Otter Rocks	10/16/06	1	dry		
057-08.8	S. Otter Rocks	11/1/06	5	dry		
057-08.8	S. Otter Rocks	11/15/06	11	dry		
057-08.8	S. Otter Rocks	11/20/06	1	dry		
057-08.8	S. Otter Rocks	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	1/29/07	1	dry	2	NA
057-08.8	S. Otter Rocks	3/27/07	1	wet		
057-08.8	S. Otter Rocks	4/23/07	1	dry		
057-08.8	S. Otter Rocks	5/23/07	1	dry		
057-08.8	S. Otter Rocks	6/12/07	2	wet		
057-08.8	S. Otter Rocks	6/17/07	1	dry		
057-08.8	S. Otter Rocks	7/8/07	19	dry		
057-08.8	S. Otter Rocks	7/31/07	1	dry		
057-08.8	S. Otter Rocks	8/28/07	5	dry		
057-08.8	S. Otter Rocks	9/23/07	4	dry		
057-08.8	S. Otter Rocks	10/16/07	2	dry		
057-08.8	S. Otter Rocks	10/22/07	2	wet		
057-08.8	S. Otter Rocks	10/31/07	5	dry		
057-08.8	S. Otter Rocks	11/5/07	1	dry		
057-08.8	S. Otter Rocks	12/6/07	1	dry		
057-08.8	S. Otter Rocks	12/10/07	12	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	1/8/08	1	dry		
057-08.8	S. Otter Rocks	3/3/08	1	dry		
057-08.8	S. Otter Rocks	4/23/08	1	dry		
057-08.8	S. Otter Rocks	4/30/08	1	wet		
057-08.8	S. Otter Rocks	5/14/08	1	dry		
057-08.8	S. Otter Rocks	5/20/08	1	wet		
057-08.8	S. Otter Rocks	5/29/08	2	wet		
057-08.8	S. Otter Rocks	6/18/08	1	wet		
057-08.8	S. Otter Rocks	6/30/08	5	wet		
057-08.8	S. Otter Rocks	7/27/08	2	dry	2	NA
057-08.8	S. Otter Rocks	8/4/08	1	wet		
057-08.8	S. Otter Rocks	8/26/08	1	dry		
057-08.8	S. Otter Rocks	9/10/08	8	wet		
057-08.8	S. Otter Rocks	9/17/08	1	dry		
057-08.8	S. Otter Rocks	10/7/08	1	wet		
057-08.8	S. Otter Rocks	10/27/08	16	wet		
057-08.8	S. Otter Rocks	11/2/08	4	dry		
057-08.8	S. Otter Rocks	11/24/08	1	dry		
057-08.8	S. Otter Rocks	12/29/08	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	2/9/09	1	dry	3	NA
057-08.8	S. Otter Rocks	3/10/09	1	wet		
057-08.8	S. Otter Rocks	4/22/09	7	wet		
057-08.8	S. Otter Rocks	5/11/09	1	dry		
057-08.8	S. Otter Rocks	6/8/09	1	dry		
057-08.8	S. Otter Rocks	6/10/09	1	wet		
057-08.8	S. Otter Rocks	6/22/09	5	wet		
057-08.8	S. Otter Rocks	7/20/09	7	dry		
057-08.8	S. Otter Rocks	8/3/09	8	dry		
057-08.8	S. Otter Rocks	8/17/09	2	dry		
057-08.8	S. Otter Rocks	8/24/09	7	wet		
057-08.8	S. Otter Rocks	9/1/09	1	dry		
057-08.8	S. Otter Rocks	10/5/09	5	wet		
057-08.8	S. Otter Rocks	11/3/09	3	dry		
057-08.8	S. Otter Rocks	12/1/09	1	wet		
057-08.8	S. Otter Rocks	12/14/09	3	wet		
057-08.8	S. Otter Rocks	12/28/09	11	wet		
057-08.8	S. Otter Rocks	1/19/10	1	wet	2	NA
057-08.8	S. Otter Rocks	1/27/10	1	wet		
057-08.8	S. Otter Rocks	2/22/10	1	dry		
057-08.8	S. Otter Rocks	3/2/10	1	wet		
057-08.8	S. Otter Rocks	4/4/10	11	dry		
057-08.8	S. Otter Rocks	4/11/10	1	wet		
057-08.8	S. Otter Rocks	5/5/10	1	wet		
057-08.8	S. Otter Rocks	6/9/10	1	wet		
057-08.8	S. Otter Rocks	7/7/10	3	dry		
057-08.8	S. Otter Rocks	7/26/10	1	wet		
057-08.8	S. Otter Rocks	8/25/10	8	wet		
057-08.8	S. Otter Rocks	9/20/10	1	dry		
057-08.8	S. Otter Rocks	9/21/10	1	dry		
057-08.8	S. Otter Rocks	10/3/10	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-08.8	S. Otter Rocks	3/15/11	1	dry	6	NA
057-08.8	S. Otter Rocks	4/25/11	11	wet		
057-08.8	S. Otter Rocks	5/23/11	13	wet		
057-08.8	S. Otter Rocks	6/8/11	3	dry		
057-08.8	S. Otter Rocks	6/22/11	1	wet		
057-08.8	S. Otter Rocks	7/11/11	3	dry		
057-08.8	S. Otter Rocks	7/19/11	81	dry		
057-08.8	S. Otter Rocks	7/25/11	6	dry		
057-08.8	S. Otter Rocks	8/10/11	11	dry		
057-08.8	S. Otter Rocks	8/17/11	18	dry		
057-08.8	S. Otter Rocks	8/22/11	6	dry		
057-08.8	S. Otter Rocks	9/12/11	5	dry		
057-08.8	S. Otter Rocks	9/19/11	7	dry		
057-09.0	NE Shell Island	1/2/00	2	dry	11	19
057-09.0	NE Shell Island	1/6/00	2	wet		
057-09.0	NE Shell Island	2/16/00	2	wet		
057-09.0	NE Shell Island	4/16/00	3[†]	dry		
057-09.0	NE Shell Island	4/23/00	11	wet		
057-09.0	NE Shell Island	5/17/00	22	wet		
057-09.0	NE Shell Island	6/22/00	50	dry		
057-09.0	NE Shell Island	7/4/00	18	wet		
057-09.0	NE Shell Island	7/16/00	50	wet		
057-09.0	NE Shell Island	7/30/00	51	wet		
057-09.0	NE Shell Island	8/6/00	4	dry		
057-09.0	NE Shell Island	9/13/00	51	wet		
057-09.0	NE Shell Island	9/17/00	6	wet		
057-09.0	NE Shell Island	9/20/00	51	wet		
057-09.0	NE Shell Island	11/12/00	22	wet		
057-09.0	NE Shell Island	11/29/00	11	wet		
057-09.0	NE Shell Island	12/5/00	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	1/9/01	11	wet		
057-09.0	NE Shell Island	3/25/01	2	wet		
057-09.0	NE Shell Island	5/30/01	4	wet		
057-09.0	NE Shell Island	7/12/01	11	wet		
057-09.0	NE Shell Island	7/25/01	4	dry		
057-09.0	NE Shell Island	8/12/01	22	wet		
057-09.0	NE Shell Island	8/14/01	11	wet		
057-09.0	NE Shell Island	8/19/01	6	dry	8	NA
057-09.0	NE Shell Island	9/9/01	8	dry		
057-09.0	NE Shell Island	9/16/01	11	wet		
057-09.0	NE Shell Island	9/23/01	50	wet		
057-09.0	NE Shell Island	10/2/01	14	wet		
057-09.0	NE Shell Island	11/7/01	14	dry		
057-09.0	NE Shell Island	11/25/01	2	wet		
057-09.0	NE Shell Island	12/2/01	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	1/6/02	8	dry		
057-09.0	NE Shell Island	1/27/02	2	dry		
057-09.0	NE Shell Island	3/17/02	2	dry		
057-09.0	NE Shell Island	3/31/02	2	dry		
057-09.0	NE Shell Island	4/21/02	2	wet		
057-09.0	NE Shell Island	5/5/02	2	dry		
057-09.0	NE Shell Island	5/12/02	2	wet		
057-09.0	NE Shell Island	5/19/02	6	wet		
057-09.0	NE Shell Island	6/9/02	11	wet		
057-09.0	NE Shell Island	6/16/02	50	wet		
057-09.0	NE Shell Island	6/23/02	6	dry	5	NA
057-09.0	NE Shell Island	6/30/02	6	dry		
057-09.0	NE Shell Island	7/8/02	8	dry		
057-09.0	NE Shell Island	7/22/02	2	dry		
057-09.0	NE Shell Island	8/4/02	8	wet		
057-09.0	NE Shell Island	8/18/02	22	wet		
057-09.0	NE Shell Island	9/8/02	6	dry		
057-09.0	NE Shell Island	9/29/02	8	wet		
057-09.0	NE Shell Island	10/20/02	22	dry		
057-09.0	NE Shell Island	11/3/02	2	dry		
057-09.0	NE Shell Island	12/16/02	8	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	1/13/03	2	dry	7	11
057-09.0	NE Shell Island	2/24/03	36	wet		
057-09.0	NE Shell Island	3/11/03	2	wet		
057-09.0	NE Shell Island	3/26/03	2	wet		
057-09.0	NE Shell Island	4/13/03	2	wet		
057-09.0	NE Shell Island	4/30/03	2	dry		
057-09.0	NE Shell Island	5/28/03	22	wet		
057-09.0	NE Shell Island	6/8/03	6	wet		
057-09.0	NE Shell Island	6/13/03	22	wet		
057-09.0	NE Shell Island	7/23/03	36	wet		
057-09.0	NE Shell Island	8/19/03	14	wet		
057-09.0	NE Shell Island	9/10/03	2	wet		
057-09.0	NE Shell Island	9/24/03	11	wet		
057-09.0	NE Shell Island	9/30/03	51	wet		
057-09.0	NE Shell Island	1/6/04	11	wet	7	NA
057-09.0	NE Shell Island	3/15/04	2	dry		
057-09.0	NE Shell Island	4/7/04	2	dry		
057-09.0	NE Shell Island	4/29/04	2	dry		
057-09.0	NE Shell Island	6/16/04	6	dry		
057-09.0	NE Shell Island	6/20/04	4	dry		
057-09.0	NE Shell Island	7/7/04	6	wet		
057-09.0	NE Shell Island	7/26/04	6	wet		
057-09.0	NE Shell Island	8/17/04	14	wet		
057-09.0	NE Shell Island	9/12/04	51	wet		
057-09.0	NE Shell Island	9/21/04	22	dry		
057-09.0	NE Shell Island	10/25/04	28	dry		
057-09.0	NE Shell Island	11/7/04	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	4/6/05	1	dry	2	NA
057-09.0	NE Shell Island	5/18/05	3	dry		
057-09.0	NE Shell Island	6/1/05	1	dry		
057-09.0	NE Shell Island	6/20/05	1	dry		
057-09.0	NE Shell Island	7/5/05	6	dry		
057-09.0	NE Shell Island	7/11/05	2	dry		
057-09.0	NE Shell Island	8/3/05	3	dry		
057-09.0	NE Shell Island	8/17/05	22	wet		
057-09.0	NE Shell Island	9/19/05	1	dry		
057-09.0	NE Shell Island	10/4/05	1	dry		
057-09.0	NE Shell Island	10/31/05	1	dry		
057-09.0	NE Shell Island	11/14/05	1	dry		
057-09.0	NE Shell Island	1/25/06	1	wet	2	NA
057-09.0	NE Shell Island	2/22/06	1	wet		
057-09.0	NE Shell Island	3/22/06	1	dry		
057-09.0	NE Shell Island	5/24/06	1	dry		
057-09.0	NE Shell Island	6/12/06	3	dry		
057-09.0	NE Shell Island	7/10/06	1	dry		
057-09.0	NE Shell Island	8/8/06	2	dry		
057-09.0	NE Shell Island	9/19/06	3	dry		
057-09.0	NE Shell Island	10/16/06	1	dry		
057-09.0	NE Shell Island	11/1/06	3	dry		
057-09.0	NE Shell Island	11/15/06	12	dry		
057-09.0	NE Shell Island	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	1/29/07	1	dry	2	NA
057-09.0	NE Shell Island	3/27/07	1	wet		
057-09.0	NE Shell Island	4/23/07	1	dry		
057-09.0	NE Shell Island	5/23/07	1	dry		
057-09.0	NE Shell Island	6/12/07	1	wet		
057-09.0	NE Shell Island	6/17/07	2	dry		
057-09.0	NE Shell Island	7/8/07	7	dry		
057-09.0	NE Shell Island	7/31/07	4	dry		
057-09.0	NE Shell Island	8/28/07	1	dry		
057-09.0	NE Shell Island	9/23/07	1	dry		
057-09.0	NE Shell Island	10/16/07	2	dry		
057-09.0	NE Shell Island	10/22/07	3	wet		
057-09.0	NE Shell Island	10/31/07	16	dry		
057-09.0	NE Shell Island	11/5/07	2	dry		
057-09.0	NE Shell Island	12/6/07	1	dry		
057-09.0	NE Shell Island	12/10/07	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	1/8/08	1	dry		
057-09.0	NE Shell Island	3/3/08	1	dry		
057-09.0	NE Shell Island	4/23/08	1	dry		
057-09.0	NE Shell Island	4/30/08	1	wet		
057-09.0	NE Shell Island	5/14/08	1	dry		
057-09.0	NE Shell Island	5/20/08	2	wet		
057-09.0	NE Shell Island	5/29/08	6	wet		
057-09.0	NE Shell Island	6/18/08	3	wet		
057-09.0	NE Shell Island	6/30/08	12	wet		
057-09.0	NE Shell Island	7/27/08	2	dry	2	NA
057-09.0	NE Shell Island	8/4/08	3	wet		
057-09.0	NE Shell Island	8/26/08	1	dry		
057-09.0	NE Shell Island	9/10/08	10	wet		
057-09.0	NE Shell Island	9/17/08	6	dry		
057-09.0	NE Shell Island	10/7/08	1	wet		
057-09.0	NE Shell Island	10/27/08	8	wet		
057-09.0	NE Shell Island	11/2/08	5	dry		
057-09.0	NE Shell Island	11/24/08	1	dry		
057-09.0	NE Shell Island	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	2/9/09	1	dry	3	NA
057-09.0	NE Shell Island	3/10/09	1	wet		
057-09.0	NE Shell Island	4/22/09	2	wet		
057-09.0	NE Shell Island	5/11/09	1	dry		
057-09.0	NE Shell Island	6/8/09	1	dry		
057-09.0	NE Shell Island	6/10/09	12	wet		
057-09.0	NE Shell Island	6/22/09	4	wet		
057-09.0	NE Shell Island	7/20/09	3	dry		
057-09.0	NE Shell Island	8/3/09	3	dry		
057-09.0	NE Shell Island	8/17/09	4	dry		
057-09.0	NE Shell Island	8/24/09	9	wet		
057-09.0	NE Shell Island	9/1/09	1	dry		
057-09.0	NE Shell Island	10/5/09	4	wet		
057-09.0	NE Shell Island	11/3/09	4	wet		
057-09.0	NE Shell Island	12/1/09	1	wet		
057-09.0	NE Shell Island	12/14/09	3	wet		
057-09.0	NE Shell Island	12/28/09	6	wet		
057-09.0	NE Shell Island	1/19/10	1	wet	2	NA
057-09.0	NE Shell Island	1/27/10	1	wet		
057-09.0	NE Shell Island	2/22/10	1	dry		
057-09.0	NE Shell Island	3/2/10	1	wet		
057-09.0	NE Shell Island	4/4/10	1	dry		
057-09.0	NE Shell Island	4/11/10	1	wet		
057-09.0	NE Shell Island	5/5/10	18	wet		
057-09.0	NE Shell Island	6/9/10	4	wet		
057-09.0	NE Shell Island	7/7/10	1	dry		
057-09.0	NE Shell Island	7/26/10	1	wet		
057-09.0	NE Shell Island	8/25/10	1	wet		
057-09.0	NE Shell Island	9/20/10	2	dry		
057-09.0	NE Shell Island	9/21/10	4	dry		
057-09.0	NE Shell Island	10/3/10	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.0	NE Shell Island	3/15/11	1	dry	7	3
057-09.0	NE Shell Island	4/25/11	7	wet		
057-09.0	NE Shell Island	5/23/11	20	wet		
057-09.0	NE Shell Island	6/8/11	13	dry		
057-09.0	NE Shell Island	6/22/11	1	wet		
057-09.0	NE Shell Island	6/29/11	7	wet		
057-09.0	NE Shell Island	7/11/11	5	dry		
057-09.0	NE Shell Island	7/19/11	72	dry		
057-09.0	NE Shell Island	7/25/11	3	dry		
057-09.0	NE Shell Island	8/10/11	9	dry		
057-09.0	NE Shell Island	8/17/11	41	dry		
057-09.0	NE Shell Island	8/22/11	1	dry		
057-09.0	NE Shell Island	9/12/11	9	dry		
057-09.0	NE Shell Island	9/19/11	19	dry		
057-09.1	NE Grassy Rock	1/2/00	2	dry	11	21
057-09.1	NE Grassy Rock	1/6/00	2	wet		
057-09.1	NE Grassy Rock	2/16/00	22	wet		
057-09.1	NE Grassy Rock	4/23/00	14	wet		
057-09.1	NE Grassy Rock	5/17/00	8	wet		
057-09.1	NE Grassy Rock	6/22/00	4	dry		
057-09.1	NE Grassy Rock	7/4/00	50	wet		
057-09.1	NE Grassy Rock	7/16/00	51	wet		
057-09.1	NE Grassy Rock	7/30/00	50	wet		
057-09.1	NE Grassy Rock	8/6/00	11	dry		
057-09.1	NE Grassy Rock	9/13/00	14	wet		
057-09.1	NE Grassy Rock	9/17/00	18	wet		
057-09.1	NE Grassy Rock	9/20/00	51	wet		
057-09.1	NE Grassy Rock	11/12/00	36	wet		
057-09.1	NE Grassy Rock	11/29/00	4	wet		
057-09.1	NE Grassy Rock	12/5/00	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	1/9/01	4	wet		
057-09.1	NE Grassy Rock	3/25/01	2	wet		
057-09.1	NE Grassy Rock	5/30/01	2	wet		
057-09.1	NE Grassy Rock	7/12/01	51	wet		
057-09.1	NE Grassy Rock	7/25/01	2	dry		
057-09.1	NE Grassy Rock	8/12/01	50	wet		
057-09.1	NE Grassy Rock	8/14/01	14	wet		
057-09.1	NE Grassy Rock	8/19/01	4	dry	9	10
057-09.1	NE Grassy Rock	9/9/01	18	dry		
057-09.1	NE Grassy Rock	9/16/01	4	wet		
057-09.1	NE Grassy Rock	9/23/01	28	wet		
057-09.1	NE Grassy Rock	10/2/01	22	wet		
057-09.1	NE Grassy Rock	11/7/01	51	dry		
057-09.1	NE Grassy Rock	11/25/01	4	wet		
057-09.1	NE Grassy Rock	12/2/01	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	1/6/02	4	dry		
057-09.1	NE Grassy Rock	1/27/02	6	dry		
057-09.1	NE Grassy Rock	3/17/02	2	dry		
057-09.1	NE Grassy Rock	3/31/02	2	dry		
057-09.1	NE Grassy Rock	4/21/02	2	wet		
057-09.1	NE Grassy Rock	5/5/02	8	dry		
057-09.1	NE Grassy Rock	5/12/02	2	wet		
057-09.1	NE Grassy Rock	5/19/02	14	wet		
057-09.1	NE Grassy Rock	6/9/02	8	wet		
057-09.1	NE Grassy Rock	6/16/02	36	wet		
057-09.1	NE Grassy Rock	6/23/02	2	dry	4	NA
057-09.1	NE Grassy Rock	6/30/02	2	dry		
057-09.1	NE Grassy Rock	7/8/02	2	dry		
057-09.1	NE Grassy Rock	7/22/02	2	dry		
057-09.1	NE Grassy Rock	8/4/02	4	wet		
057-09.1	NE Grassy Rock	8/18/02	22	wet		
057-09.1	NE Grassy Rock	9/8/02	2	dry		
057-09.1	NE Grassy Rock	9/29/02	6	wet		
057-09.1	NE Grassy Rock	10/20/02	14	dry		
057-09.1	NE Grassy Rock	11/3/02	4	dry		
057-09.1	NE Grassy Rock	12/16/02	18	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	1/13/03	11	dry	8	5
057-09.1	NE Grassy Rock	2/24/03	22	wet		
057-09.1	NE Grassy Rock	3/11/03	2	wet		
057-09.1	NE Grassy Rock	3/26/03	2	wet		
057-09.1	NE Grassy Rock	4/13/03	2	wet		
057-09.1	NE Grassy Rock	4/30/03	2	dry		
057-09.1	NE Grassy Rock	5/28/03	14	wet		
057-09.1	NE Grassy Rock	6/8/03	18	wet		
057-09.1	NE Grassy Rock	6/13/03	28	wet		
057-09.1	NE Grassy Rock	7/23/03	50	wet		
057-09.1	NE Grassy Rock	8/19/03	8	wet		
057-09.1	NE Grassy Rock	9/10/03	2	wet		
057-09.1	NE Grassy Rock	9/24/03	51	wet		
057-09.1	NE Grassy Rock	1/6/04	8	wet	3	NA
057-09.1	NE Grassy Rock	3/15/04	2	dry		
057-09.1	NE Grassy Rock	4/7/04	2	dry		
057-09.1	NE Grassy Rock	4/29/04	2	dry		
057-09.1	NE Grassy Rock	6/16/04	2	dry		
057-09.1	NE Grassy Rock	6/20/04	2	dry		
057-09.1	NE Grassy Rock	7/7/04	2	wet		
057-09.1	NE Grassy Rock	7/26/04	6	wet		
057-09.1	NE Grassy Rock	8/17/04	4	wet		
057-09.1	NE Grassy Rock	9/12/04	51	wet		
057-09.1	NE Grassy Rock	9/21/04	18	dry		
057-09.1	NE Grassy Rock	10/25/04	2	dry		
057-09.1	NE Grassy Rock	11/7/04	2	wet		
057-09.1	NE Grassy Rock	12/9/04	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	2/2/05	1	dry		
057-09.1	NE Grassy Rock	4/6/05	1	dry		
057-09.1	NE Grassy Rock	5/18/05	1	dry		
057-09.1	NE Grassy Rock	6/1/05	1	dry		
057-09.1	NE Grassy Rock	6/20/05	1	dry		
057-09.1	NE Grassy Rock	7/5/05	3	dry		
057-09.1	NE Grassy Rock	7/11/05	1	dry	1	NA
057-09.1	NE Grassy Rock	8/3/05	1	dry		
057-09.1	NE Grassy Rock	8/17/05	7	wet		
057-09.1	NE Grassy Rock	9/19/05	1	dry		
057-09.1	NE Grassy Rock	10/4/05	4	dry		
057-09.1	NE Grassy Rock	10/31/05	1	dry		
057-09.1	NE Grassy Rock	11/14/05	2	dry		
057-09.1	NE Grassy Rock	1/25/06	1	wet		
057-09.1	NE Grassy Rock	2/22/06	1	wet		
057-09.1	NE Grassy Rock	3/22/06	1	dry		
057-09.1	NE Grassy Rock	5/24/06	1	dry		
057-09.1	NE Grassy Rock	6/12/06	1	dry		
057-09.1	NE Grassy Rock	7/10/06	8	dry		
057-09.1	NE Grassy Rock	8/8/06	1	dry	2	NA
057-09.1	NE Grassy Rock	9/12/06	1	dry		
057-09.1	NE Grassy Rock	9/19/06	8	dry		
057-09.1	NE Grassy Rock	11/1/06	2	dry		
057-09.1	NE Grassy Rock	11/15/06	31	dry		
057-09.1	NE Grassy Rock	11/20/06	1	dry		
057-09.1	NE Grassy Rock	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	1/29/07	1	dry		
057-09.1	NE Grassy Rock	3/7/07	1	dry		
057-09.1	NE Grassy Rock	3/27/07	1	wet		
057-09.1	NE Grassy Rock	4/23/07	1	dry		
057-09.1	NE Grassy Rock	5/23/07	1	dry		
057-09.1	NE Grassy Rock	6/12/07	3	wet		
057-09.1	NE Grassy Rock	6/17/07	1	dry		
057-09.1	NE Grassy Rock	7/8/07	3	dry		
057-09.1	NE Grassy Rock	7/31/07	1	dry	2	NA
057-09.1	NE Grassy Rock	8/28/07	1	dry		
057-09.1	NE Grassy Rock	9/23/07	1	dry		
057-09.1	NE Grassy Rock	10/16/07	1	dry		
057-09.1	NE Grassy Rock	10/22/07	28	wet		
057-09.1	NE Grassy Rock	10/31/07	47	dry		
057-09.1	NE Grassy Rock	11/5/07	1	dry		
057-09.1	NE Grassy Rock	12/6/07	3	dry		
057-09.1	NE Grassy Rock	12/10/07	15	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	1/8/08	1	dry		
057-09.1	NE Grassy Rock	3/3/08	1	dry		
057-09.1	NE Grassy Rock	4/23/08	1	dry		
057-09.1	NE Grassy Rock	4/30/08	1	wet		
057-09.1	NE Grassy Rock	5/14/08	1	dry		
057-09.1	NE Grassy Rock	5/20/08	1	wet		
057-09.1	NE Grassy Rock	5/29/08	1	wet		
057-09.1	NE Grassy Rock	6/18/08	1	wet		
057-09.1	NE Grassy Rock	6/30/08	11	wet		
057-09.1	NE Grassy Rock	7/27/08	2	dry	2	NA
057-09.1	NE Grassy Rock	8/4/08	1	wet		
057-09.1	NE Grassy Rock	8/26/08	1	dry		
057-09.1	NE Grassy Rock	9/10/08	19	wet		
057-09.1	NE Grassy Rock	9/17/08	1	dry		
057-09.1	NE Grassy Rock	10/7/08	1	wet		
057-09.1	NE Grassy Rock	10/27/08	4	wet		
057-09.1	NE Grassy Rock	11/2/08	5	dry		
057-09.1	NE Grassy Rock	11/24/08	1	dry		
057-09.1	NE Grassy Rock	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	2/9/09	1	dry	3	16
057-09.1	NE Grassy Rock	3/10/09	1	wet		
057-09.1	NE Grassy Rock	4/22/09	5	wet		
057-09.1	NE Grassy Rock	5/11/09	1	dry		
057-09.1	NE Grassy Rock	6/1/09	1	dry		
057-09.1	NE Grassy Rock	6/8/09	1	dry		
057-09.1	NE Grassy Rock	6/10/09	9	wet		
057-09.1	NE Grassy Rock	6/22/09	6	wet		
057-09.1	NE Grassy Rock	7/20/09	1	dry		
057-09.1	NE Grassy Rock	8/3/09	4	dry		
057-09.1	NE Grassy Rock	8/17/09	4	dry		
057-09.1	NE Grassy Rock	8/24/09	25	wet		
057-09.1	NE Grassy Rock	9/1/09	1	dry		
057-09.1	NE Grassy Rock	10/5/09	5	wet		
057-09.1	NE Grassy Rock	11/3/09	3	wet		
057-09.1	NE Grassy Rock	12/1/09	12	wet		
057-09.1	NE Grassy Rock	12/14/09	19	wet		
057-09.1	NE Grassy Rock	12/28/09	15	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	1/19/10	1	wet	2	NA
057-09.1	NE Grassy Rock	1/27/10	1	wet		
057-09.1	NE Grassy Rock	2/22/10	1	dry		
057-09.1	NE Grassy Rock	3/2/10	1	wet		
057-09.1	NE Grassy Rock	4/4/10	1	dry		
057-09.1	NE Grassy Rock	4/11/10	1	wet		
057-09.1	NE Grassy Rock	5/5/10	11	wet		
057-09.1	NE Grassy Rock	6/9/10	1	wet		
057-09.1	NE Grassy Rock	7/7/10	1	dry		
057-09.1	NE Grassy Rock	7/26/10	4	wet		
057-09.1	NE Grassy Rock	8/4/10	1	dry		
057-09.1	NE Grassy Rock	8/19/10	1	dry		
057-09.1	NE Grassy Rock	8/25/10	1	wet		
057-09.1	NE Grassy Rock	9/13/10	3	dry		
057-09.1	NE Grassy Rock	9/20/10	1	dry		
057-09.1	NE Grassy Rock	9/21/10	1	dry		
057-09.1	NE Grassy Rock	9/29/10	7	wet		
057-09.1	NE Grassy Rock	10/3/10	5	wet		
057-09.1	NE Grassy Rock	11/2/10	2	dry		
057-09.1	NE Grassy Rock	11/18/10	23	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-09.1	NE Grassy Rock	3/15/11	1	dry	3	NA
057-09.1	NE Grassy Rock	4/25/11	5	wet		
057-09.1	NE Grassy Rock	5/9/11	1	dry		
057-09.1	NE Grassy Rock	5/23/11	15	wet		
057-09.1	NE Grassy Rock	6/8/11	2	dry		
057-09.1	NE Grassy Rock	6/22/11	1	wet		
057-09.1	NE Grassy Rock	6/29/11	6	wet		
057-09.1	NE Grassy Rock	7/11/11	3	dry		
057-09.1	NE Grassy Rock	7/19/11	2	dry		
057-09.1	NE Grassy Rock	7/25/11	1	dry		
057-09.1	NE Grassy Rock	8/10/11	28	dry		
057-09.1	NE Grassy Rock	8/17/11	11	dry		
057-09.1	NE Grassy Rock	8/22/11	1	dry		
057-09.1	NE Grassy Rock	9/12/11	7	dry		
057-09.1	NE Grassy Rock	9/19/11	1	dry		
057-10.1	E. Cormorant Reef	1/2/00	4	dry	4	NA
057-10.1	E. Cormorant Reef	2/16/00	2	wet		
057-10.1	E. Cormorant Reef	4/16/00	2	dry		
057-10.1	E. Cormorant Reef	6/22/00	2	dry		
057-10.1	E. Cormorant Reef	7/4/00	8	wet		
057-10.1	E. Cormorant Reef	7/16/00	22	wet		
057-10.1	E. Cormorant Reef	7/30/00	4	wet		
057-10.1	E. Cormorant Reef	8/6/00	2	dry		
057-10.1	E. Cormorant Reef	9/13/00	6	wet		
057-10.1	E. Cormorant Reef	9/17/00	2	wet		
057-10.1	E. Cormorant Reef	11/12/00	22	wet		
057-10.1	E. Cormorant Reef	12/5/00	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	1/9/01	50	wet	5	NA
057-10.1	E. Cormorant Reef	3/25/01	6	wet		
057-10.1	E. Cormorant Reef	5/30/01	4	wet		
057-10.1	E. Cormorant Reef	6/20/01	8	wet		
057-10.1	E. Cormorant Reef	7/12/01	4	wet		
057-10.1	E. Cormorant Reef	7/25/01	2	dry		
057-10.1	E. Cormorant Reef	8/14/01	18	wet		
057-10.1	E. Cormorant Reef	8/19/01	2	dry		
057-10.1	E. Cormorant Reef	9/9/01	2	dry		
057-10.1	E. Cormorant Reef	9/16/01	4	wet		
057-10.1	E. Cormorant Reef	9/23/01	18	wet		
057-10.1	E. Cormorant Reef	9/24/01	6	wet		
057-10.1	E. Cormorant Reef	10/2/01	2	wet		
057-10.1	E. Cormorant Reef	1/6/02	2	dry	4	NA
057-10.1	E. Cormorant Reef	1/27/02	4	dry		
057-10.1	E. Cormorant Reef	3/17/02	2	dry		
057-10.1	E. Cormorant Reef	3/31/02	2	dry		
057-10.1	E. Cormorant Reef	4/21/02	2	wet		
057-10.1	E. Cormorant Reef	5/5/02	2	dry		
057-10.1	E. Cormorant Reef	5/12/02	2	wet		
057-10.1	E. Cormorant Reef	6/9/02	14	wet		
057-10.1	E. Cormorant Reef	6/16/02	51	wet		
057-10.1	E. Cormorant Reef	6/23/02	14	dry		
057-10.1	E. Cormorant Reef	6/30/02	2	dry		
057-10.1	E. Cormorant Reef	8/4/02	2	wet		
057-10.1	E. Cormorant Reef	8/18/02	18	wet		
057-10.1	E. Cormorant Reef	9/8/02	2	dry		
057-10.1	E. Cormorant Reef	9/29/02	2	wet		
057-10.1	E. Cormorant Reef	10/20/02	4	dry		
057-10.1	E. Cormorant Reef	11/3/02	4	dry		
057-10.1	E. Cormorant Reef	12/16/02	28	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	1/13/03	4	dry	6	NA
057-10.1	E. Cormorant Reef	2/24/03	14	wet		
057-10.1	E. Cormorant Reef	3/11/03	2	wet		
057-10.1	E. Cormorant Reef	3/26/03	2	wet		
057-10.1	E. Cormorant Reef	4/13/03	2	wet		
057-10.1	E. Cormorant Reef	4/30/03	2	dry		
057-10.1	E. Cormorant Reef	5/28/03	11	wet		
057-10.1	E. Cormorant Reef	6/8/03	6	wet		
057-10.1	E. Cormorant Reef	6/13/03	51	wet		
057-10.1	E. Cormorant Reef	8/19/03	18	wet		
057-10.1	E. Cormorant Reef	9/10/03	2	wet		
057-10.1	E. Cormorant Reef	9/24/03	50	wet		
057-10.1	E. Cormorant Reef	1/6/04	8	wet	4	NA
057-10.1	E. Cormorant Reef	4/7/04	2	dry		
057-10.1	E. Cormorant Reef	4/29/04	2	dry		
057-10.1	E. Cormorant Reef	6/16/04	2	dry		
057-10.1	E. Cormorant Reef	6/20/04	2	dry		
057-10.1	E. Cormorant Reef	7/7/04	2	wet		
057-10.1	E. Cormorant Reef	7/26/04	2	wet		
057-10.1	E. Cormorant Reef	8/17/04	22	wet		
057-10.1	E. Cormorant Reef	9/12/04	8	wet		
057-10.1	E. Cormorant Reef	9/21/04	51	dry		
057-10.1	E. Cormorant Reef	10/25/04	6	dry		
057-10.1	E. Cormorant Reef	11/7/04	2	wet		
057-10.1	E. Cormorant Reef	12/9/04	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	2/7/05	1	dry		
057-10.1	E. Cormorant Reef	4/6/05	1	dry		
057-10.1	E. Cormorant Reef	5/18/05	1	dry		
057-10.1	E. Cormorant Reef	6/1/05	1	dry		
057-10.1	E. Cormorant Reef	6/20/05	3	dry		
057-10.1	E. Cormorant Reef	7/5/05	1	dry		
057-10.1	E. Cormorant Reef	7/11/05	1	dry		
057-10.1	E. Cormorant Reef	8/3/05	1	dry	2	NA
057-10.1	E. Cormorant Reef	8/17/05	3	wet		
057-10.1	E. Cormorant Reef	9/19/05	1	dry		
057-10.1	E. Cormorant Reef	10/4/05	1	dry		
057-10.1	E. Cormorant Reef	10/26/05	25	wet		
057-10.1	E. Cormorant Reef	10/27/05	17	wet		
057-10.1	E. Cormorant Reef	10/31/05	1	dry		
057-10.1	E. Cormorant Reef	11/14/05	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	1/25/06	1	wet		
057-10.1	E. Cormorant Reef	2/22/06	1	wet		
057-10.1	E. Cormorant Reef	3/22/06	1	dry		
057-10.1	E. Cormorant Reef	5/24/06	1	dry		
057-10.1	E. Cormorant Reef	6/12/06	1	dry		
057-10.1	E. Cormorant Reef	7/10/06	1	dry		
057-10.1	E. Cormorant Reef	8/8/06	1	dry		
057-10.1	E. Cormorant Reef	8/31/06	23	wet		
057-10.1	E. Cormorant Reef	9/5/06	5	wet	2	NA
057-10.1	E. Cormorant Reef	9/6/06	7	wet		
057-10.1	E. Cormorant Reef	9/12/06	3	dry		
057-10.1	E. Cormorant Reef	9/19/06	3	dry		
057-10.1	E. Cormorant Reef	9/28/06	2	dry		
057-10.1	E. Cormorant Reef	10/16/06	1	dry		
057-10.1	E. Cormorant Reef	11/1/06	8	dry		
057-10.1	E. Cormorant Reef	11/15/06	3	dry		
057-10.1	E. Cormorant Reef	12/17/06	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	1/29/07	1	dry		
057-10.1	E. Cormorant Reef	3/7/07	1	dry		
057-10.1	E. Cormorant Reef	3/27/07	1	wet		
057-10.1	E. Cormorant Reef	4/23/07	1	dry		
057-10.1	E. Cormorant Reef	5/23/07	1	dry		
057-10.1	E. Cormorant Reef	6/12/07	1	wet		
057-10.1	E. Cormorant Reef	6/17/07	1	dry		
057-10.1	E. Cormorant Reef	7/8/07	11	dry		
057-10.1	E. Cormorant Reef	7/31/07	4	dry	1	NA
057-10.1	E. Cormorant Reef	8/28/07	1	dry		
057-10.1	E. Cormorant Reef	9/23/07	1	dry		
057-10.1	E. Cormorant Reef	10/16/07	1	dry		
057-10.1	E. Cormorant Reef	10/22/07	5	wet		
057-10.1	E. Cormorant Reef	10/31/07	3	dry		
057-10.1	E. Cormorant Reef	11/5/07	1	dry		
057-10.1	E. Cormorant Reef	12/6/07	1	dry		
057-10.1	E. Cormorant Reef	12/10/07	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	1/8/08	1	dry	2	NA
057-10.1	E. Cormorant Reef	3/3/08	1	dry		
057-10.1	E. Cormorant Reef	4/23/08	1	dry		
057-10.1	E. Cormorant Reef	4/30/08	2	wet		
057-10.1	E. Cormorant Reef	5/14/08	1	dry		
057-10.1	E. Cormorant Reef	5/20/08	1	wet		
057-10.1	E. Cormorant Reef	5/29/08	6	wet		
057-10.1	E. Cormorant Reef	6/18/08	1	wet		
057-10.1	E. Cormorant Reef	6/30/08	8	wet		
057-10.1	E. Cormorant Reef	7/27/08	1	dry		
057-10.1	E. Cormorant Reef	8/4/08	1	wet		
057-10.1	E. Cormorant Reef	8/26/08	1	dry		
057-10.1	E. Cormorant Reef	9/10/08	28	wet		
057-10.1	E. Cormorant Reef	9/17/08	1	dry		
057-10.1	E. Cormorant Reef	10/7/08	1	wet		
057-10.1	E. Cormorant Reef	10/27/08	7	wet		
057-10.1	E. Cormorant Reef	11/24/08	1	dry		
057-10.1	E. Cormorant Reef	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	2/9/09	1	dry	3	NA
057-10.1	E. Cormorant Reef	3/10/09	1	wet		
057-10.1	E. Cormorant Reef	4/22/09	13	wet		
057-10.1	E. Cormorant Reef	5/11/09	1	dry		
057-10.1	E. Cormorant Reef	6/8/09	1	dry		
057-10.1	E. Cormorant Reef	6/10/09	6	wet		
057-10.1	E. Cormorant Reef	6/22/09	2	wet		
057-10.1	E. Cormorant Reef	7/20/09	1	dry		
057-10.1	E. Cormorant Reef	8/3/09	8	dry		
057-10.1	E. Cormorant Reef	8/17/09	2	dry		
057-10.1	E. Cormorant Reef	8/24/09	21	wet		
057-10.1	E. Cormorant Reef	9/1/09	1	dry		
057-10.1	E. Cormorant Reef	10/5/09	2	wet		
057-10.1	E. Cormorant Reef	11/3/09	2	dry		
057-10.1	E. Cormorant Reef	12/14/09	1	wet		
057-10.1	E. Cormorant Reef	12/28/09	24	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-10.1	E. Cormorant Reef	1/19/10	1	wet	2	NA
057-10.1	E. Cormorant Reef	1/27/10	1	wet		
057-10.1	E. Cormorant Reef	2/22/10	1	dry		
057-10.1	E. Cormorant Reef	3/2/10	1	wet		
057-10.1	E. Cormorant Reef	3/18/10	7	wet		
057-10.1	E. Cormorant Reef	4/4/10	8	dry		
057-10.1	E. Cormorant Reef	4/11/10	1	wet		
057-10.1	E. Cormorant Reef	5/5/10	2	wet		
057-10.1	E. Cormorant Reef	6/9/10	1	wet		
057-10.1	E. Cormorant Reef	7/7/10	2	dry		
057-10.1	E. Cormorant Reef	7/26/10	3	wet		
057-10.1	E. Cormorant Reef	8/25/10	4	wet		
057-10.1	E. Cormorant Reef	9/20/10	1	dry		
057-10.1	E. Cormorant Reef	9/21/10	1	dry		
057-10.1	E. Cormorant Reef	9/29/10	5	wet		
057-10.1	E. Cormorant Reef	10/3/10	3	wet		
057-10.1	E. Cormorant Reef	3/15/11	1	dry	2	NA
057-10.1	E. Cormorant Reef	4/25/11	3	wet		
057-10.1	E. Cormorant Reef	5/22/11	2	wet		
057-10.1	E. Cormorant Reef	5/23/11	1	wet		
057-10.1	E. Cormorant Reef	6/8/11	2	dry		
057-10.1	E. Cormorant Reef	6/22/11	1	wet		
057-10.1	E. Cormorant Reef	7/11/11	5	dry		
057-10.1	E. Cormorant Reef	7/19/11	1	dry		
057-10.1	E. Cormorant Reef	7/25/11	1	dry		
057-10.1	E. Cormorant Reef	8/10/11	12	dry		
057-10.1	E. Cormorant Reef	8/17/11	29	dry		
057-10.1	E. Cormorant Reef	8/22/11	1	dry		
057-10.1	E. Cormorant Reef	9/1/11	15	dry		
057-10.1	E. Cormorant Reef	9/12/11	1	dry		
057-10.1	E. Cormorant Reef	9/19/11	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	1/2/00	4	dry	7	3
057-11.0	N"2" Capt. Harbor	1/6/00	2	wet		
057-11.0	N"2" Capt. Harbor	2/16/00	4	wet		
057-11.0	N"2" Capt. Harbor	4/16/00	2	dry		
057-11.0	N"2" Capt. Harbor	5/7/00	8	wet		
057-11.0	N"2" Capt. Harbor	5/17/00	2	wet		
057-11.0	N"2" Capt. Harbor	6/22/00	22	dry		
057-11.0	N"2" Capt. Harbor	7/4/00	8	wet		
057-11.0	N"2" Capt. Harbor	7/16/00	28	wet		
057-11.0	N"2" Capt. Harbor	7/30/00	51	wet		
057-11.0	N"2" Capt. Harbor	8/6/00	28	dry		
057-11.0	N"2" Capt. Harbor	9/13/00	28	wet		
057-11.0	N"2" Capt. Harbor	9/17/00	2	wet		
057-11.0	N"2" Capt. Harbor	11/12/00	50	wet		
057-11.0	N"2" Capt. Harbor	11/29/00	2	wet		
057-11.0	N"2" Capt. Harbor	12/5/00	8	dry		
057-11.0	N"2" Capt. Harbor	1/9/01	14	wet	10	NA
057-11.0	N"2" Capt. Harbor	3/25/01	2	wet		
057-11.0	N"2" Capt. Harbor	4/5/01	2	dry		
057-11.0	N"2" Capt. Harbor	6/20/01	8	wet		
057-11.0	N"2" Capt. Harbor	7/12/01	8	wet		
057-11.0	N"2" Capt. Harbor	7/25/01	6	dry		
057-11.0	N"2" Capt. Harbor	8/14/01	22	wet		
057-11.0	N"2" Capt. Harbor	8/19/01	11	dry		
057-11.0	N"2" Capt. Harbor	9/9/01	11	dry		
057-11.0	N"2" Capt. Harbor	9/16/01	11	wet		
057-11.0	N"2" Capt. Harbor	9/23/01	51	wet		
057-11.0	N"2" Capt. Harbor	9/24/01	28	wet		
057-11.0	N"2" Capt. Harbor	10/2/01	6	wet		
057-11.0	N"2" Capt. Harbor	11/25/01	22	wet		
057-11.0	N"2" Capt. Harbor	12/2/01	18	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	1/6/02	14	dry	6	2
057-11.0	N"2" Capt. Harbor	3/17/02	2	dry		
057-11.0	N"2" Capt. Harbor	3/31/02	2	dry		
057-11.0	N"2" Capt. Harbor	4/21/02	6	wet		
057-11.0	N"2" Capt. Harbor	5/5/02	2	dry		
057-11.0	N"2" Capt. Harbor	5/12/02	2	wet		
057-11.0	N"2" Capt. Harbor	6/9/02	18	wet		
057-11.0	N"2" Capt. Harbor	6/16/02	50	wet		
057-11.0	N"2" Capt. Harbor	6/23/02	2	dry		
057-11.0	N"2" Capt. Harbor	7/22/02	11	dry		
057-11.0	N"2" Capt. Harbor	8/4/02	4	wet		
057-11.0	N"2" Capt. Harbor	8/18/02	36	wet		
057-11.0	N"2" Capt. Harbor	9/8/02	4	dry		
057-11.0	N"2" Capt. Harbor	9/29/02	11	wet		
057-11.0	N"2" Capt. Harbor	10/20/02	18	dry		
057-11.0	N"2" Capt. Harbor	11/3/02	2	dry		
057-11.0	N"2" Capt. Harbor	12/16/02	6	wet		
057-11.0	N"2" Capt. Harbor	1/13/03	2	dry	8	26
057-11.0	N"2" Capt. Harbor	2/24/03	14	wet		
057-11.0	N"2" Capt. Harbor	3/11/03	2	wet		
057-11.0	N"2" Capt. Harbor	3/26/03	2	wet		
057-11.0	N"2" Capt. Harbor	4/13/03	2	wet		
057-11.0	N"2" Capt. Harbor	4/30/03	2	dry		
057-11.0	N"2" Capt. Harbor	5/28/03	4	wet		
057-11.0	N"2" Capt. Harbor	6/8/03	36	wet		
057-11.0	N"2" Capt. Harbor	6/13/03	36	wet		
057-11.0	N"2" Capt. Harbor	7/23/03	51	wet		
057-11.0	N"2" Capt. Harbor	8/19/03	51	wet		
057-11.0	N"2" Capt. Harbor	9/10/03	2	wet		
057-11.0	N"2" Capt. Harbor	9/24/03	51	wet		
057-11.0	N"2" Capt. Harbor	9/30/03	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	1/6/04	2	wet	4	NA
057-11.0	N"2" Capt. Harbor	3/15/04	2	dry		
057-11.0	N"2" Capt. Harbor	4/7/04	2	dry		
057-11.0	N"2" Capt. Harbor	4/29/04	2	dry		
057-11.0	N"2" Capt. Harbor	6/16/04	2	dry		
057-11.0	N"2" Capt. Harbor	6/20/04	6	dry		
057-11.0	N"2" Capt. Harbor	7/7/04	2	wet		
057-11.0	N"2" Capt. Harbor	7/26/04	4	wet		
057-11.0	N"2" Capt. Harbor	8/17/04	28	wet		
057-11.0	N"2" Capt. Harbor	9/12/04	22	wet		
057-11.0	N"2" Capt. Harbor	10/25/04	18	dry		
057-11.0	N"2" Capt. Harbor	11/7/04	14	wet		
057-11.0	N"2" Capt. Harbor	4/6/05	1	dry	2	NA
057-11.0	N"2" Capt. Harbor	5/18/05	1	dry		
057-11.0	N"2" Capt. Harbor	6/1/05	1	dry		
057-11.0	N"2" Capt. Harbor	6/20/05	5	dry		
057-11.0	N"2" Capt. Harbor	7/5/05	2	dry		
057-11.0	N"2" Capt. Harbor	7/11/05	1	dry		
057-11.0	N"2" Capt. Harbor	8/3/05	1	dry		
057-11.0	N"2" Capt. Harbor	8/17/05	12	wet		
057-11.0	N"2" Capt. Harbor	9/19/05	5	dry		
057-11.0	N"2" Capt. Harbor	10/4/05	2	dry		
057-11.0	N"2" Capt. Harbor	10/31/05	1	dry		
057-11.0	N"2" Capt. Harbor	11/14/05	15	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	1/25/06	3	wet	3	NA
057-11.0	N"2" Capt. Harbor	2/22/06	1	wet		
057-11.0	N"2" Capt. Harbor	3/22/06	1	dry		
057-11.0	N"2" Capt. Harbor	5/24/06	1	dry		
057-11.0	N"2" Capt. Harbor	6/12/06	1	dry		
057-11.0	N"2" Capt. Harbor	7/10/06	12	dry		
057-11.0	N"2" Capt. Harbor	8/8/06	1	dry		
057-11.0	N"2" Capt. Harbor	9/19/06	3	dry		
057-11.0	N"2" Capt. Harbor	9/28/06	11	dry		
057-11.0	N"2" Capt. Harbor	10/16/06	1	dry		
057-11.0	N"2" Capt. Harbor	11/1/06	19	dry		
057-11.0	N"2" Capt. Harbor	11/15/06	13	dry		
057-11.0	N"2" Capt. Harbor	11/20/06	2	dry		
057-11.0	N"2" Capt. Harbor	12/17/06	2	dry		
057-11.0	N"2" Capt. Harbor	1/29/07	3	dry	3	NA
057-11.0	N"2" Capt. Harbor	3/7/07	1	dry		
057-11.0	N"2" Capt. Harbor	3/27/07	1	wet		
057-11.0	N"2" Capt. Harbor	4/23/07	1	dry		
057-11.0	N"2" Capt. Harbor	5/23/07	14	dry		
057-11.0	N"2" Capt. Harbor	6/12/07	2	wet		
057-11.0	N"2" Capt. Harbor	6/17/07	2	dry		
057-11.0	N"2" Capt. Harbor	7/8/07	15	dry		
057-11.0	N"2" Capt. Harbor	7/31/07	2	dry		
057-11.0	N"2" Capt. Harbor	8/28/07	2	dry		
057-11.0	N"2" Capt. Harbor	9/23/07	11	dry		
057-11.0	N"2" Capt. Harbor	10/16/07	2	dry		
057-11.0	N"2" Capt. Harbor	10/22/07	20	wet		
057-11.0	N"2" Capt. Harbor	10/31/07	8	dry		
057-11.0	N"2" Capt. Harbor	11/5/07	1	dry		
057-11.0	N"2" Capt. Harbor	12/6/07	1	dry		
057-11.0	N"2" Capt. Harbor	12/10/07	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	1/8/08	1	dry		
057-11.0	N"2" Capt. Harbor	3/3/08	1	dry		
057-11.0	N"2" Capt. Harbor	4/23/08	1	dry		
057-11.0	N"2" Capt. Harbor	4/30/08	1	wet		
057-11.0	N"2" Capt. Harbor	5/14/08	2	dry		
057-11.0	N"2" Capt. Harbor	5/20/08	1	wet		
057-11.0	N"2" Capt. Harbor	5/29/08	1	wet		
057-11.0	N"2" Capt. Harbor	6/18/08	10	wet		
057-11.0	N"2" Capt. Harbor	6/30/08	6	wet		
057-11.0	N"2" Capt. Harbor	7/27/08	30	dry	3	NA
057-11.0	N"2" Capt. Harbor	8/4/08	1	wet		
057-11.0	N"2" Capt. Harbor	8/26/08	3	dry		
057-11.0	N"2" Capt. Harbor	9/10/08	21	wet		
057-11.0	N"2" Capt. Harbor	9/17/08	3	dry		
057-11.0	N"2" Capt. Harbor	10/7/08	4	wet		
057-11.0	N"2" Capt. Harbor	10/27/08	16	wet		
057-11.0	N"2" Capt. Harbor	11/2/08	1	dry		
057-11.0	N"2" Capt. Harbor	11/24/08	1	dry		
057-11.0	N"2" Capt. Harbor	12/29/08	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	2/9/09	1	dry	3	NA
057-11.0	N"2" Capt. Harbor	3/10/09	1	wet		
057-11.0	N"2" Capt. Harbor	4/22/09	1	wet		
057-11.0	N"2" Capt. Harbor	5/11/09	1	dry		
057-11.0	N"2" Capt. Harbor	6/8/09	1	dry		
057-11.0	N"2" Capt. Harbor	6/10/09	4	wet		
057-11.0	N"2" Capt. Harbor	6/22/09	7	wet		
057-11.0	N"2" Capt. Harbor	7/20/09	12	dry		
057-11.0	N"2" Capt. Harbor	8/3/09	1	dry		
057-11.0	N"2" Capt. Harbor	8/17/09	2	dry		
057-11.0	N"2" Capt. Harbor	8/24/09	38	wet		
057-11.0	N"2" Capt. Harbor	9/1/09	1	dry		
057-11.0	N"2" Capt. Harbor	10/5/09	3	wet		
057-11.0	N"2" Capt. Harbor	11/3/09	5	wet		
057-11.0	N"2" Capt. Harbor	12/1/09	3	wet		
057-11.0	N"2" Capt. Harbor	12/14/09	4	wet		
057-11.0	N"2" Capt. Harbor	12/28/09	4	wet		
057-11.0	N"2" Capt. Harbor	1/19/10	2	wet	2	NA
057-11.0	N"2" Capt. Harbor	1/27/10	1	wet		
057-11.0	N"2" Capt. Harbor	2/22/10	1	dry		
057-11.0	N"2" Capt. Harbor	3/2/10	1	wet		
057-11.0	N"2" Capt. Harbor	4/4/10	2	dry		
057-11.0	N"2" Capt. Harbor	4/11/10	2	wet		
057-11.0	N"2" Capt. Harbor	5/5/10	1	wet		
057-11.0	N"2" Capt. Harbor	6/9/10	3	wet		
057-11.0	N"2" Capt. Harbor	7/7/10	2	dry		
057-11.0	N"2" Capt. Harbor	7/26/10	2	wet		
057-11.0	N"2" Capt. Harbor	8/25/10	10	wet		
057-11.0	N"2" Capt. Harbor	9/20/10	1	dry		
057-11.0	N"2" Capt. Harbor	9/21/10	8	dry		
057-11.0	N"2" Capt. Harbor	10/3/10	27	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-11.0	N"2" Capt. Harbor	3/15/11	1	dry	5	NA
057-11.0	N"2" Capt. Harbor	4/25/11	1	wet		
057-11.0	N"2" Capt. Harbor	5/23/11	3	wet		
057-11.0	N"2" Capt. Harbor	6/8/11	2	dry		
057-11.0	N"2" Capt. Harbor	6/22/11	16	wet		
057-11.0	N"2" Capt. Harbor	7/11/11	6	dry		
057-11.0	N"2" Capt. Harbor	7/19/11	18	dry		
057-11.0	N"2" Capt. Harbor	7/25/11	2	dry		
057-11.0	N"2" Capt. Harbor	8/17/11	48	dry		
057-11.0	N"2" Capt. Harbor	8/22/11	2	dry		
057-11.0	N"2" Capt. Harbor	9/12/11	5	dry		
057-11.0	N"2" Capt. Harbor	9/19/11	7	dry		
057-14.0	Red Rock	2/16/00	6	wet	10	8
057-14.0	Red Rock	4/16/00	6	wet		
057-14.0	Red Rock	6/22/00	6	dry		
057-14.0	Red Rock	7/4/00	4	wet		
057-14.0	Red Rock	7/16/00	51	wet		
057-14.0	Red Rock	7/30/00	51	wet		
057-14.0	Red Rock	8/6/00	8	dry		
057-14.0	Red Rock	9/13/00	2	wet		
057-14.0	Red Rock	9/17/00	8	wet		
057-14.0	Red Rock	11/12/00	28	wet		
057-14.0	Red Rock	12/5/00	28	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	3/25/01	2	wet	5	7
057-14.0	Red Rock	4/5/01	2	dry		
057-14.0	Red Rock	6/20/01	14	wet		
057-14.0	Red Rock	7/12/01	2	wet		
057-14.0	Red Rock	8/14/01	51	wet		
057-14.0	Red Rock	8/19/01	2	dry		
057-14.0	Red Rock	9/9/01	2	dry		
057-14.0	Red Rock	9/16/01	50	wet		
057-14.0	Red Rock	9/23/01	18	wet		
057-14.0	Red Rock	9/24/01	6	wet		
057-14.0	Red Rock	10/2/01	2	wet		
057-14.0	Red Rock	11/25/01	2	wet		
057-14.0	Red Rock	1/6/02	6	dry	4	NA
057-14.0	Red Rock	3/17/02	2	dry		
057-14.0	Red Rock	3/31/02	2	dry		
057-14.0	Red Rock	4/21/02	2	wet		
057-14.0	Red Rock	5/12/02	4	wet		
057-14.0	Red Rock	6/9/02	11	wet		
057-14.0	Red Rock	6/16/02	28	wet		
057-14.0	Red Rock	6/23/02	2	dry		
057-14.0	Red Rock	6/30/02	2	dry		
057-14.0	Red Rock	7/22/02	2	dry		
057-14.0	Red Rock	8/4/02	2	wet		
057-14.0	Red Rock	8/18/02	28	wet		
057-14.0	Red Rock	9/8/02	2	dry		
057-14.0	Red Rock	9/29/02	2	wet		
057-14.0	Red Rock	10/20/02	11	dry		
057-14.0	Red Rock	11/3/02	2	dry		
057-14.0	Red Rock	12/16/02	14	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	1/13/03	2	dry	6	11
057-14.0	Red Rock	2/24/03	2	wet		
057-14.0	Red Rock	3/11/03	4	wet		
057-14.0	Red Rock	3/26/03	4	wet		
057-14.0	Red Rock	4/13/03	2	wet		
057-14.0	Red Rock	4/30/03	2	dry		
057-14.0	Red Rock	5/28/03	7	wet		
057-14.0	Red Rock	6/8/03	51	wet		
057-14.0	Red Rock	6/23/03	51	wet		
057-14.0	Red Rock	7/23/03	51	wet		
057-14.0	Red Rock	8/19/03	28	wet		
057-14.0	Red Rock	9/10/03	2	wet		
057-14.0	Red Rock	9/24/03	8	wet		
057-14.0	Red Rock	11/3/03	2	dry		
057-14.0	Red Rock	1/6/04	11	wet	5	NA
057-14.0	Red Rock	4/29/04	2	dry		
057-14.0	Red Rock	6/16/04	2	dry		
057-14.0	Red Rock	6/20/04	6	dry		
057-14.0	Red Rock	7/7/04	2	wet		
057-14.0	Red Rock	7/26/04	4	wet		
057-14.0	Red Rock	8/17/04	4	wet		
057-14.0	Red Rock	9/12/04	6	wet		
057-14.0	Red Rock	9/21/04	14	dry		
057-14.0	Red Rock	10/25/04	6	dry		
057-14.0	Red Rock	11/7/04	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	4/6/05	1	dry	1	NA
057-14.0	Red Rock	5/18/05	1	dry		
057-14.0	Red Rock	6/1/05	1	dry		
057-14.0	Red Rock	6/20/05	2	dry		
057-14.0	Red Rock	7/5/05	2	dry		
057-14.0	Red Rock	7/11/05	1	dry		
057-14.0	Red Rock	8/3/05	1	dry		
057-14.0	Red Rock	8/17/05	5	wet		
057-14.0	Red Rock	9/19/05	5	dry		
057-14.0	Red Rock	10/4/05	1	dry		
057-14.0	Red Rock	10/31/05	1	dry		
057-14.0	Red Rock	11/14/05	1	dry		
057-14.0	Red Rock	1/25/06	2	wet	3	NA
057-14.0	Red Rock	2/22/06	1	wet		
057-14.0	Red Rock	3/22/06	1	dry		
057-14.0	Red Rock	5/24/06	1	dry		
057-14.0	Red Rock	6/12/06	5	dry		
057-14.0	Red Rock	7/10/06	1	dry		
057-14.0	Red Rock	8/8/06	3	dry		
057-14.0	Red Rock	9/19/06	2	dry		
057-14.0	Red Rock	9/28/06	2	dry		
057-14.0	Red Rock	10/16/06	1	dry		
057-14.0	Red Rock	11/1/06	8	dry		
057-14.0	Red Rock	11/15/06	28	dry		
057-14.0	Red Rock	12/17/06	9	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	1/29/07	2	dry		
057-14.0	Red Rock	3/7/07	1	dry		
057-14.0	Red Rock	3/27/07	1	wet		
057-14.0	Red Rock	4/23/07	1	dry		
057-14.0	Red Rock	5/23/07	1	dry		
057-14.0	Red Rock	6/12/07	5	wet		
057-14.0	Red Rock	7/8/07	8	dry		
057-14.0	Red Rock	7/31/07	6	dry	3	NA
057-14.0	Red Rock	8/28/07	1	dry		
057-14.0	Red Rock	9/23/07	6	dry		
057-14.0	Red Rock	10/16/07	6	dry		
057-14.0	Red Rock	10/22/07	10	wet		
057-14.0	Red Rock	10/31/07	4	dry		
057-14.0	Red Rock	12/6/07	7	dry		
057-14.0	Red Rock	12/10/07	9	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	1/8/08	1	dry	3	NA
057-14.0	Red Rock	3/3/08	1	dry		
057-14.0	Red Rock	4/23/08	1	dry		
057-14.0	Red Rock	4/30/08	2	wet		
057-14.0	Red Rock	5/14/08	1	dry		
057-14.0	Red Rock	5/20/08	3	wet		
057-14.0	Red Rock	5/29/08	6	wet		
057-14.0	Red Rock	6/18/08	4	wet		
057-14.0	Red Rock	6/30/08	14	wet		
057-14.0	Red Rock	7/27/08	5	dry		
057-14.0	Red Rock	8/4/08	10	wet		
057-14.0	Red Rock	8/26/08	1	dry		
057-14.0	Red Rock	9/10/08	14	wet		
057-14.0	Red Rock	9/17/08	2	dry		
057-14.0	Red Rock	10/7/08	4	wet		
057-14.0	Red Rock	10/27/08	12	wet		
057-14.0	Red Rock	11/24/08	6	dry		
057-14.0	Red Rock	12/29/08	4	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	2/9/09	1	dry	3	3
057-14.0	Red Rock	3/10/09	1	wet		
057-14.0	Red Rock	4/22/09	9	wet		
057-14.0	Red Rock	5/11/09	1	dry		
057-14.0	Red Rock	6/8/09	1	dry		
057-14.0	Red Rock	6/10/09	12	wet		
057-14.0	Red Rock	6/22/09	38	wet		
057-14.0	Red Rock	7/20/09	1	dry		
057-14.0	Red Rock	8/3/09	1	dry		
057-14.0	Red Rock	8/17/09	1	dry		
057-14.0	Red Rock	8/24/09	43	wet		
057-14.0	Red Rock	9/1/09	1	dry		
057-14.0	Red Rock	10/5/09	3	wet		
057-14.0	Red Rock	11/3/09	7	wet		
057-14.0	Red Rock	12/1/09	3	wet		
057-14.0	Red Rock	12/14/09	29	wet		
057-14.0	Red Rock	1/19/10	2	wet	2	NA
057-14.0	Red Rock	1/27/10	6	wet		
057-14.0	Red Rock	2/22/10	1	dry		
057-14.0	Red Rock	3/2/10	1	wet		
057-14.0	Red Rock	4/4/10	1	dry		
057-14.0	Red Rock	4/11/10	1	wet		
057-14.0	Red Rock	5/5/10	5	wet		
057-14.0	Red Rock	6/9/10	3	wet		
057-14.0	Red Rock	7/7/10	1	dry		
057-14.0	Red Rock	7/26/10	2	wet		
057-14.0	Red Rock	8/25/10	3	wet		
057-14.0	Red Rock	9/20/10	1	dry		
057-14.0	Red Rock	9/21/10	1	dry		
057-14.0	Red Rock	10/3/10	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I) with annual geometric means and reduction goals for samples (continued)

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
057-14.0	Red Rock	3/15/11	1	dry		
057-14.0	Red Rock	4/25/11	2	wet		
057-14.0	Red Rock	6/8/11	1	dry		
057-14.0	Red Rock	6/22/11	6	wet		
057-14.0	Red Rock	7/11/11	2	dry		
057-14.0	Red Rock	7/19/11	37	dry		
057-14.0	Red Rock	7/25/11	1	dry	3	NA
057-14.0	Red Rock	8/3/11	1	dry		
057-14.0	Red Rock	8/10/11	25	dry		
057-14.0	Red Rock	8/17/11	5	dry		
057-14.0	Red Rock	8/22/11	5	dry		
057-14.0	Red Rock	9/12/11	1	dry		
057-14.0	Red Rock	9/19/11	3	dry		

Shaded cells indicate an exceedance of water quality criteria

†Average of two duplicate samples

**** Weather conditions for selected data taken from Hartford because local station had missing data**

***Indicates geometric mean and 90% less than values used to calculate the percent reduction**

Wet and dry weather fecal coliform (colonies/100 mL) geometric mean values for all monitoring stations on Segment 12: LIS WB-Midshore – Captain Harbor (CT-W3_015-I)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-08.1	Great Captain Rocks	2000-2011	87	96	6	9	4
057-08.2	S. Bowers Island	2000-2011	87	107	4	5	3
057-08.3	between Jones Rock and Great Capt.	2000-2011	88	98	3	5	2
057-08.6	Four Foot Rocks	2000-2011	90	105	3	4	2
057-08.7	S. Grassy Rock	2000-2011	89	99	4	6	2
057-08.8	S. Otter Rocks	2000-2011	87	99	4	6	3
057-09.0	NE Shell Island	2000-2011	88	97	4	6	3
057-09.1	NE Grassy Rock	2000-2011	90	104	3	6	2
057-10.1	E. Cormorant Reef	2000-2011	86	96	3	4	2
057-11.0	N"2" Capt. Harbor	2000-2011	85	94	4	6	3
057-14.0	Red Rock	2000-2011	78	88	4	6	2
Shaded cells indicate an exceedance of water quality criteria							

Rainfall data listed in the table below were reported in Stamford by the National Oceanic and Atmospheric Administration (NOAA). When rainfall data was missing from Stamford, rainfall data reported at Tweed New Haven Airport was used.

Table 25: Segment 13 LIS WB Inner-Greenwich Harbor Bacteria Data

***Waterbody ID*:** CT-W1_021-SB

***Characteristics*:** Saltwater, Class SB

***Impairment*:** Commercial Shellfishing

***Water Quality Criteria for fecal coliform*:**

Geometric Mean: 88 colonies/100 ml

90% of Samples Less Than: 260 colonies/100 ml

***Percent reduction to meet TMDL*:**

Geometric Mean: NA

90% of Samples Less Than: NA

Data: 2010 – 2012 from DA/BA sampling efforts, 2014 TMDL cycle

Single sample fecal coliform data (colonies/100mL) for all monitoring stations on Segment 13 LIS WB Inner-Greenwich Harbor, Greenwich (CT-W1_021-SB) with annual geometric means and reduction goals for samples.

Station Name	Station Location	Date	Results	Wet/Dry	Geomean	Reduction of Exceeding Samples
057-12.0	South of Grass Island WPCF at outfall pipe	1/27/2010	6	Dry	5.56	NA
057-12.0	South of Grass Island WPCF at outfall pipe	3/2/2010	11	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	4/11/2010	12	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	5/5/2010	2	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	6/9/2010	3	Wet		

Station Name	Station Location	Date	Results	Wet/Dry	Geomean	Reduction of Exceeding Samples
057-12.0	South of Grass Island WPCF at outfall pipe	8/25/2010	16	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	9/21/2010	12	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	10/3/2010	1	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	4/25/2011	16	Dry	20.67	NA
057-12.0	South of Grass Island WPCF at outfall pipe	5/23/2011	39	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	6/22/2011	9	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	7/19/2011	81	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	8/3/2011	35	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	8/10/2011	31	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	8/17/2011	43	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	9/12/2011	15	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	10/3/2011	13	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	10/24/2011	7	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	10/31/2011	42	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	11/21/2011	5	Dry		

Station Name	Station Location	Date	Results	Wet/Dry	Geomean	Reduction of Exceeding Samples
057-12.0	South of Grass Island WPCF at outfall pipe	1/16/2012	12	Wet	6.07	NA
057-12.0	South of Grass Island WPCF at outfall pipe	2/27/2012	1	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	4/25/2012	2	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	5/23/2012	13	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	6/7/2012	1	Dry		
057-12.0	South of Grass Island WPCF at outfall pipe	10/3/2012	81	Wet		
057-12.0	South of Grass Island WPCF at outfall pipe	10/23/2012	12	Dry		

Wet and dry weather geometric mean values for all monitoring stations on segment: LIS WB Inner-Greenwich Harbor, Greenwich (CT-W1_021-SB)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
057-12.0	South of Grass Island WPCF at outfall pipe	2010-2012	9	18	10.2	18.7	7.5

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DOCUMENT REVISION HISTORY: ESTUARY 2-GREENWICH-STAMFORD TMDL

February 2019 Revision: Segment 13: LIS WB Inner-Greenwich Harbor (CT-W1_021-SB) was added to the TMDL along with Connecticut Department of Agriculture/Bureau of Aquaculture (DA/BA) data from Station 057-12.0 listed in Table 25. Bacteria monitoring indicates attainment with water quality goals but this location has an administrative closure to shellfishing due to the outfall of the Water Pollution Control Facility and a marina in close proximity. The only changes made to the document were those needed to add the additional segment and updated website information or DEEP program information when necessary. The 2012 tables and the maps were updated also.

Date	Segments covered: impaired designated use
September 2012	CT-W1_022-SB: Recreation & Shellfishing CT-W2_018: Shellfishing CT-W2_019: Shellfishing CT-W2_020: Shellfishing CT-W2_021: Shellfishing CT-W2_022: Shellfishing CT-W2_024: Recreation & Shellfishing CT-W2_025: Shellfishing CT-W3_011: Shellfishing CT-W3_012: Shellfishing CT-W3_013: Shellfishing CT-W3_015-I: Shellfishing
February 2019	ADDED CT-W1_021-SB: Shellfishing Remains the same: CT-W1_022-SB: Recreation & Shellfishing CT-W2_018: Shellfishing CT-W2_019: Shellfishing CT-W2_020: Shellfishing CT-W2_021: Shellfishing CT-W2_022: Shellfishing CT-W2_024: Recreation & Shellfishing CT-W2_025: Shellfishing CT-W3_011: Shellfishing CT-W3_012: Shellfishing CT-W3_013: Shellfishing CT-W3_015-I: Shellfishing

Estuary 15: Westbrook

Watershed Summary

WATERSHED DESCRIPTION AND MAPS

The Westbrook Estuary (Estuary 15) covers an area of approximately 6,884 acres along the coast of south central Connecticut. These impaired segments are located in the central portion of Long Island Sound (LIS). All of the impaired segments in this estuary are located in the municipality of Westbrook, CT with the headwaters of the rivers in Clinton.

The Westbrook Estuary includes five segments impaired for direct shellfish harvesting due to elevated bacteria levels. These segments were assessed by Connecticut Department of Energy and Environmental Protection (CT DEEP) and included in the CT 2016 303(d) list of impaired waterbodies. Some segments in the estuary are currently unassessed as of the writing of this document. This does not mean there are no potential issues on these segments, but indicates a lack of current data to evaluate the segments as part of the assessment process. An excerpt of the Integrated Water Quality Report is included in Table 1 (CT DEEP, 2016).

Impaired Segments

Segment 1: LIS CB Inner - Patchogue And Menunketesuck Rivers (CT-C1_001) is in the central portion of LIS Inner Estuary, Patchogue and Menunketesuck Rivers from mouths at Grove Beach Point, US to saltwater limits just above I95 crossing, and at I95 crossing respectively, in Westbrook.

Segment 2: LIS CB Shore - Westbrook Harbor (East), Westbrook (CT-C2_001) is in the central portion of LIS from Fiske Lane to Old Saltworks Road (includes Middle Beach), out approximately 1000 ft offshore in Westbrook.

Segment 3: LIS CB Shore – Westbrook Harbor (CT-C2_002) is in the central portion of LIS from Portside Drive near Patchogue River outlet to Fiske Lane (includes Westbrook Town Beach), out approximately 1000 ft offshore in Westbrook.

Impaired Segment Facts

Impaired Segments, Classifications, and Areas (square miles):

Segment 1: LIS CB Inner - Patchogue and Menunketesuck Rivers (CT-C1_001); SA; 0.182

Segment 2: LIS CB Shore - Westbrook Harbor (East), Westbrook (CT-C2_001); SA; 0.244

Segment 3: LIS CB Shore - Westbrook Harbor (West), Westbrook (CT-C2_002); SA; 0.231

Segment 4: LIS CB Midshore - Westbrook Harbor, Westbrook (*CT-C3_001*); SA; 2.692

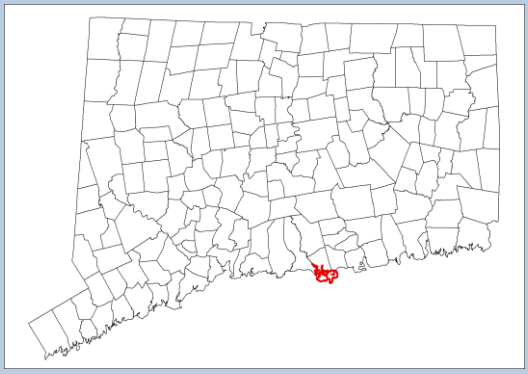
Segment 5: LIS EB Midshore - Westbrook (*CT-E3_012*); SA; 7.407

Municipalities: Westbrook

Designated Use Impairments: Shellfish

MS4 Applicable? Yes

Applicable Season: Year Round



Segment 4: LIS CB Midshore - Westbrook Harbor, (CT-C3_001) is in the central portion of LIS from approximately 1000 ft offshore (Westbrook Harbor), out to 50 ft contour and basin boundary separating Eastern/ Central.

Segment 5: LIS EB Midshore - Westbrook - Outer Westbrook Harbor (CT-E3_012) Eastern portion of LIS from approximately 1000 ft offshore Old Kelsey Point (outer Westbrook Harbor), out to 50 ft contour.

These 5 impaired segments of the Westbrook Estuary have a water quality classification of SA. Designated uses include habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of direct shellfishing.

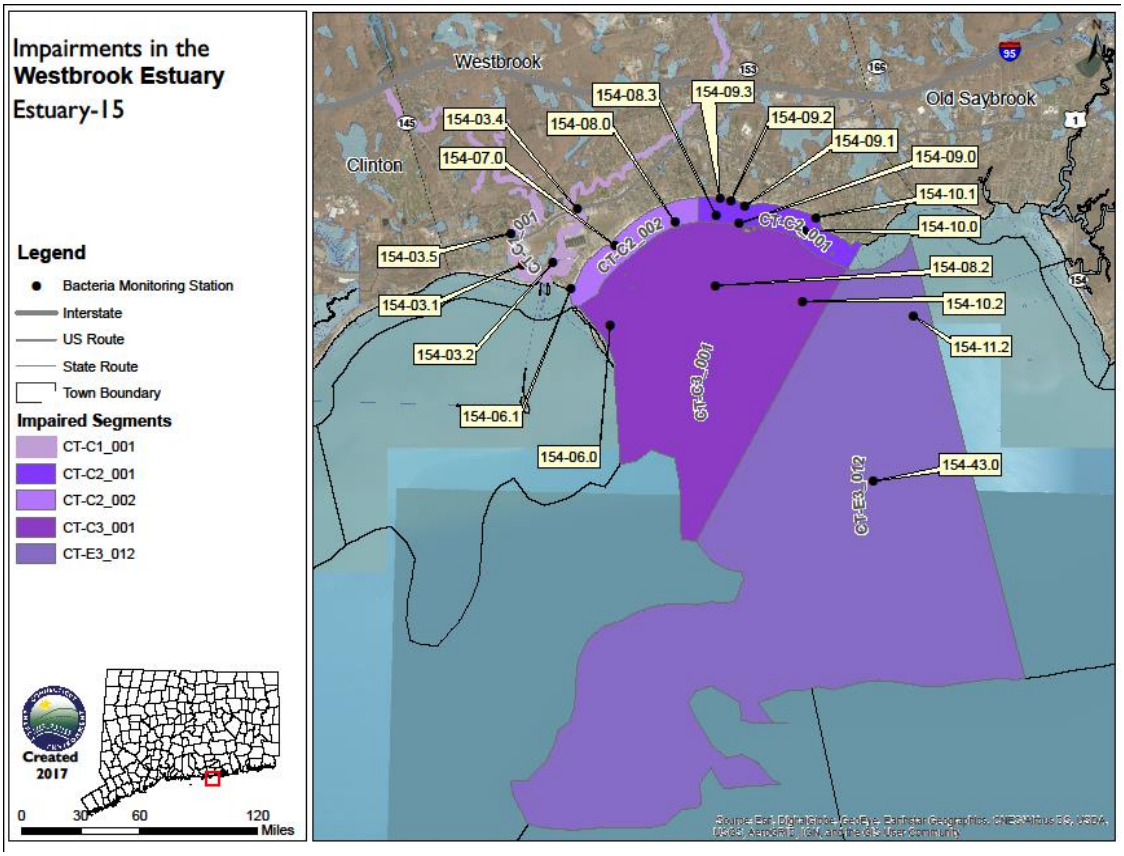
Table 1: Impaired segments in the Westbrook Estuary from the Connecticut 2016 Integrated Water Quality Report

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Fish Consumption	Direct Shellfish	Commercial Shellfish
CT-C1_001	LIS CB Inner - Patchogue And Menunketesuck Rivers	Central portion of LIS, Inner Estuary, Patchogue and Menunketesuck Rivers from mouths at Grove Beach Point, US to saltwater limits just above I95 crossing, and at I95 crossing respectively, Westbrook.	0.182	U	U	FULL	NOT	///
CT-C2_001	LIS CB Shore - Westbrook Harbor (East), Westbrook	Central portion of LIS from Fiske Lane to Old Saltworks Road (includes Middle Beach), out approximately 1000 ft offshore, Westbrook.	0.244	U	FULL	FULL	NOT	///
CT-C2_002	LIS CB Shore - Westbrook Harbor (West), Westbrook	Central portion of LIS from Portside Drive near Patchogue River outlet to Fiske Lane (includes Westbrook Town Beach), out approximately 1000 ft offshore, Westbrook.	0.231	U	FULL	FULL	NOT	///

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Fish Consumption	Direct Shellfish	Commercial Shellfish
CT-C3_001	LIS CB Midshore - Westbrook Harbor, Westbrook	Central portion of LIS from approximately 1000 ft offshore (Westbrook Harbor), out to 50 ft contour and basin boundary separating Eastern/ Central.	2.692	FULL	U	FULL	NOT	///
CT-E3_012	LIS EB Midshore - Westbrook	See Map for Boundaries. Eastern portion of LIS from approximately 1000 ft offshore Old Kelsey Point (outer Westbrook Harbor), out to 50 ft contour. Odd shape due to 50 ft contour.	7.407	FULL	U	FULL	NOT	///

Shaded cells indicate impaired segment addressed in this TMDL
FULL = Designated Use Fully Supported
NOT = Designated Use Not Supported
U = Unassessed
/// = Not Applicable to Segment

Figure 1: GIS map featuring general information for impaired segments in the Westbrook Estuary



Shellfish Bed Classifications, Closures, and Lease Locations

The Connecticut Department of Agriculture/Bureau of Aquaculture (CT DA/BA) is responsible for regulating shellfish harvesting (www.ct.gov/doag/cwp/view.asp?a=1369&Q=259170). A shellfish growing area is defined by CT DA/BA as any area that supports or could support the growth and/or propagation of molluscan shellstock. Shellfish are defined by CT DA/BA as oysters, clams, mussels, and scallops, either shucked or in the shell, fresh or frozen, whole or in part. All shellfish growing areas are classified by CT DA/BA in accordance with the Interstate Shellfish Sanitation Conference (ISSC) National Shellfish Sanitation Program Model Ordinance (NSSP-MO) and CT General Statutes Chapter 491, §26-192e. These classifications, summarized below, are established to minimize health risks and may restrict the take and use of shellfish from some areas. They are based on fecal coliform bacteria standards as provided in the NSSP-MO (Interstate Shellfish Sanitation Conference, 2007). Any shellfish area, regardless of classification, may be temporarily closed to all activities when a potential public health emergency exists as a result of a storm event, flooding, sewage, chemical, or petroleum discharges, or a hazardous algal bloom.

Shellfish harvesting has been divided into two designated uses as specified in the Connecticut Water Quality Standards (WQS: shellfish harvesting suitable for direct human consumption (Class SA waters), and shellfish harvesting suitable for commercial operations requiring depuration or relay (Class SB waters). The impaired segments in the Westbrook Estuary are Class SA waters.

Shellfish classification areas in the Westbrook Estuary are shown in Figure 2. The following classifications for shellfish growing areas are defined by CT DA/BA:

APPROVED AREA: A classification used to identify a growing area that is safe for the direct marketing or consumption of shellfish. An area may be classified as Approved when a sanitary survey finds that there is no contamination from pathogenic organisms, poisonous or deleterious substances, marine biotoxins, or bacteria concentrations exceeding the bacteriological standards for a growing area in this classification as set forth in the NSSP MO. The water quality in the growing area shall also meet the bacteriological standards for an Approved classification.

CONDITIONALLY APPROVED AREA: Is a classification used to identify a growing area that is safe for the direct, marketing or consumption of shellfish when the area is in the open status. The area must meet the criteria for Approved classification when the area is in the open status, and meets the criteria for the restricted classification in the closed status. An area may be classified as Conditionally Approved when a sanitary survey finds that the area can remain in the open status for a reasonable period of time, the factors impacting the area are known and predictable and do not preclude a reasonable management approach, and the water quality correlates with the environmental conditions or other factors affecting the distribution of pollutants into the growing area. Each Conditionally Approved growing area must have a written management plan that is adhered to by all responsible parties.

CONDITIONALLY APPROVED SEASONAL AREA: Conditionally Approved Seasonal areas are closed under certain seasonal conditions, either due to the operations of marinas or mooring fields, or because the area may be subject to elevated bacteria levels during certain times of the year.

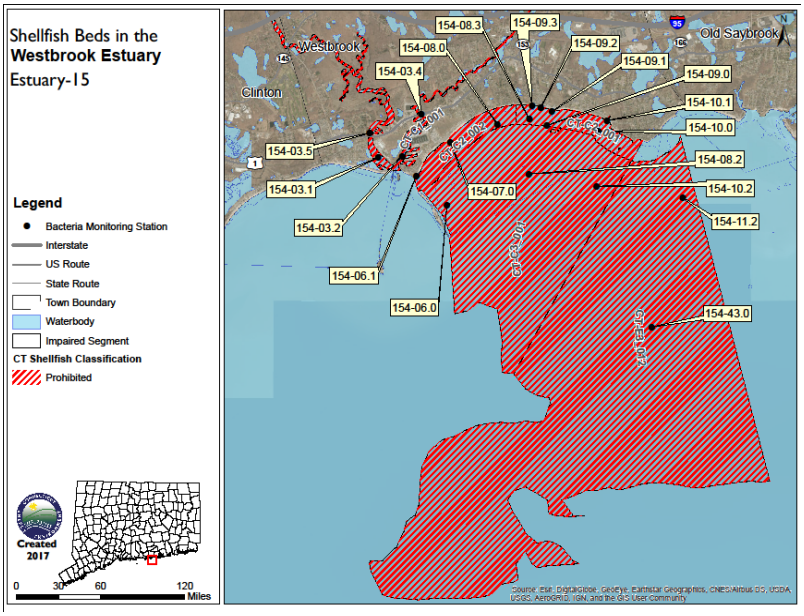
RESTRICTED: A growing area in which the sanitary survey finds there are levels of fecal pollution, human pathogens, or poisonous or deleterious substances that can be reduced by relaying the shellstock to Approved or Conditionally Approved waters for natural cleansing or depuration. Shellfish from these areas may not be directly harvested for market or consumption.

CONDITIONALLY RESTRICTED: Is a classification used to identify a growing area where a sanitary survey has found that the area meets the criteria for Restricted classification when the area is in the open status and meets the criteria for Prohibited classification when the area is in the closed status. Each Conditionally Restricted growing area must have a written management plan that designates whether harvested shellfish are relayed or depurated. Shellfish may only be harvested from Conditionally Restricted areas by special license, and may not be directly harvested for market or consumption.

PROHIBITED: Is a classification used to identify a growing area where there has been no current sanitary survey or where a sanitary survey has found that the area is adjacent to a sewage treatment plant or other point source outfall with public health significance; pollution sources may unpredictably contaminate the growing area; the growing area is contaminated with fecal waste so that the shellfish may be vectors for disease microorganisms; and/or that the concentration of biotoxin is sufficient to cause a public health risk. Shellfish may not be harvested from Prohibited areas except for seed oystering or depletion of the areas.

As discussed above and shown in Table 1, Segments 1 – 5 did not meet their designated use for shellfish harvesting for direct consumption due to bacteria (Table 1). Shellfish beds in Westbrook are closed and classified as Prohibited.

Figure 2: GIS map featuring Shellfish Bed Classifications and Closures for the impaired segments in the Westbrook Estuary



Shellfish Bed Lease Locations

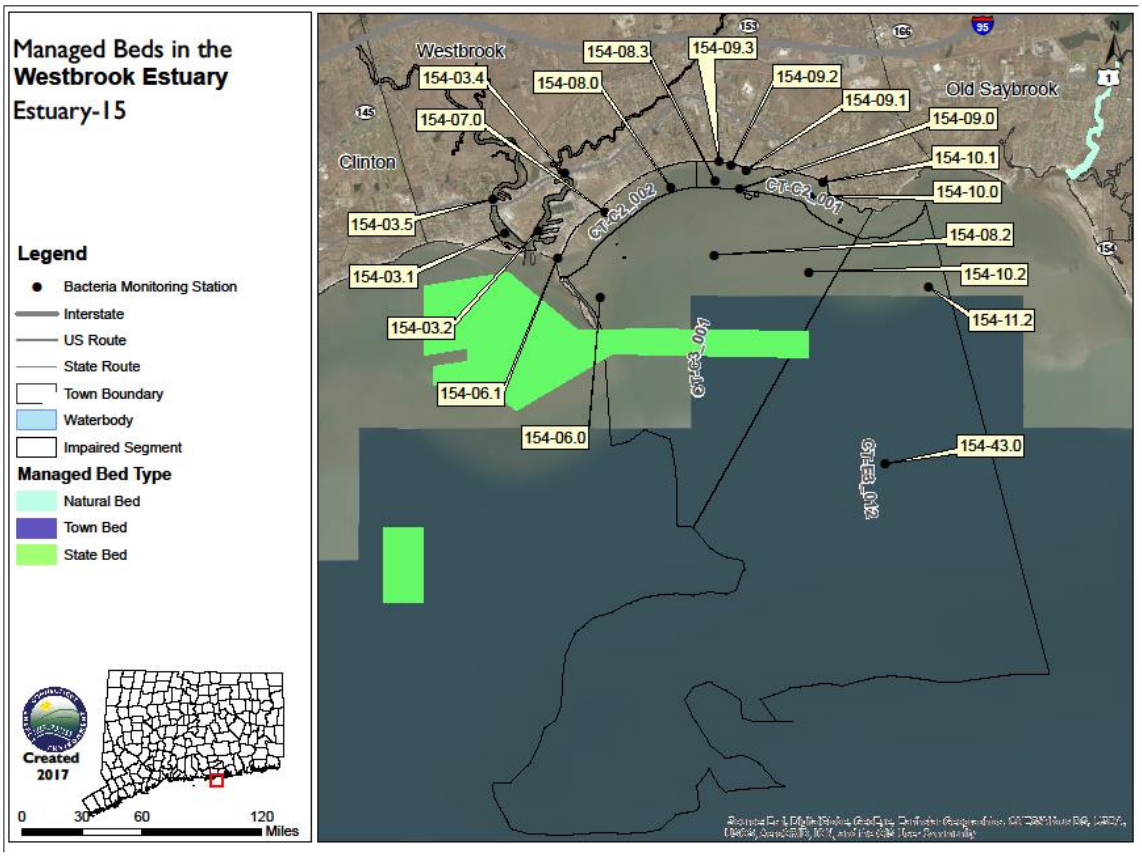
Shellfish beds in the Westbrook Estuary are also classified by their management (Figure 3). CT DA/BA defines these areas as follows:

State and Town Beds: In 1881, a line, referred to as the Commissioner's Line, was established to divide the waters of the State into northern and southern sections. All beds south of this line are State beds and most beds north of this line are town beds. Town beds are leased, owned or managed through the local shellfish commission. However, CT DA/BA still controls all the licensing and regulations for both state and town beds. For example, DA/BA issues licenses and determines when an area will be closed to shellfishing due to a change in water quality. Towns may require additional permits to work in waters under local jurisdiction. Beds north of the line in Westport, Milford, West Haven, and New Haven are exceptions to this as they are fully under State control.

State and Town Natural Beds: Natural beds get their name from the fact that shellfish, especially oyster, naturally inhabited the area. These areas tend to be closer to shore, usually at the mouth of a river. Natural beds have specific regulations concerning their use, including licensing and harvesting methods. They are predominately seed beds that cannot be mechanically harvested. Use of natural beds requires a Relay/Transplant License I or II and/or Seed Oyster Harvesting License from CT DA/BA. Any person assisting in the harvesting of seed oysters must have a Helper's License. These beds cannot be leased or subdivided; they are to remain open to any properly licensed harvester. State natural beds are natural beds south of the Commissioner's Line. Descriptions of these beds can be found in §3295 of the Connecticut General Statutes (CGS), revision of 1918. Not all beds listed in §3295 were mapped, and many natural beds in State waters off Greenwich are managed through leases. Town natural beds were defined by law under §2326 of the CGS of 1888. Each town had the opportunity to map areas to be considered natural beds. The documents, written descriptions, and maps were submitted to the Superior Court with jurisdiction for that town. Several towns did not avail themselves to this opportunity, and some, such as Westport, have changed the delineation of their natural beds in recent court decisions. There are also areas that may have been declared natural beds, but are now leased.

Portions of Segments 4 (CT-C3_001) and Segment 5 (CT-E3_012) are State-managed beds (Figure 3). There are no natural shellfish beds in the Westbrook Estuary. The Town managed beds in Westbrook are closed and classified as "Prohibited".

Figure 3: GIS map featuring Shellfish Bed Lease Locations for the impaired segments in the Westbrook Estuary



WHY IS A TMDL NEEDED?

For saltwater segments, the indicator bacteria, fecal coliform, is used in the CT Water Quality Standards (WQS) to assess shellfish uses for Class SA and SB waters (CTDEEP, 2013). Enterococcus is the indicator bacteria used to assess recreational uses for Class SA and SB waters. All data are from CT DEEP, USGS, Bureau of Aquaculture, or volunteer monitoring efforts at stations located on the impaired segments.

Segments 1 – 5 are Class SA saltwater waterbodies. Their applicable designated uses include shellfish harvesting for direct human consumption, recreation, habitat for marine fish and other aquatic life and wildlife, industrial water supply, and navigation. Water quality analyses were conducted using data from four sample locations on Segment 1 (CT-C1_001), seven sampling locations on Segment 2 (CT-C2_001), three sampling locations on Segment 3 (CT-C2_002), three sampling locations on Segment 4 (CT-C3_001), and two sampling locations on Segment 5 (CT-E3_012). The water quality criteria for fecal coliform, along with bacteria sampling results from 2000 – 2011, are presented in Tables 11-15. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of direct shellfishing.

To aid in identifying possible bacteria sources, the geometric mean was also calculated for wet-weather and dry-weather sampling days for all stations, where possible (Tables 11 and 15).

Segment 1 (CT-C1_001): As shown in Table 11, geometric means for data collected during the sampling period were calculated for each station using wet and dry-weather conditions, resulting in exceedances of WQS for fecal coliform during both wet-weather and dry-weather. All 6 years of monitoring at the station near the mouth of the Menunketesuck River (154-03.1) showed exceedances of water quality criteria. Results reported at the other stations in this segment also showed water quality exceedances most years.

Segment 2 (CT-C2_001): As shown in Table 12 geometric means for data collected during the sampling period were calculated for each station using wet and dry-weather conditions, resulting in exceedances of WQS for fecal coliform during both wet-weather and dry-weather. There is one designated swimming area in this segment, Middle Beach, this beach did not report any closures for swimming from 2007-2012. According to the 2003 Westbrook report completed by DA/BA, stations 154-9.1, 9.2, and 9.3 were established to monitor water quality for shellfishing at storm drain outfalls between Quotonset and Middle beaches. There were exceedances of water quality criteria at these 3 locations during wet and dry conditions. Station 154-10-1 was established to monitor the small tidal creek at Money Point. This location was only sampled during dry conditions and water quality was exceeded 3 times from 2002-2005.

Segment 3 (CT-C2_002): There is one designated swimming area in this segment, West Beach. This beach was preemptively closed for 5 days in 2009 and for 7 days in 2010. As shown in Table 13, monitoring results exceeded water quality criteria for shellfishing only once at stations 154-06.1 and 154-08.0 and twice at location 154-07.0. The Geometric mean values exceeded the WQS for fecal coliform for shellfishing twice at station 154-07.0, once at station 154-06.1 and once also at 154-08.0. Although there were Geomean exceedances some years, geometric means for all samples collected during wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 4 (CT-C3_001): As shown in Table 14, the Geomean at Station 154-10.2 and station 154-08.2 were exceeded once at each station during dry weather in 2008. 154-10.2 is located off Salt Works Bay and 154-08.2 monitors water quality off Westbrook Harbor. Although there were Geomean exceedances in individual years, and one exceedance of WQS in an individual sample during wet weather the geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at any station.

Segment 5 (CT-E3_012): As shown in Table 15, geometric mean for data collected during the sampling period were calculated for two stations using wet and dry-weather conditions. Although there was one Geomean exceedance in 2005 at 154-43.0, geometric means for wet and dry-weather did not exceed the WQS for fecal coliform at either station. 154-11.2 monitors water quality off Old Kelsey Point; there were no exceedances of water quality criteria reported at this location during the 9 years of monitoring.

Due to the elevated bacteria measurements presented in Tables 11 – 15, these five impaired segments did not meet CT's bacteria WQS, were identified as impaired, and were placed on the CT List of Waterbodies Not Meeting Water Quality Standards, also known as the CT 303(d) Impaired Waters List. The Clean Water Act requires that all 303(d) listed waters undergo a TMDL assessment that describes the impairments and identifies the measures needed to restore water quality. The goal is for all waterbodies to comply with State WQS.

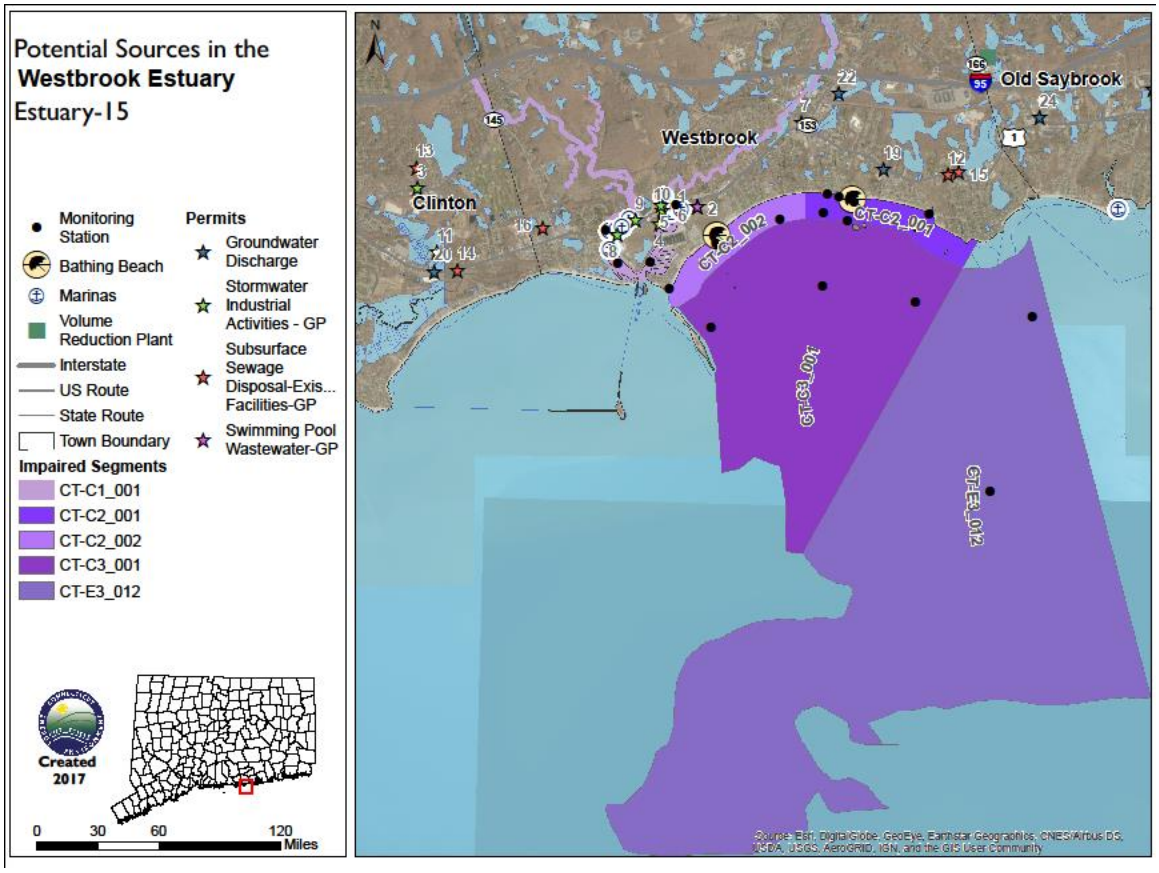
Table 2: Sampling station location for the impaired segments in the Westbrook Estuary

Waterbody ID	Station	Municipality	Latitude	Longitude
CT-C1_001	154-03.1	Westbrook	41.271833	-72.475383
	154-03.2	Westbrook	41.272033	-72.470817
	154-03.4	Westbrook	41.27795	-72.467167
	154-03.5	Westbrook	41.275317	-72.477017
CT-C2_001	154-10.0	Westbrook	41.2755	-72.433517
	154-10.1	Westbrook	41.27695	-72.431783
	154-08.3	Westbrook	41.277167	-72.446567
	154-09.0	Westbrook	41.276283	-72.443217
	154-09.1	Westbrook	41.278233	-72.442317
	154-09.2	Westbrook	41.278817	-72.4444
	154-09.3	Westbrook	41.279117	-72.446
CT-C2_002	154-06.1	Westbrook	41.269217	-72.468167
	154-07.0	Westbrook	41.27395	-72.461633
	154-08.0	Westbrook	41.276483	-72.452667
CT-C3_001	154-06.0	Westbrook	41.265083	-72.462333
	154-08.2	Westbrook	41.269433	-72.4467
	154-10.2	Westbrook	41.267667	-72.4338
CT-E3_012	154-11.2	Westbrook	41.266017	-72.4174
	154-43.0	Westbrook	41.247717	-72.423433

POTENTIAL BACTERIA SOURCES

Potential sources of indicator bacteria in a watershed include point and non-point sources, such as stormwater runoff, agriculture, sanitary sewer overflows (collection system failures), illicit discharges, and inappropriate discharges to the waterbody. Potential sources that have been tentatively identified in the Westbrook Estuary are presented in Table 3 and Figure 4. However, the list of potential sources is general in nature and should not be considered comprehensive. There may be other sources not listed here that contribute to the observed water quality impairment in the study segments. Further monitoring and investigation will confirm listed sources and discover additional ones. Some segments in this watershed are currently listed as unassessed by CT DEEP procedures. This does not mean that there are no data or impairments in existence in the segment. There are data from permitted sources for some segments, and CT DEEP recommends that any elevated concentrations found from those permitted sources be addressed through voluntary reduction measures. More detailed evaluation of potential sources is expected to become available as activities are conducted to implement these TMDLs.

Figure 4: Potential bacteria sources to the impaired segments in the Westbrook Estuary



The potential sources map for the impaired basin was developed after thorough analysis of available data sets. If information is not displayed in the map, then no sources were discovered during the analysis. The following is the list of potential sources that were evaluated: problems with migratory waterfowl, golf course locations, reservoirs, proposed and existing sewer service, cattle farms, poultry farms, permitted sources of bacteria loading (surface water discharge, MS4 permit, industrial stormwater, commercial stormwater, groundwater permits), and leachate and discharge sources (agricultural waste, Combined Sewer Overflow (CSO), failing septic systems, landfills, large septic tank leach fields, septage lagoons, sewage treatment plants, and water treatment or filter backwash).

Table 3: Potential bacteria sources to the impaired segments in the Westbrook Estuary

Segment #	Impaired Segment	Permit Source	Illicit Discharge	CSO/SSO Issue	Failing Septic System	Marinas	Stormwater Runoff	Nuisance Wildlife/Pets	Other
1	CT-C1_001	x			x	x	x	x	
2	CT-C2_001	x			x	x	x	x	
3	CT-C2_002	x			x	x	x	x	
4	CT-C3_001	x			x	x	x	x	
5	CT-E3_012	x			x	x	x	x	

Point Sources

Permitted sources within the watershed that could potentially contribute to the bacteria loading are identified in Table 4. This table includes permit types that may or may not be present in the impaired watershed. Table 5 is a list of active permits in Westbrook. Additional investigation and monitoring could reveal the presence of other discharges in the estuary.

Table 4: General categories list of permitted discharges

Permit Code	Permit Description Type	Number in Estuary
CT	Surface Water Discharges	0
GPL	Discharge of Swimming Pool Wastewater	2
GSC	Stormwater Discharge Associated with Commercial Activity	0
GSI	Stormwater Associated with Industrial Activity	9
GSM	Part B Municipal Stormwater MS4	1
LF	Groundwater Permit	0
UI	Underground Injection	7
GSSD	Community Subsurface Sewer Disposal Systems	5

Permitted Sources

As shown in Table 5, there are multiple permitted discharges in Westbrook that could be contributing bacteria to the impaired segments. These facilities include some industrial facilities, the Town of Westbrook, and multiple marinas throughout the watershed. The marinas include Pilot's Point Marina, Harry's Marine, Pier 76, Brewer Pilot's Point, and Westbrook Marine. Harry's Marine, Pier 76, Ritt's Marine and Brewer Pilot's Point Marina are also listed as permitted sources in the Clinton Estuary TMDL.

Since the Municipal Separate Storm Sewer Systems (MS4) permits are not targeted to a specific location, but the geographic area of the regulated municipality, there is no one accurate location on the map to display the location of these permits, therefore the MS4 permit will not be displayed in the Potential Sources Map. Using the municipal border as a guideline will show which areas of an affected watershed are covered by an MS4 permit.

Table 5: Permitted facilities in Westbrook, CT that may be affecting the Westbrook Estuary

Town	Company	Permit ID	Permit Type	Site Name	Address	Map #
Clinton	Clinton Commons Shopping Center	UI0000118	Groundwater Discharge	Clinton Commons Shopping Center	266 E Main St	20
Clinton	The Moorings I Association, Inc.	GSSD000083	Subsurface Sewage Disposal-GP	The Moorings I	280 E Main St	14
Clinton	Nichols Auto Parts	GSI002503	Stormwater Industrial Activities - GP	Nichols Auto Parts	46 Meadow Rd	11
Westbrook	Pilots Point Marina, Inc.	GSI002132	Stormwater Industrial Activities - GP	Brewer Pilots Point Marina - North Yard	333 Boston Post Rd	8
Westbrook	Jensen's, Inc.	GSSD000156	Subsurface Sewage Disposal-GP	Grove Beach Residential Community	Grove Beach Rd and Boston Post Rd	16
Westbrook	Harry's Marine Repair, Inc.	GSI000462	Stormwater Industrial Activities - GP	Harry's Marine Repair, Inc.	38 Hammock Rd S	4
Westbrook	Louis Marine Ltd.	GSI002448	Stormwater Industrial Activities - GP	434 Boston Post Road	434 Boston Post Rd	9
Westbrook	Westbrook Marine Center, Llc	GSI002470	Stormwater Industrial Activities - GP	Westbrook Marine Center, LLC	533 Boston Post Rd	10
Westbrook	Pilots Point Marina, Inc.	GSI000907	Stormwater Industrial Activities - GP	Pilots Point Marina, Inc.	63 Pilots Point Dr	6
Westbrook	Pilots Point Marina, Inc.	GPL000219	Swimming Pool Wastewater-GP	Pilots Point Marina, Inc.	63 Pilots Point Dr	2
Westbrook	Pilots Point Marina, Inc.	GPL000167	Swimming Pool Wastewater-GP	Pilots Point Marina, Inc.	63 Pilots Point Dr	1

Town	Company	Permit ID	Permit Type	Site Name	Address	Map #
Westbrook	Pier 76, Inc.	GSI000496	Stormwater Industrial Activities - GP	Pier 76, Inc.	54 Old Boston Post Rd	5
Clinton	Mallace Industries Corp	GSI000308	Stormwater Industrial Activities - GP	Mallace Industries Corp	2 Heritage Park Rd	3
Westbrook	SKS Westbrook, LLC	GSSD000054	Subsurface Sewage Disposal-GP	Ambleside Apartments	1784 Boston Post Rd	12
Westbrook	Green Acres Associates, LLC	GSSD000152	Subsurface Sewage Disposal-GP	Green Acres Associates, LLC	1810 Boston Post Rd	15
Westbrook	DGG Properties Co.	UI0000087	Groundwater Discharge	Water's Edge Inn & Resort	1525 Boston Post Rd	19
Clinton	Victoria Manor Association, Inc.	GSSD000079	Subsurface Sewage Disposal-GP	Victoria Manor Association, Inc.	59 Old Post Rd	13
Westbrook	Aiudi Concrete, Inc.	GSI001152	Stormwater Industrial Activities - GP	Aiudi Concrete, Inc	Norris Avenue	7
Old Saybrook	Oyster River Landing Condo. Assoc.	UI0000021	Groundwater Discharge	Oyster River Condo Association	25 Sunset Rd	17
Old Saybrook	Max's Place LLC	UI0000445	Groundwater Discharge	Max's Place	NE Corner of Boston Post Road and Spence Plain Road	24
Old Saybrook	Town of Old Saybrook	UI0000430	Groundwater Discharge	Old Saybrook High School	1111 Boston Post Rd	23
Westbrook	Tanger Outlet Center	UI0000290	Groundwater Discharge	Tanger Outlet Center Westbrook	314 Flat Rock Pl	22
Old Saybrook	R. R. Donnelley & Sons Company	UI0000146	Groundwater Discharge	R. R. Donnelley & Sons Company	50 School House Rd	21
Westbrook	Town of Westbrook	GSM000054	Municipal Stormwater MS4	Town of Westbrook	MS4 General Permit	Entire town

As shown in Table 6, there are water quality data available from some of these discharges. Fecal coliform data cannot be compared to the WQS as there is no single sample shellfish standard for fecal coliform, however, no more than 10% of the samples can exceed 31 cfu/100 mL.

Table 6: Fecal coliform (colonies/100mL) data reported for Underground Injection permits in Westbrook. The results cannot be directly compared to the water quality standard as there is no single sample shellfish standard for fecal coliform.

Client	Site Name	Sample Dates	Permit Number	Sample Location	N=	Min	Max
Town of Westbrook	Westbrook High School	2008-2012	UI0000291	MW1	6	<10	<10
				MW2	7	<10	<10
				MW3	6	<10	<10
DGG Properties	Water's Edge Inn & Resort	2013-2014	UI0000087	Hotel Effluent	100	0	29
				Laundry Effluent	100	0	3
Coroc Holdings	Tanger Outlet Center	2014	UI0000290	Effluent	33	0	<1
Lee Company	Lee Company	2012-2014	UI0000089	MW-5	8	<10	180
				MW-6	8	<10	<10
				MW-7A	2	<10	<10
				MW-43	5	<10	<10
				MW-47A	1	<10	<10

Municipal Stormwater Permitted Sources

Per the EPA Phase II Stormwater rule all municipal storm sewer systems (MS4s) operators located within US Census Bureau Urbanized Areas (UAs) must be covered under MS4 permits regulated by the appropriate State agency. The Phase II Stormwater Rule also required coverage of state and federal institutions that it called "non-traditional" MS4s. State and federal prisons, colleges, hospitals and military facilities are covered by the general permit as non-traditional MS4s. There are 121 municipalities and 12 institutions currently regulated by CT DEEP's General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems, effective January 1, 2017 (MS4 general permit). These municipalities and institutions are considered small MS4s as defined by EPA. Stormwater discharges from CT's only medium MS4, Stamford, as defined by EPA, are regulated by an individual permit.

The US Census Bureau defines a UA as a densely settled area that exceeds a population of 50,000 people and has a population density of at least 1,000 people per square mile. The UA will also include adjacent block groups and blocks with at least 500 people per square mile. A UA consists of all or part of one or more incorporated places and/or census designated places, and may include additional territory outside of any place. (67 FR 11663) Maps of UAs are published after each decennial census, the most recent maps

reflect the results of the 2010 census. The current MS4 general permit requires implementation of the six minimum control measures throughout the municipality with some additional or alternate measures within the UA portion of the MS4. These six minimum measures are explained later in this document.

The impaired segments of the Westbrook Estuary are located within the Town of Westbrook. Westbrook has designated urban areas, as defined by the U.S. Census Bureau and is required to comply with the MS4 General permit (Figure 5). This general permit is applicable to municipalities that are identified in Appendix A of the MS4 permit that contain designated urban areas and discharge stormwater via a separate storm sewer system to surface waters of the State. The permit requires municipalities to develop a Stormwater Management Plan (SMP) to reduce the discharge of pollutants as well as protect water quality. The MS4 permit is discussed further in the core TMDL document and additional information regarding stormwater management and the MS4 permit can be obtained on CTDEEP's website (www.ct.gov/deep/stormwater).

There are six MS4 outfalls that have been sampled for *E. coli* bacteria in the watershed in Westbrook, discharging directly to the shoreline of LIS or indirectly through the Patchogue River (Table 7). Although the results cannot be compared to the water quality standard, as *E. coli* is the wrong indicator species for shellfish use, high counts were detected at all six of the outfalls in Westbrook.

Figure 5: MS4 areas near the Westbrook Estuary

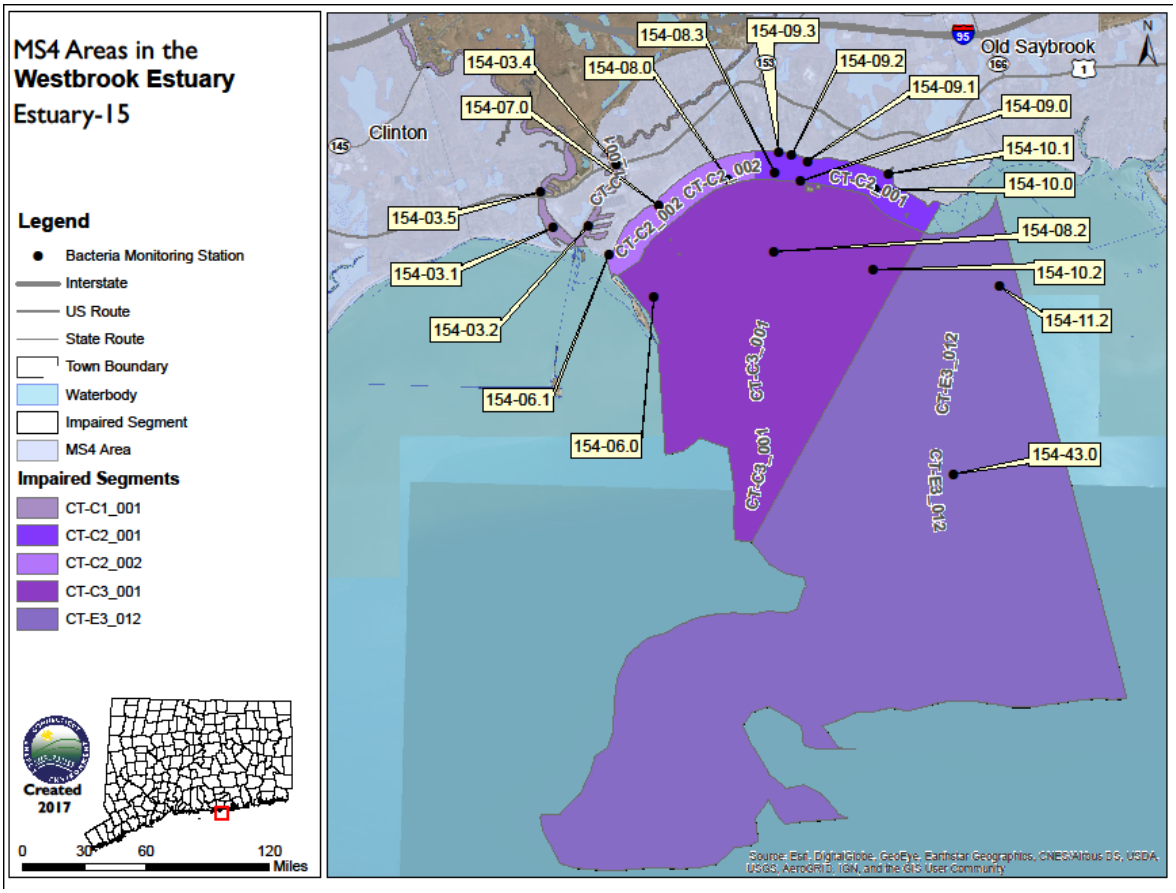


Table 7: List of MS4 sample locations and *E. coli* (colonies/100 mL) results in or near the Westbrook Estuary. The results cannot be directly compared to the water quality standard as there as *E. coli* is the wrong indicator species for shellfish use.

Town	Location	MS4 Type	Receiving Water	Sample Date	Result
Westbrook	C1	Commercial	LIS	10/19/07	2,420
Westbrook	C1	Commercial	LIS	11/06/07	411
Westbrook	C1	Commercial	LIS	04/03/09	326
Westbrook	C1	Commercial	LIS	04/06/09	290
Westbrook	C1	Commercial	LIS	07/21/09	1,553
Westbrook	C1: Linden Ave South	Commercial	LIS	04/15/14	>200
Westbrook	C1 Upstream Catch basin on Linden Ave South	Commercial	LIS	09/10/15	1,400
Westbrook	C2	Commercial	Patchogue River Basin	10/19/07	>816
Westbrook	C2	Commercial	Patchogue River Basin	11/06/07	187
Westbrook	C2	Commercial	Patchogue River Basin	04/03/09	16
Westbrook	C2	Commercial	Patchogue River Basin	04/06/09	2
Westbrook	C2	Commercial	Patchogue River Basin	07/21/09	1,986
Westbrook	C2: 1 Flat Rock Place	Commercial	Patchogue River Basin	04/15/14	>200
Westbrook	C2 Upstream catch basin near 1 Flat Rock Place	Commercial	Patchogue River Basin	09/10/15	300
Westbrook	I1	Industrial		10/19/07	1,300
Westbrook	I1	Industrial		11/06/07	159

Town	Location	MS4 Type	Receiving Water	Sample Date	Result
Westbrook	I1	Industrial		04/03/09	8
Westbrook	I1	Industrial		04/06/09	1
Westbrook	I1	Industrial		07/21/09	687
Westbrook	I1 Culvert on Lee Co property near 2 Pettipaug Rd	Industrial		09/10/15	700
Westbrook	I2	Industrial	Patchogue River Basin	10/19/07	>2,420
Westbrook	I2	Industrial	Patchogue River Basin	11/06/07	140
Westbrook	I2	Industrial	Patchogue River Basin	04/03/09	10.9
Westbrook	I2	Industrial	Patchogue River Basin	04/06/09	10.8
Westbrook	I2	Industrial	Patchogue River Basin	07/21/09	>2,420
Westbrook	I2: 2 Pettipaug Road	Industrial	Patchogue River Basin	04/15/14	>200
Westbrook	I2: 35 Wesley Ave	Industrial	Patchogue River Basin	04/15/14	>200
Westbrook	I2 Upstream catch basin near 36 Wesley Ave	Industrial	Patchogue River Basin	09/10/15	1200
Westbrook	R1	Residential	LIS	10/19/07	>2,420
Westbrook	R1	Residential	LIS	11/06/07	980
Westbrook	R1	Residential	LIS	04/03/09	1
Westbrook	R1	Residential	LIS	04/06/09	2
Westbrook	R1	Residential	LIS	07/21/09	2,420
Westbrook	R1: 249 Seaside Ave	Residential	LIS	04/15/14	>200

Town	Location	MS4 Type	Receiving Water	Sample Date	Result
Westbrook	R1 Outfall near 249 Seaside Ave	Residential	LIS	09/10/15	>20,000
Westbrook	R2	Residential	Patchogue River Basin	10/19/07	1,733
Westbrook	R2	Residential	Patchogue River Basin	11/06/07	1,300
Westbrook	R2	Residential	Patchogue River Basin	04/03/09	2
Westbrook	R2	Residential	Patchogue River Basin	04/06/09	2
Westbrook	R2	Residential	Patchogue River Basin	07/21/09	>2,420
Westbrook	R2: 26 Beech Tree Lane	Residential	Patchogue River Basin	04/15/14	>200
Westbrook	R2 Upstream Catch Basin near 26 Beech Tree Lane	Residential	Patchogue River Basin	09/10/15	90

Publicly Owned Treatment Works

According to our records, there are no Water Pollution Control Facilities (WPCFs) in Westbrook, public or private.

Non-point Sources

Non-point source (NPS) pollution comes from many diffuse sources and is more difficult to identify and control. NPS pollution is often associated with certain land-use practices. Examples of NPS that can contribute bacteria to surface waters include stormwater runoff, illicit discharges, insufficient septic systems, pet and wildlife waste, agriculture, and contact recreation (swimming or wading). With the waters that are tidally influenced, bacterial sources that appear to be downstream of the impaired segment may be also affecting the water quality in upstream segments. Potential sources of NPS to the impaired segments in the Westbrook Estuary are described below.

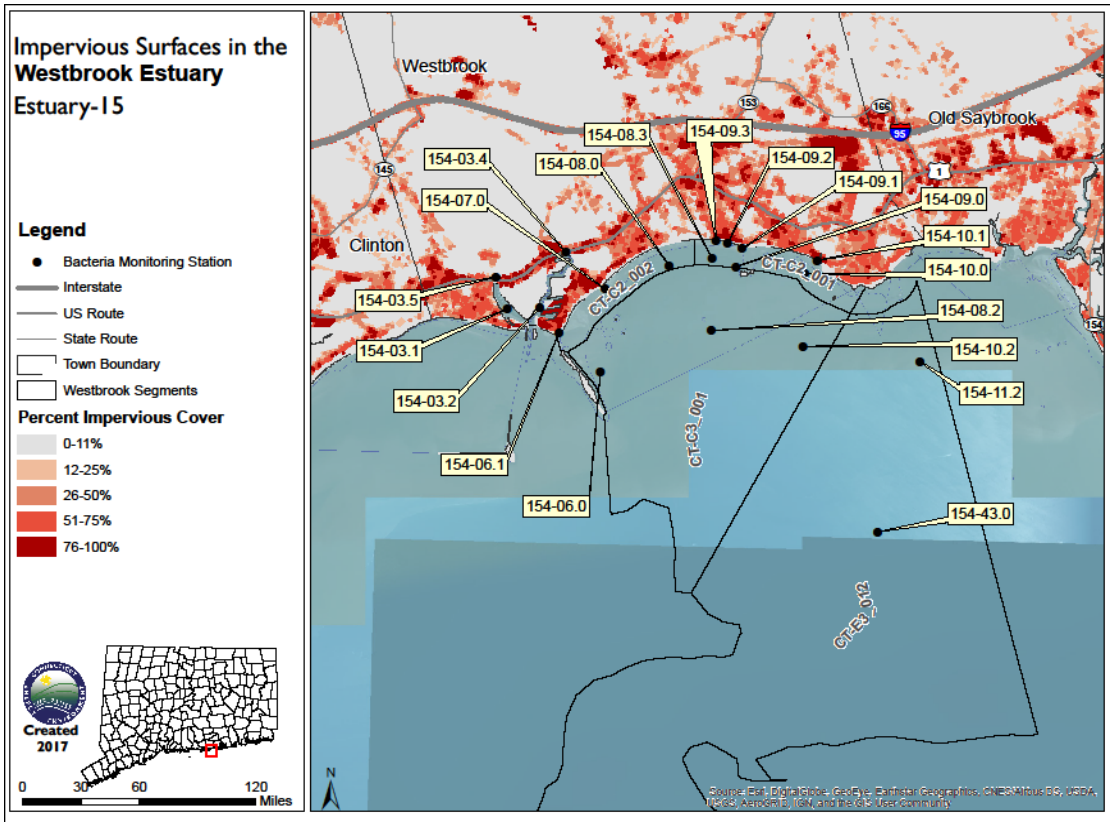
Stormwater Runoff from Developed Areas

Impervious cover (IC) refers to hard surfaces across the landscape such as roads, sidewalks, parking lots and roofs. IC forces rain to runoff the land, carrying pollutants quickly and directly to surface waters instead of soaking into the ground. Studies have shown a link between the amount of impervious area in a watershed and water quality conditions (CWP, 2003). In one study, researchers correlated the amount

of fecal coliform to the percentage of land with impervious cover in a watershed (Mallin *et al.*, 2000). While all levels of IC can contribute stormwater to streams, it is important to note that land with greater than 12% IC is likely to be contributing enough stormwater to streams to have a negative impact on water quality (CWP, 2003). Towns should aim to make stormwater improvements in areas with IC greater than 12% in an effort to reduce the amount of stormwater pollution reaching surface waters which will protect and improve water quality.

In Westbrook, most areas with the highest percentage of impervious cover are found south of Route 95, bordering the estuary (Figure 6). 15% of the Town of Westbrook has >12% impervious cover. For more information please refer to the town factsheets on our web site, using the map or pulldown list (www.ct.gov/deep/cwp/view.asp?A=2719&Q=567336). Stations on Segment 1 (CT-C1_001) and Segment 2 (CT-C2_001), exceeded the WQS for fecal coliform during wet-weather, which indicates that stormwater runoff is likely contributing bacteria to the estuary.

Figure 6: Impervious cover (%) for Westbrook



Illicit Discharges and Insufficient Septic Systems

There is no WPCF in Westbrook; all properties are served by subsurface sewage disposal systems. Properly managed septic systems and leach fields have the ability to effectively remove bacteria from waste. If systems are not maintained, waste will not be adequately treated and may result in bacteria reaching nearby surface and ground water. In Connecticut, local health directors or health districts are responsible for investigating and issuing orders to abate insufficient or failing septic systems within their jurisdiction.

Wildlife and Domestic Animal Waste

Wildlife, including waterfowl, and domestic animals within the municipality of Westbrook, including those present in the estuary, represent another potential source of bacteria to the impaired waterbodies. Elevated bacteria levels due solely to a natural population of wildlife are not subject to the WQS. However, any exacerbation of wildlife population sizes or residency times influenced by human activities is subject to the CT WQS and TMDL provisions. With the construction of roads and drainage systems, wastes from these waterfowl may no longer be retained on the landscape, but instead may be conveyed via stormwater to the nearest surface waterbody. As such, physical land alterations can exacerbate the impact of these natural sources on water quality (USEPA, 2001).

Geese and other waterfowl are known to congregate in open areas, including recreational fields, agricultural crop fields, and golf courses. There is a 110 acre golf course located on the border of Westbrook in Clinton that is part of the watershed of the Menunketesuck River. In addition to creating a nuisance, large numbers of geese can create unsanitary conditions on the grassed areas and cause water quality problems due to bacterial contamination associated with their droppings. Large populations of geese can also lead to habitat destruction as a result of overgrazing on wetland and riparian plants.

Part of the McKinney Wildlife Refuge, The Salt Meadow Unit, is located in Westbrook. This area has abundant wildlife, especially during the spring and summer months. The Salt Meadow Unit is 316 acres of salt marsh, forest, grassland, and shrubland located on the Atlantic Flyway. In addition to resident species of waterfowl and land animals, this diverse landscape is visited by 280 species of migrating neotropical birds during the spring and fall migrations as well as some species overwintering here. (www.fws.gov/refuge/Stewart_B_McKinney/)

Portions of Westbrook, feature heavily developed commercial areas and residential properties. As such, waste from domestic animals, such as dogs, may also be contributing to bacteria concentrations in some of the impaired segments in the Westbrook Estuary. Westbrook has a dog ordinance (www.westbrookct.us/Docs/dogordinance52913.pdf) requiring owners to clean up after their dogs when they are on town property. There is a fine for owners that do not comply "The owner of any dog who leaves waste on any park, athletic field, playground or beach at any time shall clean up after said dog, and failure to do so shall be punishable by a fine in accordance with the provisions of subparagraph (f) of this ordinance."

Marinas

As noted previously, multiple marinas are located within the Westbrook Estuary (Figure 4 and Table 5). Marinas are located at the water's edge, and if no measures are taken to reduce pollutants, including buffering, pollutants can be transported via runoff from parking lots and hull maintenance areas directly into the marina basin. Common pollutants from marinas include bacteria and nutrients from stormwater runoff, solid and liquid materials used in boat maintenance and cleaning, fuel and oil, sewage from public restrooms and boat pump-outs, fish waste, and turbidity from boating activities. There are two marinas that offer pump-out services in Westbrook, Harry's Marine and Brewer Pilot's Point. The CT DEEP has information on regional pump-out boats and facilities at its website, www.ct.gov/deep/cwp/view.asp?a=2705&q=323708&depNav_GID=1711. Most services are free and eliminate the possibility of vessels dumping raw wastes into Long Island Sound, which is prohibited by CT Water Quality Standards Number 24, "the discharge of sewage from any vessel to any water is prohibited."

The Westbrook Harbor Management Plan (Westbrook Harbor Management Commission, 2014) recommends that all marinas in town participate in the Clean Marina Program. Our CT DEEP records

indicate that 2 marinas qualified for this program, Harry's Marine Repair and Ritt's Marine Center. The Clean Marina Program is not currently accepting new pledges or conducting recertifications, however, educational materials are provided on the CT DEEP website (www.ct.gov/deep/cleanmarina). This program is described in more detail later in this document.

All Connecticut coastal waters are designated "No Discharge Areas" (NDAs) prohibiting the discharge of sewage, treated or untreated. Eliminating the release of all sewage from boats, will result in further reductions of human fecal waste discharge and, therefore, reductions in nutrient loading and potential human exposure to bacterial and viral pathogens in swimming areas, shellfish beds and other environmentally sensitive aquatic habitats. CT DEEP records show, two Westbrook marinas have pump out services and one has a pump-out boat. For more information please see our web site (www.ct.gov/deep/cwp/view.asp?a=2705&q=323816&deepNav_GID=1635). According to the Westbrook Harbor Management Plan, the Town is home to over 2000 vessels docked or moored within Westbrook. That number does not include boats docked at private residences. The area around the mouths of the Menunketesuck and Patchogue Rivers (Segment 1 CT-C1_001) is especially congested with boats and marinas.

Picture above from Google Maps showing the multiple dock areas found near the mouths of the Menunketesuck and Patchogue Rivers.

Recreation

People coming in direct contact with surface water presents another potential source of bacterial contamination. Microbial source tracking (MST) surveys conducted in New Hampshire have shown humans to be a source of bacterial contamination at beaches (Jones, 2008). Since there are two designated public swimming areas along the shoreline, Middle Beach and West Beach, and multiple private beach areas in the watershed, it is probable that some bacterial contamination can be attributed to human activities in the Westbrook Estuary.

Additional Sources

There may be other sources not listed here or identified in Figure 4 that contribute to the observed water quality impairments in the Westbrook Estuary. Further monitoring and investigation will confirm the listed sources and discover additional ones. More detailed evaluation of potential sources is expected to become available as activities are conducted to implement this TMDL.

Current Management Activities

The National Shellfish Sanitation Program (NSSP) has multiple requirements for the protection and evaluation of shellfish growing areas. More information about this program is provided below and available online: www.fda.gov/food/guidanceregulation/federalstatefoodprograms/ucm2006754.htm

The NSSP requires the completion of a sanitary survey to determine acceptable and unacceptable growing areas, and to accurately classify a growing area as Approved, Conditionally Approved, Restricted, Conditionally Restricted, or Prohibited. A sanitary survey is an in-depth evaluation of all environmental factors impacting water quality in a shellfish growing area. Environmental factors include both actual and potential pollutant sources, whether natural or man-made, along with meteorological and hydrographic characteristics of the growing area. The principal components of a sanitary survey are: (1) identification and evaluation of pollutant sources, (2) evaluation of meteorological factors, (3) evaluation of hydrographic factors affecting the distribution of pollutants, and (4) assessment of water quality.

The sanitary survey includes data and results from the following:

1. Shoreline survey;
2. Survey of the bacteriological quality of the water;
3. Evaluation of meteorological, hydrodynamic, and geographic characteristics of the growing area;
4. Analysis of shoreline survey, bacteriological water quality, and meteorological, hydrodynamic, and geographic characteristics; and
5. Determination of the appropriate growing area classification

Maintaining updated sanitary survey records consists primarily of routinely evaluating major pollutant sources, collecting water quality data from sampling stations under the selected NSSP water quality monitoring strategy, and analyzing the data to ensure that the classification continues to represent current sanitary conditions in the growing area. The entire sanitary survey process must be repeated every 12 years. In the interim, the sanitary quality of each growing area must be reviewed as often as necessary to ensure appropriate classification. Certain sanitary survey components are required by the Model Ordinance to be updated annually and triennially.

The growing area classification and supporting data from the sanitary survey shall be reviewed at least every three years. As required by the NSSP, this triennial re-evaluation shall include:

1. A review of water quality sampling results;
2. Documentation of any new pollutant sources and evaluation of their impact on the growing area;
3. Re-evaluation of all pollutant sources, including sources previously identified in the sanitary survey, as necessary to fully evaluate any changes in the sanitary conditions of the growing area. Re-evaluation may or may not include a site visit;
4. A comprehensive report analyzing the sanitary survey data and determining whether the existing growing area classification is accurate or requires revision; and

5. Reclassification of the growing area if re-evaluation determines that conditions for classification have changed based on data collected during the triennial review

NSSP also requires that the sanitary survey be updated annually to reflect changes in conditions in the growing area. The annual re-evaluation shall include:

1. Field observation of pollutant sources during drive-through surveys, sample collections, or other information sources;
2. Addition and review of current year's water quality sampling results to a database collected in accordance with the bacteriological standards and sample collection required;
3. Review of available inspection reports and effluent samples collected from pollutant sources;
4. Review of available performance standards for various types of discharges impacting the growing area; and
5. A brief report documenting annual re-evaluation findings.

The most recent annual evaluation for the Shellfish Growing Waters in the Town of Westbrook was published in 2005 (DA/BA, 2005). According to this report, based on the available data and information Westbrook shellfishing waters are properly classified and no changes are warranted at this time.

Other efforts have been taken by Westbrook to reduce bacteria to its surface waters. As indicated previously, Westbrook is regulated under the MS4 program. The MS4 General Permit is required for any municipality with urbanized areas that initiates, creates, originates or maintains any discharge of stormwater from a storm sewer system to waters of the State. The MS4 general permit requires towns to design a Stormwater Management Plan (SMP) that reduces the discharge of stormwater pollutants to improve water quality. The plan must address the following six minimum measures:

1. Public Education and Outreach.
2. Public Involvement/Participation.
3. Illicit discharge detection and elimination.
4. Construction site stormwater runoff control.
5. Post-construction stormwater management in the new development and redevelopment.
6. Pollution prevention/good housekeeping for municipal operations.

Each municipality is also required to submit an annual update outlining steps taken to meet the six minimum measures. The most recent updates that address bacterial contamination in the watershed are summarized in Table 8.

Table 8: Summary of MS4 requirement updates related to the reduction of Stormwater contamination from Westbrook, CT (Permit # GSM000054)

Minimum Measure	Westbrook Annual Report (2016)
Public Outreach and Education	1) Middle school students conduct surveys on Cold Spring Creek 2) GIS information is available on the Town Website 3) The Town of Westbrook continues to display and make available for the public to read and take the following brochures:: • EPA brochure "After the Storm" • EPA brochure "Rivers Beneath Our Feet" • "The Importance of Stream Buffers" developed by Rivers Alliance of Connecticut • A pet waste brochure

Minimum Measure	Westbrook Annual Report (2016)
Public Involvement and Participation	Annual Cleanup day and hazardous waste program
Illicit Discharge Detection and Elimination	1) Mapped outfalls greater than 15" town-wide and greater than 12" in the urbanized areas. 2) Illicit Discharge Ordinance was finalized in 2017 3) Identifying and addressing failing septic systems and working on sewer upgrades Town-wide.
Construction Site Stormwater Runoff Control	Regulations require soil erosion and sediment control plans for projects >1/2 acre, these plans are certified for approval by the Zoning Commission, and they do inspections to ensure compliance.
Post Construction Stormwater management	1) On-going development and implementation of post-construction ordinance & regulations 2) Development and implementation of post construction BMP strategy.
Pollution Prevention and Good Housekeeping	The following have been implemented and are on-going: • Training program for Municipal employees related to stormwater management. • Streets are swept annually after snowmelt, streets in beach areas are swept twice per year • Evaluations of areas (such as beaches) for possible sweeping more than once a year. • Annual clean-up of approximately 1,000 catch basins. • Town has a dedicated vehicle washing bay with a collection system

RECOMMENDED NEXT STEPS

Westbrook has developed and implemented programs to protect water quality from bacterial contamination. Future mitigation activities are necessary to ensure the long-term protection of Segments 1 – 5 in the Westbrook Estuary and have been prioritized below.

1) Continue monitoring of permitted sources.

There are at least 20 permitted sources in the Westbrook Estuary. Some of these facilities should be monitoring for bacteria. Further monitoring will provide information essential to better locate, understand, and reduce pollution sources. If any current monitoring is not done with appropriate bacterial indicator based on the receiving water, then a recommended change during the next permit reissuance is to include the appropriate indicator species. If facility monitoring indicates elevated bacteria, then implementation of permit is required, and any voluntary measures to identify and reduce sources of bacterial contamination at the facility are also recommended. Regular monitoring should be established for all permitted sources to ensure compliance with permit requirements and to determine if current requirements are adequate or if additional measures are necessary for water quality protection.

The General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), effective July 1, 2017 requires some additional control measures for outfalls that discharge into impaired waters with or without a TMDL. In addition, waterbodies that are subject to an approved TMDL should be given priority when investigating illicit discharges. Section 6(k) of the MS4 General Permit requires a municipality that discharges stormwater into impaired waters with or without a TMDL to perform monitoring based on the pollutant of concern. The sample shall be analyzed for the pollutants identified as the cause of the impairment. If phosphorus, nitrogen, bacteria or mercury are the stormwater pollutants of concern, control measures and outfall monitoring is required to investigate and target potential sources of these pollutants. Additional BMPs may be required to address areas with sample results showing elevated levels of the pollutant(s) of concern. In the case of bacteria related impairments municipal BMPs could include: implementation or improvement to existing nuisance wildlife programs, septic system monitoring programs, any additional measures that can be added to the required illicit discharge detection and elimination (IDDE) programs, and increased street sweeping above basic permit requirements. Any non-MS4 municipalities can implement these same types of initiatives in effort to reduce bacteria source loading to impaired waterways. For all other impairments Section 6(i)(1)C requires monitoring for turbidity at the outfall and immediately upstream of the outfall. Implementation of control measures is required if the turbidity at the outfall is 5 or more NTUs greater than the turbidity upstream. The permittee shall implement BMPs as necessary to achieve the Waste Load Allocation, Load Allocation or Water Quality Targets specified within the TMDL. Please see the current MS4 General permit for information www.ct.gov/deep/municipalstormwater.

Any facilities regulated by CT DEEP that discharge non-MS4 regulated stormwater should update their Pollution Prevention Plan to reflect BMPs that can reduce bacteria loading to the receiving waterway. These BMPs could include nuisance wildlife control programs and any installations that increase surface infiltration to reduce overall stormwater volumes.

Tables 9 and 10 detail the appropriate bacteria criteria for use as waste load allocations established by this TMDL for use as water quality targets by permittees as permits are renewed and updated, within the Westbrook Estuary.

Table 9. Bacteria (Enterococci) TMDLs, WLAs, and LAs for Recreational Uses.

		Instantaneous Enterococcus (#/100mL)				Geometric Mean Enterococcus (#/100mL)	
Class	**Bacteria Source**	**WLA[6]**		**LA[6]**		**WLA[6]**	**LA[6]**
	Recreational Use	**1**	**2**	**1**	**3**	**All**	**All**
SA[5]	Illicit sewer connection	0	0			0	
	Leaking sewer lines	0	0			0	
	Stormwater (MS4s)	104[7]	500[7]			35[7]	
	Stormwater (non-MS4)			104[7]	500[7]		35[7]
	Wildlife direct discharge			104[7]	500[7]		35[7]
	Human or domestic animal direct discharge[3]			104	500		35
SB[5]	Non-Stormwater NPDES	104	500			35	
	CSOs	104	500			35	
	SSOs	0	0			0	
	OBDs[4]	0	0			0	
	Illicit sewer connection	0	0			0	
	Leaking sewer lines	0	0			0	
	Stormwater (MS4s)	104[7]	500[7]			35[7]	
	Stormwater (non-MS4)			104[7]	500[7]		35[7]
	Wildlife direct discharge			104[7]	500[7]		35[7]
	Human or domestic animal direct discharge[3]			104	500		35

(1) **Designated Swimming.** 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 Protections and the Department of Public Health. May 1989. Revised April 2003 and updated December 2008.

(2) **Non-Designated Swimming.** 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.

(3) **All Other Recreational Uses.**

(4) 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. (Class B surface waters located north of Interstate Highway I-95 and downstream of a sewage treatment plant providing seasonal disinfection May 1 through October 1, as authorized by the Commissioner.)

(5) Human direct discharge = swimmers

(6) Unless otherwise required by statute or regulation, compliance with this TMDL will be based on ambient concentrations and not end-of-pipe bacteria concentrations

(7) Replace numeric value with “natural levels” if only source is naturally occurring wildlife. Natural is defined as the biological, chemical and physical conditions and communities that occur within the environment which are unaffected or minimally affected by human influences (CT DEEP 2011). Sections 2.2.2 and 6.2.7 of this Core Document deal with BMPs and delineating type of wildlife inputs.

Table 10: Bacteria (Fecal Coliform) TMDLs, WLAs, and LAs for Shellfish Harvesting Areas.

		Geometric Mean Fecal coliform (#/100mL)[4]		90% less than Statistical measure Fecal Coliform (#/100mL)[4]	
Class	**Bacteria Source[1]**	**WLA[5]**	**LA[5]**	**WLA[5]**	**LA[5]**
SA Direct Consumption	CSOs	14		31	
	SSOs	0		0	
	OBDs[3]	0		0	
	Illicit sewer connection	0		0	
	Leaking sewer lines	0		0	
	Stormwater (MS4s)	14[6]		31[6]	
	Stormwater (non-MS4)		14[6]		31[6]
	Wildlife direct discharge		14[6]		31[6]
	Human or domestic animal direct discharge[2]		14		31
SB Indirect Consumption	Non-Stormwater NPDES	88		260	
	CSOs	88		260	
	SSOs	0		0	
	OBDs[3]	0		0	
	Illicit sewer connection	0		0	
	Leaking sewer lines	0		0	
	Stormwater (MS4s)	88[6]		260[6]	
	Stormwater (non-MS4)		88[6]		260[6]
	Wildlife direct discharge		88[6]		260[6]
	Human or domestic animal direct discharge[2]		88		260

(1) Criteria are based on utilizing the mTec method as specified in the U.S. Food and Drug Administration National Shellfish Sanitation Program-Model Ordinance (NSSP-MO) document *Guide for the Control of Molluscan Shellfish 2007.*

(2) Human direct discharge = swimmers

(3) All coastal and inland waters in Connecticut are designated as No Discharge Areas for Overboard Discharges (OBDs) from marine vessels with Marine Sanitation Devices.

(4) Adverse Condition Allocations apply to areas affected by Point Sources. Adverse Condition or Random Sampling Allocations apply to areas affected by Nonpoint Sources. Adverse condition is defined as "... a State or situation caused by meteorological, hydrological or seasonal events or point source discharges that has historically resulted in elevated [bacteria] levels in the particular growing area." USFDA 2005

(5) Unless otherwise required by statute or regulation, compliance with this TMDL will be based on ambient concentrations and not end-of-pipe bacteria concentrations

(6) Replace numeric value with "natural levels" if only source is naturally occurring wildlife. Natural is defined as the biological, chemical and physical conditions and communities that occur within the environment which are unaffected or minimally affected by human influences (CT DEEP 2011). Sections 2.2.2 and 6.2.7 of this Core Document deal with BMPs and delineating type of wildlife inputs.

2) Identify areas in Westbrook to implement Best Management Practices (BMPs) to control stormwater runoff.

As noted previously, much of the coastal land of the Westbrook Estuary has impervious cover greater than 12% and some of the impaired segments (CT-C2_001 and CT-C2_002) are surrounded by >26% impervious cover. The Town has urban areas regulated under the MS4 program. As such, stormwater runoff is likely contributing bacteria to the Westbrook Estuary. To identify areas that are contributing bacteria to the impaired segments, municipalities should conduct wet-weather sampling at stormwater outfalls that discharge directly to the impaired segments in Westbrook Estuary. To treat stormwater runoff, the towns should identify areas along the developed sections of the impaired segments to install BMPs designed to encourage stormwater to infiltrate the ground before entering the waterbodies. These BMPs would disconnect impervious areas and reduce pollutant loads to the estuary. More detailed information and BMP recommendations can be found in the core TMDL document established in September 2012 and available at www.ct.gov/deep/lib/deep/water/tmdl/statewidebacteria/ct_bacteria_coredoc_tmdl.pdf.

3) Inspect septic systems.

There are no public sewers in Westbrook. The entire town relies on subsurface sewage disposal systems. Westbrook has established a Water Pollution Control Commission to ensure that existing septic systems are properly operated and maintained (www.westbrookct.us/water-pollution-control-commission.php). Inspections help encourage proper maintenance and identify failed and sub-standard systems. Municipalities can also develop programs to assist citizens with the replacement and repair of older and failing systems. Policies that govern the eventual replacement of the sub-standard systems within a reasonable timeframe are included in this ordinance. There are also sanitation requirements for marinas.

4) Evaluate municipal education and outreach programs regarding animal waste.

Any education and outreach program should highlight the importance of not feeding waterfowl and wildlife and managing waste from horses, dogs, and other pets. Municipalities and residents can take measures to minimize waterfowl-related impacts by allowing tall, coarse vegetation to grow in riparian areas of impaired segments frequented by waterfowl. Waterfowl, especially grazers like geese, prefer easy access to water. Maintaining an uncut vegetated buffer along the shore will make the habitat less desirable to geese and encourage migration. In addition, any educational program should emphasize that feeding waterfowl, such as ducks, geese, and swans, may contribute to water quality impairments in the Westbrook Estuary and can harm human health and the environment. Animal wastes should be disposed of away from any waterbody or storm drain system. BMPs effective at reducing the impact of animal waste on water quality include installing signage, providing pet waste receptacles in high-use areas, enacting ordinances requiring the clean-up of pet waste, and targeting educational and outreach programs in problem areas. The Town of Westbrook does have an ordinance in place that will fine pet owners that do not clean up after their pets on town property.

5) Improve education and outreach programs regarding boats and marinas.

Marinas must comply with permit requirements that limit bacteria contribution to the Westbrook Estuary. Other programs, such as Connecticut's Clean Marina Program, may also be adopted by all marinas in the estuary to reduce bacteria contribution from non-point source pollution from marinas (www.ct.gov/deep/cleanmarina). The Clean Marina Program is a voluntary program that encourages inland and coastal marina operators to minimize pollution, and recognizes Connecticut marinas, boatyards, and yacht clubs that go above and beyond regulatory compliance as "Certified Clean Marinas." While the Clean Marina Program is not currently accepting new pledges or conducting recertifications, educational materials are provided on the CT DEEP website. Marinas are encouraged to review and apply these recommendations at their facility, as appropriate, to minimize pollution from their site. All previously certified marinas receive

a weatherproof Clean Marina Flag to fly at their facility and authorization to use the Clean Marina Program logo on company publications. CT DEEP recognized certified Clean Marinas through press releases, on its web page, and at public events. As a companion to the Clean Marina Program, the Clean Boater Program (www.ct.gov/deep/cwp/view.asp?a=2705&q=323526) encourages boaters to use clean boating techniques when operating and maintaining their boats.

BACTERIA DATA AND PERCENT REDUCTIONS TO MEET THE TMDL

Rainfall data listed in the tables below were reported at Tweed New Haven Airport. When rainfall data was missing from Tweed, rainfall data from Groton was used as reported by the National Oceanic and Atmospheric Administration (NOAA). Shaded cells indicate an exceedance of water quality criteria.

Table 11: Segment 1: LIS CB Inner - Patchogue and Menunketesuck Rivers Bacteria Data
Waterbody ID: CT-C1_001
Characteristics: Saltwater, Class SA
Impairment: Shellfishing

Water Quality Criteria for Fecal coliform:
Geometric Mean: 14 colonies/100 ml
90% of Samples Less Than: 31 colonies/100 ml

Percent reduction to meet:
Geometric Mean: 94.6%
90% of Samples Less Than: 90%

Data: 2000 – 2011 from DA/BA sampling efforts, 2014 TMDL cycle
Single sample fecal coliform data (colonies/100mL) for all monitoring stations on segment: LIS CB Inner – Patchogue and Menunketesuck Rivers (CT-C1_001) with annual geometric means and reduction goals for samples.

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-03.1		2/15/2000	29	Wet	86.5	40
154-03.1		6/7/2000	258	Wet		
154-03.1		8/13/2001	258	Wet	258	90
154-03.1		6/17/2002	248	Dry	88.1	90
154-03.1		6/18/2002	54	Dry		
154-03.1		10/28/2002	51	Dry		
154-03.1		7/12/2005	30	Dry	45.2	40
154-03.1		7/13/2005	68	Dry		
154-03.1		4/25/2006	9	Wet	16.2	n/a
154-03.1		9/18/2006	29	Dry		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-03.1		7/29/2008	84	Dry	22.4	40
154-03.1		7/30/2008	6	Dry		
154-03.2		2/15/2000	88	Wet	150.7	90
154-03.2		6/7/2000	258	Wet		
154-03.2		8/13/2001	248	Wet	248	90
154-03.2		6/17/2002	139	Dry	72.6	90
154-03.2		6/18/2002	54	Dry		
154-03.2		10/28/2002	51	Dry		
154-03.2		7/12/2005	22	Dry	52.6	40
154-03.2		7/13/2005	126	Dry		
154-03.2		4/25/2006	21	Wet	20	n/a
154-03.2		9/18/2006	19	Dry		
154-03.2		7/29/2008	104	Dry	43.3	40
154-03.2		7/30/2008	18	Dry		
154-03.4		2/15/2000	88	Wet	36.1	40
154-03.4		3/21/2000	8.7	Dry		
154-03.4		3/22/2000	8.6	Dry		
154-03.4		6/12/2000	258	Wet		
154-03.4		2/20/2001	8.6	Dry	8.6	n/a
154-03.4		5/6/2002	70	Dry	59.7	90
154-03.4		10/28/2002	51	Dry		
154-03.4		11/24/2003	23	Dry	34.2	40
154-03.4		12/22/2003	51	Dry		
154-03.4		9/22/2005	48	Dry	43.8	90
154-03.4		12/27/2005	40	Dry		
154-03.4		12/4/2006	32	Dry	32	90

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-03.4		10/18/2010	4	Dry	3.8	n/a
154-03.4		11/7/2010	9	Dry		
154-03.4		11/21/2010	1	Dry		
154-03.4		12/5/2010	6	Dry		
154-03.4		4/18/2011	61	Wet	23.4	40
154-03.4		4/26/2011	9	Dry		
154-03.5		11/24/2003	23	Dry	39.3	40
154-03.5		12/22/2003	67	Dry		
154-03.5		9/22/2005	171	Dry	96.1	90
154-03.5		12/27/2005	54	Dry		
154-03.5		12/4/2006	41	Dry	41	90
154-03.5		10/18/2010	5	Dry	7.2	n/a
154-03.5		11/7/2010	22	Dry		
154-03.5		11/21/2010	8	Dry		
154-03.5		12/5/2010	3	Dry		
154-03.5		4/18/2011	75	Wet	21.2	40
154-03.5		4/26/2011	6	Dry		
Shaded cells indicate an exceedance of water quality criteria						

Wet and dry weather geometric mean values for all monitoring stations on Segment 1: LIS CB Inner – Patchogue and Menunketesuck Rivers (CT-C1_001)

Station #	Station Name	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
154-03.1		2000-2008	4	8	51.57	64.56	46.09
154-03.2		2000-2011	4	8	63.7	104.28	52.17
154-03.4		2000-2011	3	15	20.6	111.47	14.7
154-03.5		2000-2011	1	10	22.34	75	19.8
Shaded cells indicate an exceedance of water quality criteria							

Table 12: Segment 2: LIS CB Shore – Westbrook Harbor (East) Bacteria Data

Waterbody ID: CT-C2_001
Characteristics: Saltwater, Class SA

Impairment: Shellfishing

Water Quality Criteria for Fecal coliform:
Geometric Mean: 14 colonies/100 ml

90% of Samples Less Than: 31 colonies/100 ml

Percent reduction to meet:
Geometric Mean: 84.05%

90% of Samples Less Than: 90%

Data: 2000 – 2011 from DA/BA sampling efforts, 2014 TMDL cycle

Single sample fecal coliform data (colonies/100mL) for all monitoring stations on segment 2: LIS CB Shore – Westbrook Harbor, Westbrook (CT-C2_001) with annual geometric means and reduction goals for samples.

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-08.3		6/7/2000	36	Wet	7.8	23
154-08.3		9/14/2000	3.6	Wet		
154-08.3		9/19/2000	3.6	Wet		
154-08.3		8/13/2001	51	Wet	11.7	23
154-08.3		8/16/2001	3.6	Dry		
154-08.3		8/21/2001	8.7	Wet		
154-08.3		6/17/2002	8.1	Dry	7.4	n/a
154-08.3		6/18/2002	5.8	Dry		
154-08.3		9/19/2002	8.6	Dry		
154-08.3		8/20/2003	3.6	Dry	3.6	n/a
154-08.3		7/12/2005	9	Dry	6	n/a
154-08.3		7/13/2005	4	Dry		
154-08.3		4/25/2006	9	Wet	3	n/a
154-08.3		9/18/2006	1	Dry		
154-08.3		9/19/2006	3	Dry		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-08.3		7/29/2008	34	Dry	22.6	40
154-08.3		7/30/2008	15	Dry		
154-09.0		2/15/2000	1.6	Wet	3.9	15
154-09.0		6/7/2000	51	Wet		
154-09.0		9/14/2000	1.7	Wet		
154-09.0		9/19/2000	1.7	Wet		
154-09.0		8/13/2001	51	Wet	5.2	23
154-09.0		8/16/2001	1.6	Dry		
154-09.0		8/21/2001	1.7	Wet		
154-09.0		6/17/2002	3.6	Dry	5.2	n/a
154-09.0		6/18/2002	11	Dry		
154-09.0		9/19/2002	3.6	Dry		
154-09.0		8/20/2003	3.6	Dry	3.6	n/a
154-09.0		7/12/2005	1	Dry	2.2	n/a
154-09.0		7/13/2005	5	Dry		
154-09.0		4/25/2006	8	Wet	3.7	n/a
154-09.0		9/18/2006	3	Dry		
154-09.0		9/19/2006	2	Dry		
154-09.0		7/29/2008	19	Dry	16.9	n/a
154-09.0		7/30/2008	15	Dry		
154-09.0		10/18/2010	14	Dry	5.1	n/a
154-09.0		11/7/2010	2	Dry		
154-09.0		11/21/2010	4	Dry		
154-09.0		12/5/2010	6	Dry		
154-09.0		4/18/2011	9	Wet	6.7	n/a
154-09.0		4/26/2011	5	Dry		
154-09.1		2/15/2000	29	Wet	60.1	23

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-09.1		3/22/2000	29	Dry		
154-09.1		6/12/2000	258	Wet		
154-09.1		2/20/2001	18	Dry	18	n/a
154-09.1		5/6/2002	54	Dry	77.1	90
154-09.1		10/28/2002	110	Dry		
154-09.1		9/22/2005	9	Dry	9	n/a
154-09.2		2/15/2000	8.7	Wet	20.2	23
154-09.2		3/22/2000	8.6	Dry		
154-09.2		6/12/2000	110	Wet		
154-09.2		2/20/2001	8.6	Dry	8.7	n/a
154-09.2		12/20/2001	8.7	Dry		
154-09.2		5/6/2002	8.6	Dry	5.6	n/a
154-09.2		10/28/2002	3.6	Dry		
154-09.2		9/22/2005	4	Dry	4	n/a
154-09.3		2/15/2000	54	Wet	49.3	23
154-09.3		3/22/2000	8.6	Dry		
154-09.3		6/12/2000	258	Wet		
154-09.3		2/20/2001	8.6	Dry	8.6	n/a
154-09.3		5/6/2002	70	Dry	87.8	90
154-09.3		10/28/2002	110	Dry		
154-09.3		9/22/2005	9	Dry	9	
154-10.0		2/15/2000	1.7	Wet	6.5	15
154-10.0		6/7/2000	50	Wet		
154-10.0		9/14/2000	5.8	Wet		
154-10.0		9/19/2000	3.6	Wet		
154-10.0		8/13/2001	1.7	Wet	1.7	n/a
154-10.0		8/16/2001	1.7	Dry		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-10.0		8/21/2001	1.6	Wet		
154-10.0		6/17/2002	5.8	Dry	3.1	n/a
154-10.0		6/18/2002	5.8	Dry		
154-10.0		9/17/2002	1.7	Wet		
154-10.0		9/19/2002	1.6	Dry		
154-10.0		8/20/2003	3.6	Dry	3.6	n/a
154-10.0		7/12/2005	2	Dry	2	n/a
154-10.0		7/13/2005	2	Dry		
154-10.0		9/18/2006	1	Dry	3.3	23
154-10.0		9/19/2006	1	Dry		
154-10.0		12/4/2006	37	Dry		
154-10.0		7/29/2008	35	Dry	17.7	40
154-10.0		7/30/2008	9	Dry		
154-10.0		10/18/2010	14	Dry	3.7	n/a
154-10.0		11/7/2010	2	Dry		
154-10.0		11/21/2010	1	Dry		
154-10.0		12/5/2010	7	Dry		
154-10.0		4/18/2011	18	Wet	6	n/a
154-10.0		4/26/2011	2	Dry		
154-10.1		3/22/2000	8.7	Dry	8.7	n/a
154-10.1		2/20/2001	8.1	Dry	8.1	n/a
154-10.1		5/6/2002	41	Dry	45.7	90
154-10.1		10/28/2002	51	Dry		
154-10.1		12/22/2003	23	Dry	23	n/a
154-10.1		9/22/2005	36	Dry	36	90

Shaded cells indicate an exceedance of water quality criteria

Wet and dry weather geometric mean values for all monitoring stations on segment 2: LIS CB Shore – Westbrook Harbor (East), Westbrook (CT-C2_001)

Station #	Station Name	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
154-08.3		2000-2008	6	11	7.35	11.09	5.88
154-09.0		2000-2011	4	16	4.89	5.90	4.45
154-09.1		2000-2005	2	5	41.4	86.50	30.84
154-09.2		2000-2005	2	6	9.67	30.94	6.56
154-09.3		2000-2005	2	5	35.53	118.03	21.98
154-10.0		2000-2011	8	17	3.96	4.43	3.76
154-10.1		2000-2005	0	6	22.27	n/a	22.27
Shaded cells indicate an exceedance of water quality criteria							

Table 13: Segment 3: LIS CB Shore – Westbrook Harbor (West) Bacteria Data

Waterbody ID: CT-C2_002
Characteristics: Saltwater, Class SA
Impairment: Shellfishing

Water Quality Criteria for Fecal coliform:
Geometric Mean: 14 colonies/100 ml
90% of Samples Less Than:31 colonies/100 ml

Percent reduction to meet:
Geometric Mean: 54.25%
90% of Samples Less Than:40%

Data: 2000 – 2011 from DA/BA sampling efforts, 2014 TMDL cycle
Single sample fecal coliform data (colonies/100mL) for all monitoring stations on segment 3: LIS CB Shore – Westbrook Harbor (West), Westbrook (CT-C2_002) with annual geometric means and reduction goals for samples.

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-06.1		2/15/2000	5.8	Wet	4.3	n/a
154-06.1		3/21/2000	1.6	Dry		
154-06.1		3/22/2000	8.6	Dry		
154-06.1		2/20/2001	5.8	Dry	5.8	n/a
154-06.1		5/6/2002	8.7	Dry	17.7	40
154-06.1		10/28/2002	36	Dry		
154-07.0		2/15/2000	1.6	Wet	5	n/a
154-07.0		3/21/2000	1.6	Dry		
154-07.0		3/22/2000	8.6	Dry		
154-07.0		6/12/2000	28	Wet		
154-07.0		2/20/2001	1.7	Dry	1.7	n/a
154-07.0		5/6/2002	8.6	Dry	3.8	n/a
154-07.0		10/28/2002	1.7	Dry		
154-07.0		11/24/2003	14	Dry	30.6	40
154-07.0		12/22/2003	67	Dry		
154-07.0		9/22/2005	3	Dry	3	n/a
154-07.0		4/18/2011	10	Wet	22.6	40

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-07.0		4/26/2011	51	Dry		
154-08.0		6/7/2000	36	Wet	4.7	23
154-08.0		9/14/2000	1.7	Wet		
154-08.0		9/19/2000	1.7	Wet		
154-08.0		8/13/2001	22	Wet	3.9	n/a
154-08.0		8/16/2001	1.7	Dry		
154-08.0		8/21/2001	1.6	Wet		
154-08.0		6/17/2002	5.8	Dry	4.3	n/a
154-08.0		6/18/2002	8.1	Dry		
154-08.0		9/19/2002	1.7	Dry		
154-08.0		8/20/2003	1.6	Dry	1.6	n/a
154-08.0		7/12/2005	2	Dry	2.8	n/a
154-08.0		7/13/2005	4	Dry		
154-08.0		4/25/2006	1	Wet	1	n/a
154-08.0		9/18/2006	1	Dry		
154-08.0		9/19/2006	1	Dry		
154-08.0		7/29/2008	27	Dry	18.7	n/a
154-08.0		7/30/2008	13	Dry		
154-08.0		10/18/2010	13	Dry	3	n/a
154-08.0		11/7/2010	1	Dry		
154-08.0		11/21/2010	1	Dry		
154-08.0		12/5/2010	6	Dry		
154-08.0		4/18/2011	10	Wet	4.5	n/a
154-08.0		4/26/2011	2	Dry		

Shaded cells indicate an exceedance of water quality criteria

Wet and dry weather geometric mean values for all monitoring stations on segment 3: LIS CB Shore – Westbrook Harbor (West), Westbrook (CT-C2_002)

Station #	Station Name	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
154-06.1		2000-2002	1	5	7.25	5.8	7.58
154-07.0		2000-2011	3	9	7.28	7.65	6.99
154-08.0		2000-2011	7	16	3.51	4.49	3.15

Table 14: Segment 4: LIS CB Midshore –Westbrook Harbor Bacteria Data

Waterbody ID: CT-C3_001

Characteristics: Saltwater, Class SA

Impairment: Shellfishing

Water Quality Criteria for Fecal coliform:

Geometric Mean: 14 colonies/100 ml

90% of Samples Less Than:31 colonies/100 ml

Percent reduction to meet:

Geometric Mean:26.32%

90% of Samples Less Than: 40%

Data: 2000 – 2011 from DA/BA sampling efforts, 2014 TMDL cycle
Single sample fecal coliform data (colonies/100mL) for all monitoring stations on segment 4: LIS CB Midshore – Westbrook (CT-C3_001) with annual geometric means and reduction goals for sample

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-06.0		6/7/2000	5.8	Wet	2.5	n/a
154-06.0		9/14/2000	1.6	Wet		
154-06.0		9/19/2000	1.7	Wet		
154-06.0		8/13/2001	22	Wet	6.6	n/a
154-06.0		8/16/2001	3.6	Dry		
154-06.0		8/21/2001	3.6	Wet		
154-06.0		6/17/2002	11	Dry	5.8	n/a
154-06.0		6/18/2002	11	Dry		
154-06.0		9/19/2002	1.6	Dry		
154-06.0		8/20/2003	1.6	Dry	1.6	n/a
154-06.0		7/12/2005	5	Dry	6.3	n/a
154-06.0		7/13/2005	8	Dry		
154-06.0		6/7/2000	5.8	Wet	2.5	n/a
154-06.0		9/14/2000	1.6	Wet		
154-06.0		9/19/2000	1.7	Wet		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-06.0		8/13/2001	22	Wet	6.6	n/a
154-06.0		8/16/2001	3.6	Dry		
154-06.0		8/21/2001	3.6	Wet		
154-06.0		6/17/2002	11	Dry	5.8	n/a
154-06.0		6/18/2002	11	Dry		
154-06.0		9/19/2002	1.6	Dry		
154-06.0		8/20/2003	1.6	Dry	1.6	n/a
154-06.0		7/12/2005	5	Dry	6.3	n/a
154-06.0		7/13/2005	8	Dry		
154-06.0		4/25/2006	5	Wet	2.2	n/a
154-06.0		9/18/2006	2	Dry		
154-06.0		9/19/2006	1	Dry		
154-06.0		7/29/2008	12	Dry	6.9	n/a
154-06.0		7/30/2008	4	Dry		
154-06.0		10/18/2010	17	Dry	4.7	n/a
154-06.0		11/7/2010	1	Dry		
154-06.0		11/21/2010	4	Dry		
154-06.0		12/5/2010	7	Dry		
154-06.0		4/18/2011	14	Wet	14	n/a
154-08.2		6/7/2000	14	Wet	3.3	n/a
154-08.2		9/14/2000	1.6	Wet		
154-08.2		9/19/2000	1.6	Wet		
154-08.2		8/13/2001	1.7	Wet	2.1	n/a
154-08.2		8/16/2001	3.6	Dry		
154-08.2		8/21/2001	1.6	Wet		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-08.2		6/17/2002	11	Dry	4.8	n/a
154-08.2		6/18/2002	8.1	Dry		
154-08.2		9/17/2002	3.6	Wet		
154-08.2		9/19/2002	1.6	Dry		
154-08.2		8/20/2003	1.6	Dry	1.6	n/a
154-08.2		7/12/2005	1	Dry	1.4	n/a
154-08.2		7/13/2005	2	Dry		
154-08.2		4/25/2006	1	Wet	1.3	n/a
154-08.2		9/18/2006	1	Dry		
154-08.2		9/19/2006	2	Dry		
154-08.2		7/29/2008	30	Dry	19.0	n/a
154-08.2		7/30/2008	12	Dry		
154-08.2		10/18/2010	9	Dry	4.9	n/a
154-08.2		11/7/2010	2	Dry		
154-08.2		11/21/2010	4	Dry		
154-08.2		12/5/2010	8	Dry		
154-08.2		4/18/2011	6	Wet	2.4	n/a
154-08.2		4/26/2011	1	Dry		
154-10.2		6/7/2000	50	Wet	9.2	40
154-10.2		9/14/2000	1.7	Wet		
154-10.2		8/13/2001	18	Wet	3.7	n/a
154-10.2		8/16/2001	1.6	Dry		
154-10.2		8/21/2001	1.7	Wet		
154-10.2		6/17/2002	5.8	Dry	3.6	n/a
154-10.2		6/18/2002	11	Dry		
154-10.2		9/17/2002	1.7	Wet		
154-10.2		9/19/2002	1.6	Dry		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-10.2		8/20/2003	1.7	Dry	1.7	n/a
154-10.2		7/12/2005	1	Dry	2.2	n/a
154-10.2		7/13/2005	5	Dry		
154-10.2		4/25/2006	1	Wet	1.4	n/a
154-10.2		9/18/2006	3	Dry		
154-10.2		9/19/2006	1	Dry		
154-10.2		7/29/2008	28	Dry	19.0	n/a
154-10.2		7/30/2008	13	Dry		
154-10.2		10/18/2010	12	Dry	5.8	15
154-10.2		11/7/2010	1	Dry		
154-10.2		11/21/2010	6	Dry		
154-10.2		12/5/2010	16	Dry		
154-10.2		4/18/2011	7	Wet	2.6	n/a
154-10.2		4/26/2011	1	Dry		

Shaded cells indicate an exceedance of water quality criteria

Wet and dry weather geometric mean values for all monitoring stations on segment 4: LIS CB Midshore – Westbrook (CT-C3_001)

Station #	Station Name	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
154-06.0		2000-2011	7	15	4.44	5.08	4.17
154-08.2		2000-2011	8	16	3.21	2.6	3.57
154-10.2		2000-2011	7	16	3.95	4.38	3.78

Table 15: Segment 5: LIS EB Midshore –Westbrook Bacteria Data

Waterbody ID: CT-E3_012

Characteristics: Saltwater, Class SA

Impairment: Shellfishing

Water Quality Criteria for Fecal coliform:

Geometric Mean: 14 colonies/100 ml

90% of Samples Less Than:31 colonies/100 ml

Percent reduction to meet:

Geometric Mean: 62.67%

90% of Samples Less Than: 90%

Data: 2000 – 2011 from DA/BA sampling efforts, 2014 TMDL cycle
Single sample fecal coliform data (colonies/100mL) for all monitoring stations on segment 5: LIS CB Midshore – Westbrook (CT-E3_012) with annual geometric means and reduction goals for samples.

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-11.2		6/7/2000	3.6	Wet	2.4	n/a
154-11.2		9/14/2000	1.6	Wet		
154-11.2		8/16/2001	8.1	Dry	5.4	n/a
154-11.2		8/21/2001	3.6	Wet		
154-11.2		6/17/2002	5.8	Dry	2.3	n/a
154-11.2		6/18/2002	1.7	Dry		
154-11.2		9/17/2002	1.7	Wet		
154-11.2		9/19/2002	1.7	Dry		
154-11.2		8/20/2003	3.6	Dry	3.6	n/a
154-11.2		7/12/2005	1	Dry	2	n/a
154-11.2		7/13/2005	4	Dry		
154-11.2		4/25/2006	5	Wet	2.5	n/a
154-11.2		9/18/2006	3	Dry		
154-11.2		9/19/2006	1	Dry		
154-11.2		7/29/2008	19	Dry	13.8	n/a
154-11.2		7/30/2008	10	Dry		
154-11.2		10/18/2010	9	Dry	10.5	n/a
154-11.2		11/7/2010	15	Dry		
154-11.2		11/21/2010	10	Dry		
154-11.2		12/5/2010	9	Dry		
154-11.2		4/18/2011	10	Wet	7.1	n/a
154-11.2		4/26/2011	5	Dry		
154-43.0		6/7/2000	28	Wet	7.3	n/a
154-43.0		9/14/2000	1.7	Wet		
154-43.0		9/19/2000	8.1	Wet		

Station #	Station Name	Date	Results	Wet/Dry	Geomean	90% Reduction
154-43.0		8/13/2001	28	Wet	6.5	n/a
154-43.0		8/16/2001	5.8	Dry		
154-43.0		8/21/2001	1.7	Wet		
154-43.0		6/17/2002	22	Dry	6.3	n/a
154-43.0		6/18/2002	28	Dry		
154-43.0		9/19/2002	1.6	Dry		
154-43.0		9/30/2002	1.6	Dry		
154-43.0		8/20/2003	1.6	Dry	1.6	n/a
154-43.0		7/12/2005	44	Dry	37.5	90
154-43.0		7/13/2005	32	Dry		
154-43.0		4/25/2006	1	Wet	1	n/a
154-43.0		9/18/2006	1	Dry		
154-43.0		9/19/2006	1	Dry		
154-43.0		7/29/2008	13	Dry	8.1	n/a
154-43.0		7/30/2008	5	Dry		
Shaded cells indicate an exceedance of water quality criteria						

Wet and dry weather geometric mean values for all monitoring stations on segment 5: LIS CB Midshore – Westbrook (CT-E3_012)

Station #	Station Name	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
154-11.2		2000-2011	6	16	4.36	3.48	4.75
154-43.0		2000-2008	6	12	5.55	5.14	5.76

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DOCUMENT REVISION HISTORY: ESTUARY 15 WESTBROOK TMDL

February 2019: This is a new document, not a revision. 5 segments are included in this TMDL, all impaired for Shellfishing due to high levels of bacteria.

Date	Segments covered: impaired designated use
February 2019	CT-C1_001: Shellfishing CT-C2_001: Shellfishing CT-C2_002: Shellfishing CT-C3_001: Shellfishing CT-E3_012: Shellfishing