Estuary 4: Westport-Fairfield

Watershed Summary

Watershed Description and Maps

The Westport-Fairfield Estuary (Estuary 4) covers an area of approximately 10,870 acres in southwestern Connecticut. These impaired segments are located in the western portion of Long Island Sound (LIS) in the municipalities of Westport and Fairfield.

The Westport-Fairfield Estuary includes nine 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 2010 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, 2010).

Impaired Segments

Segments 1 – 3 are part of the western portion of LIS extending from the inland saltwater limit to the shoreline. Segment 1: LIS WB Inner – Southport Harbor (CT-W1_005) is located in the inner estuary from the mouth of Southport Harbor, parallel to Willow Street, upstream to the Harbor Road crossing in Fairfield. Segment 2: LIS WB Inner – Sherwood Millpond (CT-W1_008) is located in the inner estuary from the mouth of Compo Cove, upstream to the saltwater limit south of the RR and Interstate 95 crossing, and includes Mill Creek, Grove Point, and Greens Farms Brook in Westport. Segment 3: LIS WB Inner – Saugatuck River (mouth) (CT-W1_010-SB) is located in the inner estuary from the SA/SB water quality line at the mouth of the Saugatuck River estuary at Bluff Point across from Owenoke, upstream to the RR crossing before Interstate 95, and includes Kitts Island and Burritt Cove in Westport (Figure 1).

Impaired Segment Facts

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

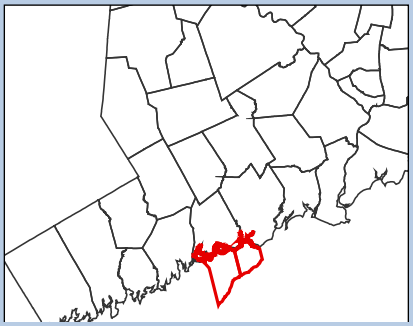
Segment 1: LIS WB Inner – Southport Harbor (*CT-W1_005*); SA; 0.07
Segment 2: LIS WB Inner – Sherwood Millpond (*CT-W1_008*); SA; 0.17
Segment 3: LIS WB Inner – Saugatuck River (mouth) (*CT-W1_010-SB*); SB; 0.65
Segment 4: LIS WB Shore – Southport Harbor (East) (*CT-W2_006*), SA; 0.18
Segment 5: LIS WB Shore – Southport Harbor (West) (*CT-W2_007*); SA; 0.19
Segment 6: LIS WB Shore – Compo Cove, SISP (*CT-W2_009*); SA; 0.32
Segment 7: LIS WB Shore – Compo Beach, Cedar Point (*CT-W2_010)*; SA; 0.42
Segment 8: LIS WB Midshore – Southport Harbor (*CT-W3_005)*; SA; 5.28
Segment 9: LIS WB Midshore – Sherwood Point (*CT-W3_006)*; SA; 9.69

Municipalities: Westport and Fairfield

Designated Use Impairments: Shellfish

MS4 Applicable? Yes

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



Segments 4 – 7 extend from the shoreline to approximately 1,000 feet offshore in Westport and Fairfield. Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) is located in Fairfield from inner Southport Harbor outlet to Pine Creek Point area, and includes Sasco Beach and Kense Point. Segment 5: LIS WB Shore – Southport Harbor (West) (CT-W2_007) is located in Fairfield from Beachside Lane area to inner Southport Harbor outlet, and includes Southport Beach and Sasco Brook outlet. Segment 6: LIS WB Shore – Compo Cove, SISP (CT-W2_009) is located in Westport from Compo Cove to Burying Hill Road area, and includes Sherwood Island State Park Beach, Sherwood Point, Sherwood Millpond outlet, and Greens Farms Brook outlet. Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) is located in Westport from Saugatuck Shores area to Compo Cove, and includes Compo Beach, Cedar Point, Saugatuck River outlet and Owenoke (Figure 1).

Segments 8 and 9 begin approximately 1,000 feet offshore, beyond Segments 4 – 7, and extend to the 50 foot contour line (Figure 1). Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) is located in Fairfield from Frost Point to Pine Creek Point area. Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) is located in Westport from Saugatuck River mouth to Compo Cove and Sherwood Island State Park area (Figure 1).

Segments 1, 2, and 4 – 9 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. Segment 3 (CT-W1_010-SB) 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 of the Westport-Fairfield Estuary are impaired due to elevated bacteria concentrations, affecting the designated use of shellfishing.

Table 1: Impaired segments in the Westport-Fairfield Estuary from the Connecticut 2010 Integrated Water Quality Report

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
CT-W1_005	LIS WB Inner - Southport Harbor, Fairfield	Western portion of LIS, Inner Estuary, from mouth parallel to Willow Street, US to Harbor Road crossing, Fairfield.	0.07	U	U	NOT	////	FULL
CT-W1_007	LIS WB Inner - Sasco Brook, Westport	Western portion of LIS, Inner Estuary, from mouth DS of Pequot Avenue crossing, US to saltwater limit at Route 1 crossing, Westport/Fairfield.	0.02	U	NOT*	NOT*	////	FULL

Table 1: Impaired segments in the Westport-Fairfield Estuary from the Connecticut 2010 Integrated Water Quality Report (continued)

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
CT-W1_008	LIS WB Inner - Sherwood Millpond, Westport	Western portion of LIS, Inner Estuary, from mouth at Compo Cove, US to saltwater limit south of RR and I95 (includes Mill Creek, Grove Point, and all of Greens Farm Brook surrounding Sherwood Island State Park), Westport.	0.17	U	U	NOT	////	FULL
CT-W1_010-SB	LIS WB Inner - Saugatuck River (mouth), Westport	Western portion of LIS, Inner Estuary, from SA/SB water quality line at mouth of Saugatuck River Estuary (at Bluff Point across to Owenoke), US to RR crossing, DS of I95 crossing (includes Kitts Island, Burritt Cove), Westport.	0.65	U	U	////	NOT	FULL
CT-W2_006	LIS WB Shore - Southport Harbor (East), Fairfield	Western portion of LIS from inner Southport Harbor outlet to Pine Creek Point area (includes Sasco Beach, Kense Point) out approximately 1000 ft offshore, Fairfield.	0.18	U	FULL	NOT	////	FULL
CT-W2_007	LIS WB Shore - Southport Harbor (West), Fairfield	Western portion of LIS from Beachside Lane area to inner Southport Harbor outlet area (includes Southport Beach, Sasco Brook outlet) out approximately 1000 ft offshore, Fairfield.	0.19	U	FULL	NOT	////	FULL

Table 1: Impaired segments in the Westport-Fairfield Estuary from the Connecticut 2010 Integrated Water Quality Report (continued)

Waterbody ID	Waterbody Name	Location	Square Miles	Marine Aquatic Life	Recreation	Direct Shellfish	Commercial Shellfish	Fish Consumption
CT-W2_009	LIS WB Shore - Compo Cove, SISP, Westport	Western portion of LIS from Compo Cove to Burying Hill Road area (includes Sherwood Island State Park Beach, Sherwood Point, Sherwood Millpond outlet, Greens Farms Brook outlet) out approximately 1000 ft offshore, Westport.	0.32	U	FULL	NOT	////	FULL
CT-W2_010	LIS WB Shore - Compo Beach, Cedar Point, Westport	Western portion of LIS from Saugatuck Shores area to Compo Cove (includes Compo Beach, Cedar Point, Saugatuck River outlet, Owenoke) out approximately 1000 ft offshore, Westport.	0.42	U	FULL	NOT	////	FULL
CT-W3_005	LIS WB Midshore - Southport Harbor, Fairfield	Western portion of LIS from approximately 1000 ft offshore (Frost Point to Pine creek Point area), out to 50 ft contour, Fairfield.	5.28	NOT	U	NOT	////	FULL
CT-W3_006	LIS WB Midshore - Sherwood Point, Westport	Western portion of LIS from approximately 1000 ft offshore (Saugatuck River mouth, Compo Cove, Sherwood Island State Park area), out to 50 ft contour, Westport.	9.69	NOT	U	NOT	////	FULL

Shaded cells indicate impaired segment addressed in this TMDL

***Bacteria data based on incorrect indicator; percent reductions could not be calculated for recreation or shellfish impairments.**

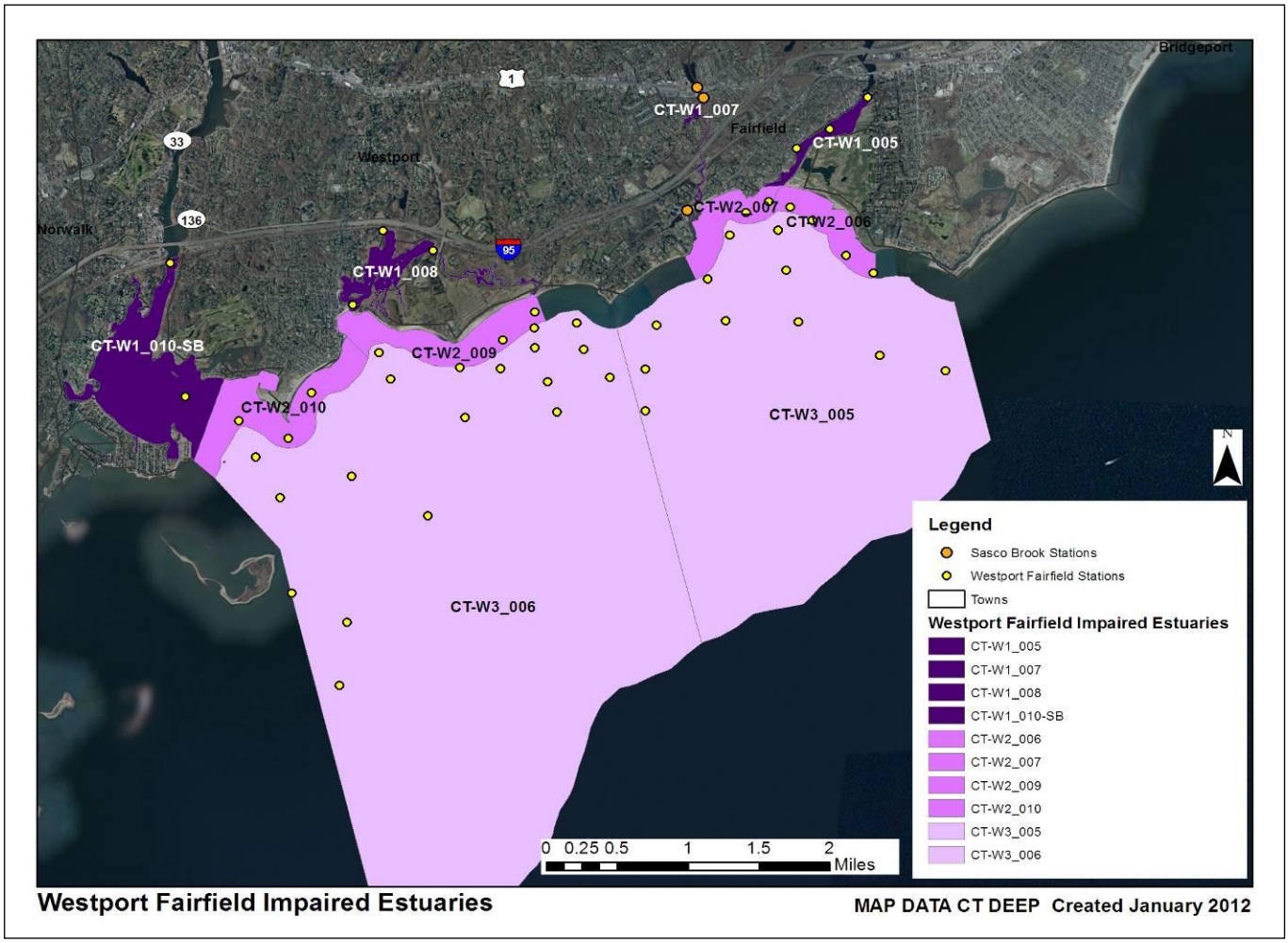
FULL = Designated Use Fully Supported

NOT = Designated Use Not Supported

U = Unassessed

/// = Not Applicable to Segment

Figure 1: GIS map featuring general information for impaired segments in the Westport-Fairfield 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 (http://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 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 Westport-Fairfield Estuary include both Class SA and SB waters.

Shellfish Bed Classifications and Closures in the Westport-Fairfield Estuary

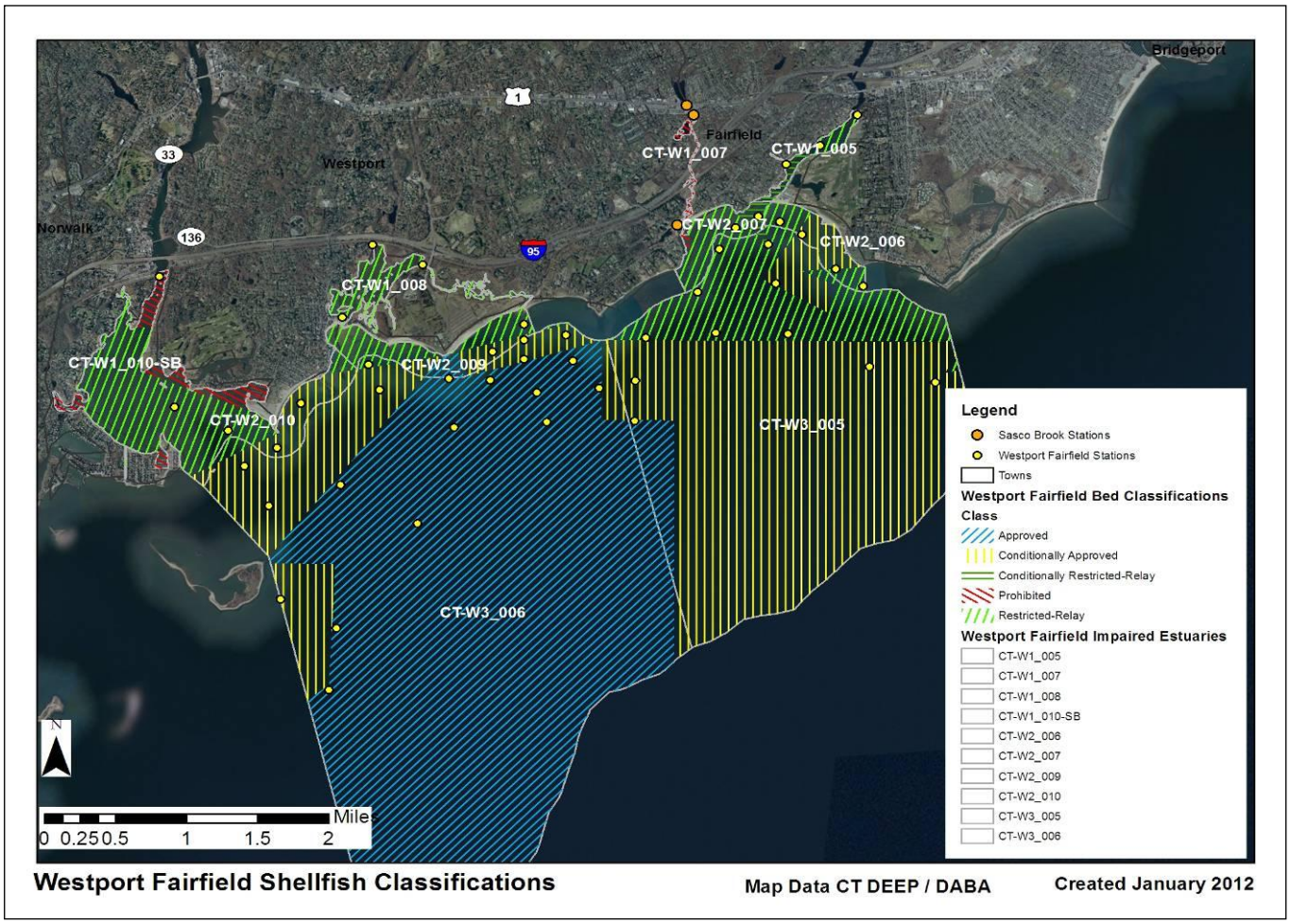
Shellfish classification areas in the Westport-Fairfield Estuary are shown in Figure 2. The following classifications for shellfish growing areas are defined by CT DA/BA:

> **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.
>
> **Restricted-Relay/Depuration**: 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 – 9 do not meet their designated use for shellfish harvesting for direct human consumption due to bacteria (Table 1). The majority of Segments 1 – 3 are permitted by Restricted-Relay/Depuration. The southern half of Segment 1 (CT-W1_005) is also permitted by Conditionally Restricted-Relay/Depuration, and the innermost section of Segment 3 (CT-W1_010-SB) is Prohibited. The eastern and western sides of Segment 4 (CT-W2_006) are permitted by Restricted-Relay/Depuration, while the middle section near Sasco Point is Conditionally Approved. The majority of Segment 5 (CT-W2_007) is permitted by Restricted-Relay/Depuration with a small portion near the mouth of Southport Harbor permitted by Conditionally Restricted-Relay/Depuration. The eastern and western sides of Segment 6 (CT-W2_009) are permitted by Restricted-Relay/Depuration with small portions of Approved and Conditionally Approved waters off the point of Sherwood Island State Park. For Segment 7 (CT-W2_010), areas around Compo Cove and the Saugatuck River outlet are permitted by Restricted-Relay/Depuration with the middle section Conditionally Approved. Most of Segment 8 (CT-

W3_005) is Conditionally Approved with Restricted-Relay/Depuration waters to the north and Approved waters to the east off Frost Point. Most of Segment 9 (CT-W3_006) is Approved with portions of Conditionally Approved waters to the north near the shore (Figure 2).

Figure 2: GIS map featuring Shellfish Bed Classifications and Closures for the impaired segments in the Westport-Fairfield Estuary



Shellfish Bed Lease Locations

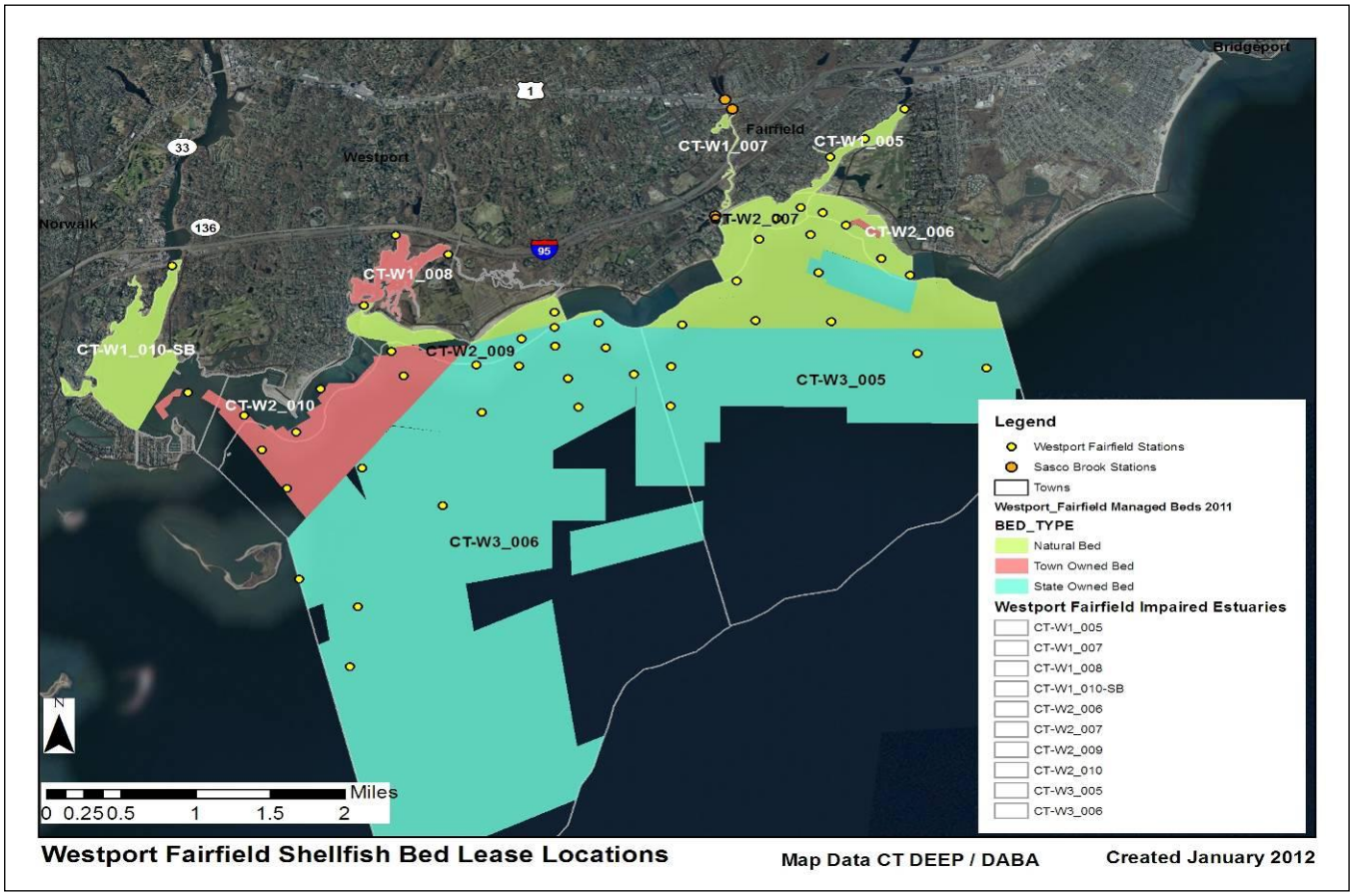
Shellfish beds in the Westport-Fairfield Estuary are also classified by their management (Figure 3). CT DA/BA defines these areas as follows:

> **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 Westport 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.

The majority of Segments 1 (CT-W1_005), 3 (CT-W1_010-SB), 4 (CT-W2_006), 5 (CT-W2_007), and 6 (CT-W2_009) and portions of Segment 8 (CT-W3_005) are natural beds. The majority of Segments 2 (CT-W1_008) and 7 (CT-W2_010) and portions of Segments 3 (CT-W1_010-SB), 4 (CT-W2_006), 6 (CT-W2_009), and 9 (CT-W3_006) are town-managed beds. The majority of Segments 8 (CT-W3_005) and 9 (CT-W3_006) and portions of Segment 6 (CT-W2_009) are State-managed beds (Figure 3).

Figure 3: GIS map featuring Shellfish Bed Lease Locations for the impaired segments in the Westport-Fairfield 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, 2011). 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 3 (CT-W1_010-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. Segments 1, 2 and 4 – 9 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 sampling locations on Segments 1 (CT-W1_005), 2 (CT-W1_008), and 4 (CT-W2_006), one sampling location on Segment 5 (CT-W2_007), two sampling locations on Segments 3 (CT-W1_010-SB) and 6 (CT-W2_009), three sampling locations on Segment 7 (CT-W2_010), ten sampling locations on Segment 8 (CT-W3_005), and eleven sampling locations on Segment 9 (CT-W3_006). Water quality criteria for fecal coliform, along with bacteria sampling results from 2000 – 2011, for Segments 1 – 9 are presented in Tables 13 – 21. These segments of the estuary are impaired due to elevated bacteria concentrations, affecting the designated use of 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 in Segments 1 – 9 (Tables 13 – 21).

Segment 1 (CT-W1_005): As shown in Table 13, geometric mean and 90% less than values exceeded the WQS for fecal coliform for all sampling years at all stations in Segment 1, where applicable, 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 exceedance of WQS for fecal coliform during both wet and dry-weather at all stations.

Segment 2 (CT-W1_008): As shown in Table 14, geometric mean and 90% less than values exceeded the WQS for fecal coliform at Station 158-11.2 in 2000 and 2002 during the sampling period. Geometric mean and 90% less than values could not be calculated for the remaining stations due to insufficient data. Geometric means for data collected during the sampling period were also calculated for each station using wet and dry-weather conditions, resulting in exceedance of WQS for fecal coliform during both wet and dry-weather at Station 158-11.2.

Segment 3 (CT-W1_010-SB): As shown in Table 15, 90% less than values exceeded the WQS for fecal coliform once at Station 158-09.4 in 2001 during the sampling period. Geometric mean values did not exceed the WQS for fecal coliform at any station. 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 4 (CT-W2_006): As shown in Table 16, 90% less than values exceeded the WQS for fecal coliform multiple times at Stations 051-03.0, 051-09.5, and 051-09.6 in Segment 4 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform once in 2000 for Stations 051-03.0 and 051-09.5 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. 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_007): As shown in Table 17, geometric mean and 90% less than values exceeded the WQS for fecal coliform multiple times at Station 051-02.1 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 exceedance of WQS for fecal coliform during both wet and dry-weather at Station 051-02.1.

Segment 6 (CT-W2_009): 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 158-13.0 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 exceedance of WQS for fecal coliform during wet-weather at Station 158-13.0.

Segment 7 (CT-W2_010): As shown in Table 19, 90% less than values exceeded the WQS for fecal coliform multiple times at Stations 158-08.0 and 158-09.0 and once in 2006 at Station 158-10.0 in Segment 7 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform at Station 158-09.0 in 2001 and 2006. 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 8 (CT-W3_005): As shown in Table 20, 90% less than values exceeded the WQS for fecal coliform multiple times at all stations in Segment 8, except Station 158-15.1 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform multiple times at Stations 051-01.0, 051-01.2, and 051-2.4 and once in 2000 at Stations 051-04.1 and 051-04.3 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, resulting exceedance of WQS for fecal coliform during wet-weather at Station 051-01.2.

Segment 9 (CT-W3_006): As shown in Table 21, 90% less than values exceeded the WQS for fecal coliform multiple times at Stations 158-02.3, 158-07.0, 158-11.0, 158-12.2, and 158-12.4 and only once at Stations 158-07.1 in 2002, 158-08.1 in 2007, 158-12.0 in 2010, 158-12.5 in 2010, and 158-12.6 in 2001 during the sampling period. Geometric mean values exceeded the WQS for fecal coliform once in 2000 at Station 158-12.2. 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.

Due to the elevated bacteria measurements presented in Tables 13 – 21, these nine 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 description for the impaired segments in the Westport-Fairfield Estuary**

Waterbody ID	Station	Station Description	Town	Latitude	Longitude
Segment 1: CT-W1_005	051-02.2	Pequot YC Southport Harbor	Fairfield	41.1338	-73.2798
	051-02.3	Dam in Southport Harbor/Mill River	Fairfield	41.1372	-73.2748
	051-02.5	Southport Harbor Horseneck Creek outlet	Fairfield	41.1317	-73.2843
	051-02.8	Southport Harbor	Fairfield		
Segment 2: CT-W1_008	158-11.2	Sherwood Park in Pond	Westport	41.1204	-73.3333
	158-11.6	Sherwood Millpond	Westport		
	158-11.7	Sherwood Millpond	Westport		
	158-11.8	Sherwood Mill Pond-Grove Pt. Road	Westport	41.1225	-73.3401
Segment 3: CT-W1_010-SB	158-09.1	Saugatuck River near C"13"	Westport	41.1044	-73.3667
	158-09.4	Saugatuck River at RR bridge	Westport	41.1188	-73.3689
Segment 4: CT-W2_006	051-03.0	S. Kensie Pt.	Fairfield		
	051-03.1	Kensie Point	Fairfield		
	051-09.5	Sasco Beach	Fairfield	41.1239	-73.2821
	051-09.6	Sasco Beach near channel	Fairfield	41.1253	-73.2851
Segment 5: CT-W2_007	051-02.1	C"11" channel	Fairfield	41.1259	-73.2880
Segment 6: CT-W2_009	158-12.3	S. Sherwood Island Park	Westport	41.1108	-73.3238
	158-13.0	mouth Burial Hill Creek	Westport	41.1138	-73.3196
Segment 7: CT-W2_010	158-08.0	Cedar Pt.	Westport	41.0999	-73.3528
	158-09.0	N"8" mouth of Saugatuck River	Westport	41.1018	-73.3594
	158-10.0	Compo Beach	Westport	41.1049	-73.3496
Segment 8: CT-W3_005	051-01.0	S. Sasco Brook	Fairfield	41.1175	-73.2962
	051-01.2	Southport Beach	Fairfield	41.1223	-73.2933
	051-02.0	N"2" entrance to channel	Fairfield	41.1185	-73.2856
	051-02.4	N"8" channel	Fairfield	41.1228	-73.2867
	051-04.0	R"22" bell	Fairfield	41.1077	-73.2640
	051-04.1	NW R"22" bell	Fairfield	41.1093	-73.2729
	051-04.2	S. channel to harbor	Fairfield	41.1129	-73.2839
	051-04.3	S. Sasco Brook	Fairfield	41.1130	-73.2937
	158-15.0	SE Frost Pt.	Westport	41.1124	-73.3031
	158-15.1	SE Frost Pt. (Mid-lot 359)	Westport	41.1077	-73.3045

Table 2: Sampling station location description for the impaired segments in the Westport-Fairfield Estuary (continued)

Waterbody ID	Station	Station Description	Town	Latitude	Longitude
Segment 9: CT-W3_006	158-02.3	S. Cockenoe Island N"2"	Westport	41.0732	-73.3456
	158-07.0	between Cedar Pt. and NE Cockenoe Island	Westport	41.0935	-73.3538
	158-07.1	between NE Cockenoe Island And Sherwood Pt.	Westport	41.0959	-73.3442
	158-08.1	G"5"	Westport	41.0979	-73.3572
	158-10.1	S. Compo Mill Cove	Westport	41.1064	-73.3390
	158-11.0	Compo Mill Cove	Westport	41.1093	-73.3406
	158-12.0	Sherwood Pt.	Westport	41.1077	-73.3296
	158-12.2	S. Burial Hill Creek	Westport	41.1100	-73.3195
	158-12.4	S. Burial Hill Beach	Westport	41.1127	-73.3139
	158-12.5	S. Sherwood Island Park	Westport	41.1076	-73.3241
	158-12.6	S. Burial Hill Beach	Westport	41.1098	-73.3129

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 Westport-Fairfield 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 Westport-Fairfield Estuary

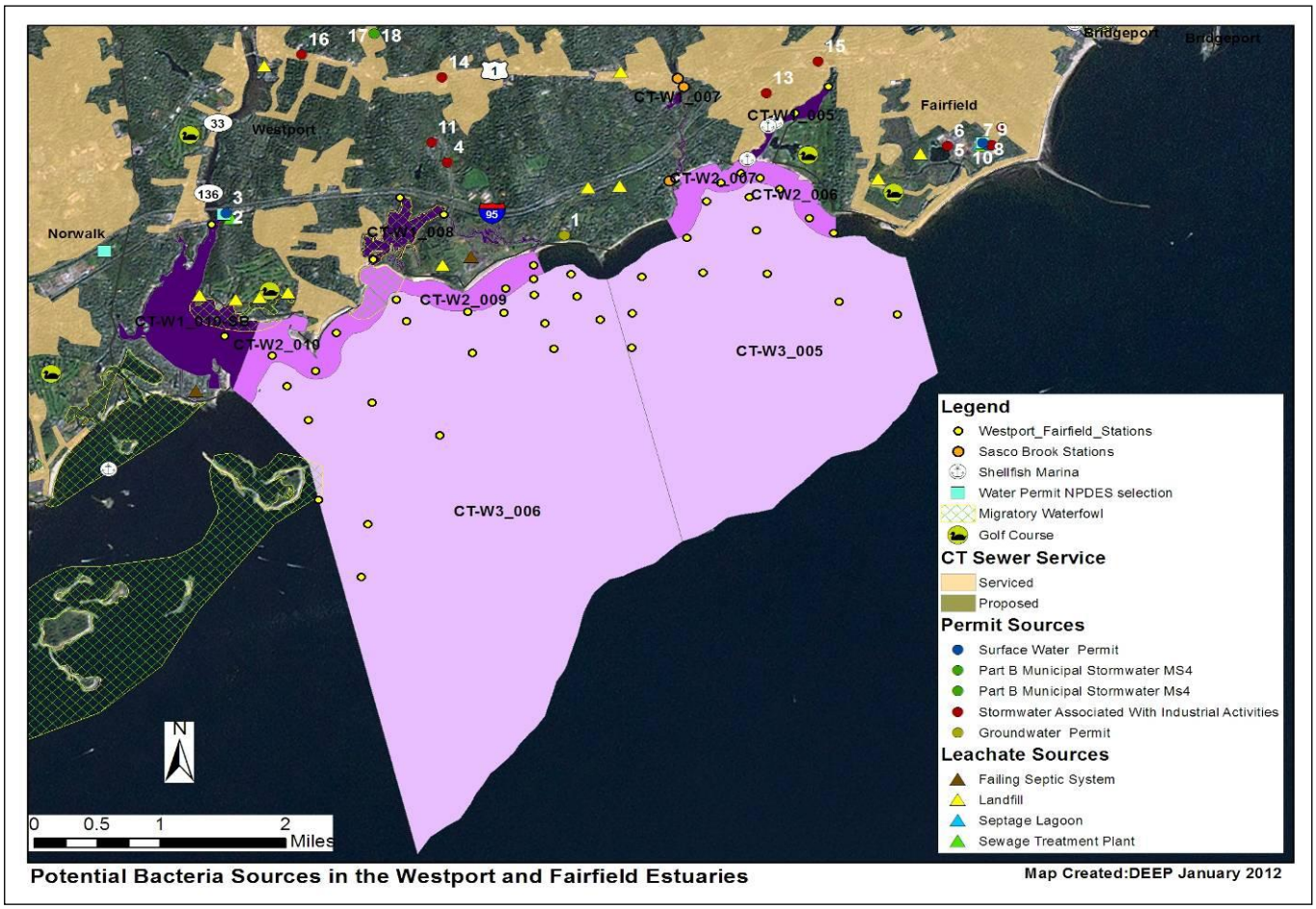


Table 3: Potential bacteria sources to the impaired segments in the Westport-Fairfield Estuary

Segment #	Impaired Segment	Permit Source	Illicit Discharge	CSO/SSO Issue	Failing Septic System	Marinas	Stormwater Runoff	Nuisance Wildlife/Pets	Other
1	LIS WB Inner – Southport Harbor CT-W1_005	**x**	**x**		**x**	**x**	**x**	**x**	
2	LIS WB Inner – Sherwood Millpond CT-W1_008	**x**	**x**		**x**		**x**	**x**	
3	LIS WB Inner – Saugatuck River (mouth) CT-W1_010-SB	**x**	**x**		**x**		**x**	**x**	**x**
4	LIS WB Shore – Southport Harbor (East) CT-W2_006	**x**	**x**		**x**	**x**	**x**	**x**	**x**
5	LIS WB Shore – Southport Harbor (West) CT-W2_007	**x**	**x**		**x**	**x**	**x**	**x**	**x**
6	LIS WB Shore – Compo Cove, SISP CT-W2_009	**x**	**x**		**x**		**x**	**x**	**x**
7	LIS WB Shore – Compo Beach, Cedar Point CT-W2_010	**x**	**x**		**x**		**x**	**x**	**x**
8	LIS WB Midshore – Southport Harbor CT-W3_005	**x**	**x**		**x**	**x**	**x**	**x**	**x**
9	LIS WB Midshore – Sherwood Point CT-W3_006	**x**	**x**		**x**		**x**	**x**	**x**

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 construction related stormwater), 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).

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 Westport-Fairfield 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	0
GSC	Stormwater Discharge Associated with Commercial Activity	0
GSI	Stormwater Associated with Industrial Activity	12
GSM	Part B Municipal Stormwater MS4	2
GSN	Stormwater Registration – Construction	0
LF	Groundwater Permit (Landfill)	0
UI	Underground Injection	1

Permitted Sources

As shown in Table 5, there are multiple permitted discharges in Westport and Fairfield that could be contributing bacteria to the impaired segments. These facilities include the Fairfield Sewage Treatment Plant, Fairfield Yard Waste Facility, Fairfield Transfer Station, Westport Maintenance Facility, Westport Transfer Station, and multiple marinas throughout the watershed. According to the 2008 Westport and Fairfield Estuary Reports, there are approximately 10 marinas in Westport and 2 marinas in Fairfield. There are water quality data available for some of these discharges (Table 6). Although this data cannot be compared to the WQS as there is no single sample shellfish standard for fecal coliform, high fecal coliform counts were detected at Superior Plating Company (GSI000850): 2,900 colonies/100 mL in 2001 and counts that were "too numerous to count" (TNTC) in 2002. This industrial discharge affects Southport Harbor, particularly Segments 1 (CT-W1_005), 4 (CT-W2_006), and 5 (CT-W2_007).

Since the 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. One dot will be displayed at the geographic center of the municipality as a reference point. Sometimes

this location falls outside the targeted watershed, and 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 Westport and Fairfield, CT that may be affecting the Westport-Fairfield Estuary

Town	Client	Permit ID	Permit Type	Site Name	Map #
Fairfield	Town Of Fairfield	CT0101044	Surface Water Permit	Fairfield WPCF	8
Fairfield	Town Of Fairfield	CT0101044	Surface Water Permit	Fairfield Sewage Treatment Plant	10
Fairfield	Town Of Fairfield	GSI001448	Stormwater Associated With Industrial Activities	Fairfield Transfer Station	6
Fairfield	Town Of Fairfield	GSI001871	Stormwater Associated With Industrial Activities	Fairfield Yard Waste Facility	9
Fairfield	Town Of Fairfield	GSI001992	Stormwater Associated With Industrial Activities	Fairfield WPCF	7
Fairfield	Town Of Fairfield	GSI002146	Stormwater Associated With Industrial Activities	Fairfield Transfer Station	5
Fairfield	First Student, Inc.	GSI002261	Stormwater Associated With Industrial Activities	First Student, Inc. (#20910)	12
Fairfield	Town Of Fairfield	GSM000012	Part B Municipal Stormwater MS4	Fairfield, Town of	
Southport	Jelliff Corporation	GSI000849	Stormwater Associated With Industrial Activities	Jelliff Corporation	13
Southport	Superior Plating Company	GSI000850	Stormwater Associated With Industrial Activities	Superior Plating Company	15
Westport	Town Of Westport	CT0100684	Surface Water Permit	Westport WPCF	3
Westport	State Of Connecticut Department Of Transportation	GSI000081	Stormwater Associated With Industrial Activities	Westport Maintenance Facility	14
Westport	Town Of Westport	GSI001207	Stormwater Associated With Industrial Activities	Parsell Public Works Center	4
Westport	Town Of Westport	GSI001716	Stormwater Associated With Industrial Activities	Westport WPCF	2
Westport	Dattco, Inc.	GSI002101	Stormwater Associated With Industrial Activities	Dattco, Inc.	16
Westport	Town Of Westport	GSI002142	Stormwater Associated With Industrial Activities	Westport Transfer Station	11
Westport	Town Of Westport	GSM000026 / 200902793	Part B Municipal Stormwater Ms4	Westport, Town Of	18
Westport	Greens Farms Academy, Inc.	UI0000372	Groundwater Permit	Greens Farms Academy	1

Table 6: Industrial permits affecting the Westport-Fairfield Estuary and available fecal coliform data (colonies/100mL). The results cannot be 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	Result
Fairfield	Jelliff Corporation	GSI000849	Westport-Fairfield Estuary	SWD-01	09/25/01	0
Fairfield	Jelliff Corporation	GSI000849	Westport-Fairfield Estuary	SWD-01	11/05/02	0
Fairfield	Superior Plating Company	GSI000850	Westport-Fairfield Estuary	002	09/25/01	2,900
Fairfield	Superior Plating Company	GSI000850	Westport-Fairfield Estuary	002	09/26/02	TNTC
Fairfield	Superior Plating Company	GSI000850	Westport-Fairfield Estuary	002	09/19/03	890
Fairfield	Fairfield Transfer Station	GSI001448	Westport-Fairfield Estuary	CB 2	05/28/02	<100
Fairfield	Fairfield Transfer Station	GSI001448	Westport-Fairfield Estuary	CB 2	09/26/02	1,500
Westport	Saugatuck Harbor Yacht Club	GSI000347	Westport-Fairfield Estuary	Hauling Site	10/26/02	0
Westport	Parsell Public Works Center	GSI001207	Westport-Fairfield Estuary	CB NE001 corner	10/15/01	150
Westport	Parsell Public Works Center	GSI001207	Westport-Fairfield Estuary	CB NE001 corner	11/05/02	5

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. There is an EPA waiver process that municipalities can apply for to not participate in the MS4 program. In Connecticut, EPA has granted such waivers to 19 municipalities. All participating municipalities within UAs in Connecticut are currently regulated under MS4 permits by CT DEEP staff in the MS4 program.

The US Census Bureau defines a UA as a densely settled area that has a census population of at least 50,000. A UA generally consists of a geographic core of block groups or blocks that exceeds the 50,000 people threshold 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)

For the 2000 Census a new geographic entity was created to supplement the UA blocks of land. This created a block known as an Urban Cluster (UC) and is slightly different than the UA. The definition of a UC is a densely settled area that has a census population of 2,500 to 49,999. A UC generally consists of a geographic core of block groups or blocks that have a population density of at least 1,000 people per square mile, and adjacent block groups and blocks with at least 500 people per square mile. A UC

consists of all or part of one or more incorporated places and/or census designated places; such a place(s) together with adjacent territory; or territory outside of any place. The major difference is the total population cap of 49,999 people for a UC compared to >50,000 people for a UA. (67 FR 11663)

While it is possible that CT DEEP will be expanding the reach of the MS4 program to include UC municipalities in the near future they are not currently under the permit. However, the GIS layers used to create the MS4 maps in this Statewide TMDL did include both UA and UC blocks. This factor creates some municipalities that appear to be within an MS4 program that are not currently regulated through an MS4 permit. This oversight can explain a municipality that is at least partially shaded grey in the maps and there are no active MS4 reporting materials or information included in the appropriate appendix. While these areas are not technically in the MS4 permit program, they are still considered urban by the cluster definition above and are likely to contribute similar stormwater discharges to affected waterbodies covered in this TMDL.

As previously noted, EPA can grant a waiver to a municipality to preclude their inclusion in the MS4 permit program. One reason a waiver could be granted is a municipality with a total population less than 1000 people, even if the municipality was located in a UA. There are 19 municipalities in Connecticut that have received waivers, this list is: Andover, Bozrah, Canterbury, Coventry, East Hampton, Franklin, Haddam, Killingworth, Litchfield, Lyme, New Hartford, Plainfield, Preston, Salem, Sherman, Sprague, Stafford, Washington, and Woodstock. There will be no MS4 reporting documents from these towns even if they are displayed in an MS4 area in the maps of this document.

The list of US Census UCs is defined by geographic regions and is named for those regions, not necessarily by following municipal borders. In Connecticut the list of UCs includes blocks in the following Census Bureau regions: Colchester, Danielson, Lake Pocotopaug, Plainfield, Stafford, Storrs, Torrington, Willimantic, Winsted, and the border area with Westerly, RI (67 FR 11663). Any MS4 maps showing these municipalities may show grey areas that are not currently regulated by the CT DEEP MS4 permit program.

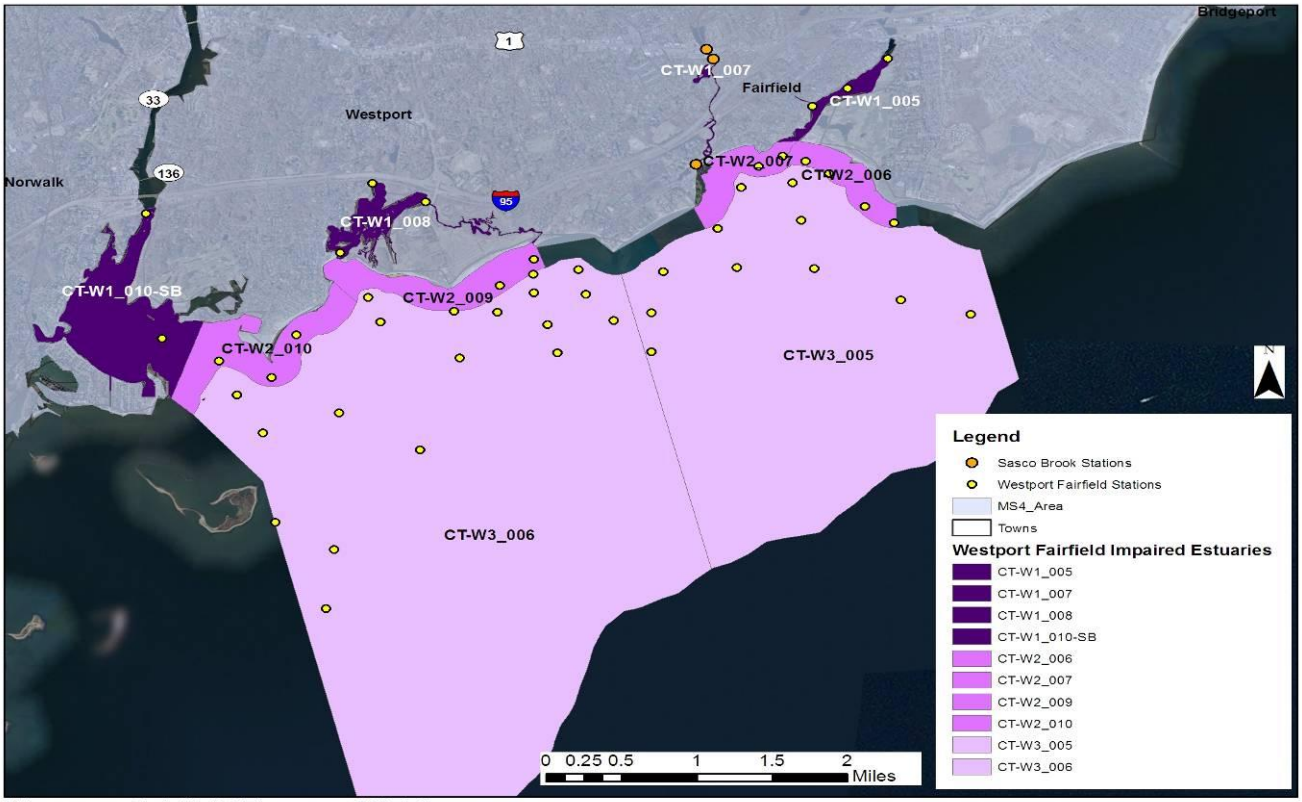
The impaired segments in the Westport-Fairfield Estuary are located within the Towns of Westport and Fairfield, CT. Both municipalities have designated urban areas, as defined by the U.S. Census Bureau and are required to comply with the General Permit for the Discharge of Stormwater from Small Municipal 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 (http://www.ct.gov/dep/cwp/view.asp?a=2721&q=325702&depNav_GID=1654).

There are six MS4 outfalls that have been sampled for *E. coli* bacteria in the watershed in Westport and Fairfield, discharging directly to Southport Harbor or indirectly to Sasco Brook, Pine Creek, Horse Tavern Creek, and the Mill River (Table 7). Although the results cannot be compared to the water quality standard as there is no single sample shellfish standard for *E. coli*, high counts were detected at four of the six outfalls on 10/15/2010.

Table 7: List of MS4 sample locations and *E. coli* (colonies/100 mL) results in the Westport-Fairfield Estuary. The results cannot be compared to the water quality standard as there is no single sample shellfish standard for *E. coli*.

Town	Location	MS4 Type	Receiving Waters	Sample Date	Result
Westport	Old Road and Grist Mill	Residential	Sasco Brook	09/14/06	480
Fairfield	#1 Beaumont Street	Commercial	Pine Creek	04/27/05	120
Fairfield	#1 Beaumont Street	Commercial	Pine Creek	02/03/06	6
Fairfield	#1 Beaumont Street	Commercial	Pine Creek	11/08/06	128
Fairfield	#1 Beaumont Street	Commercial	Pine Creek	04/12/07	120
Fairfield	#1 Beaumont Street	Commercial	Pine Creek	04/04/08	66
Fairfield	#1 Beaumont Street	Commercial	Pine Creek	06/18/09	1,650
Fairfield	#1 Beaumont Street	Residential	Pine Creek	10/15/10	TNTC
Fairfield	#2 Pequot Avenue	Industrial	Horse Tavern Creek to Southport Harbor	04/27/05	104
Fairfield	#2 Pequot Avenue	Industrial	Horse Tavern Creek to Southport Harbor	02/03/06	8
Fairfield	#2 Pequot Avenue	Industrial	Horse Tavern Brook to Southport Harbor	11/08/06	220
Fairfield	#2 Pequot Avenue	Industrial	Horse Tavern Brook to Southport Harbor	04/12/07	380
Fairfield	#2 Pequot Avenue	Industrial	Horse Tavern Brook to Southport Harbor	10/15/10	2,120
Fairfield	#3 Flinklock Road	Residential	Mill River	04/27/05	0
Fairfield	#3 Flinklock Road	Residential	Mill River	02/03/06	18
Fairfield	#3 Flinklock Road	Residential	Mill River	11/08/06	86
Fairfield	#3 Flinklock Road	Residential	Mill River	04/12/07	12
Fairfield	#3 Flinklock Road	Residential	Mill River	10/15/10	2,400
Fairfield	#4 Mill Hill Terrace	Residential	Sasco Brook	04/27/05	0
Fairfield	#4 Mill Hill Terrace	Residential	Sasco Brook	02/03/06	0
Fairfield	#4 Mill Hill Terrace	Residential	Sasco Brook	11/08/06	64
Fairfield	#4 Mill Hill Terrace	Residential	Sasco Brook	04/12/07	650
Fairfield	#4 Mill Hill Terrace	Residential	Sasco Brook	10/15/10	TNTC
Fairfield	Chester Place	Residential	Southport Harbor	04/04/08	55
Fairfield	Chester Place	Residential	Southport Harbor	06/18/09	2,410

Figure 5: MS4 areas near the Westport-Fairfield Estuary



Publicly Owned Treatment Works

The Westport Water Pollution Control Facility (CT0100684) is located along Elaine Road and has the potential to impact the shellfish growing waters in the Westport-Fairfield Estuary, particularly the Prohibited waters near the Saugatuck river mouth (Westport, 2008). According to the 2008 Westport Estuary Report, the Interstate Environmental Commission (IEC) inspected the effluent from the plant and no WQS exceedance was reported from 2006-2008. The Westport-Weston Family YMCA has a private WPCF that was under construction in 2008. The Fairfield Water Pollution Control Facility (CT0101044) is located at 1 Rod Highway and also has the potential to impact the shellfish growing waters in the Westport-Fairfield Estuary (Fairfield, 2008). According to the 2008 Fairfield Estuary Report, the IEC inspected the effluent from the plant from 2006-2008 and three exceedances were reported in 2007. The Fairfield WPCF has two industrial discharges that require pretreatment, and nearby growing areas were closed twice in 2007 due to UV disinfection failure. Closures from 2006-2008 were due to Bridgeport West Side WPCF bypasses, including 21 in 2006 and 48 in 2008. Bacteria data from the effluent of the Westport and Fairfield Water Pollution Control Facilities are included in Table 8. The plants did not exceed their permit limits on any date sampled.

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

Town	Permitee	Permit Number	Receiving Water	Date	30-Day Geometric Mean	7-Day Geometric Mean
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	01/31/09	5	12
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	02/28/09	4	12
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	03/31/09	2	6
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	04/30/09	6	12
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	05/31/09	10	48
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	06/30/09	8	60
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	07/31/09	10	20
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	08/31/09	6	28
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	09/30/09	18	150
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	10/31/09	17	60
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	11/30/09	8	26
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	12/31/09	5	100
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	01/31/10	6	18
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	02/28/10	5	20
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	03/31/10	4	18
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	04/30/10	4	10
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	05/31/10	3	4
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	06/30/10	7	40
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	07/31/10	21	90
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	08/31/10	8	50
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	09/30/10	10	22
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	10/31/10	6	20
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	11/30/10	6	20
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	12/31/10	8	24
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	01/31/11	11	68
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	02/28/11	4	26
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	03/31/11	5	58
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	04/30/11	3	8
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	05/31/11	3	12
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	06/30/11	5	58
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	07/31/11	16	140
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	08/31/11	15	136
Fairfield	Fairfield WPCF	CT0101044	Westport-Fairfield Estuary	09/30/11	4	10
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	01/31/09	2	3
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	02/28/09	1	3

Table 8: Wastewater treatment plant fecal coliform (colonies/100 mL) data discharging to the Westport-Fairfield Estuary (continued)

Town	Permitee	Permit Number	Receiving Water	Date	30-Day Geometric Mean	7-Day Geometric Mean
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	03/31/09	3	4
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	04/30/09	3	6
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	05/31/09	3	7
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	06/30/09	2	4
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	07/31/09	3	10
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	08/31/09	6	26
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	09/30/09	10	35
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	10/31/09	4	15
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	11/30/09	3	6
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	12/31/09	2	4
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	01/31/10	3	11
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	02/28/10	4	27
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	03/31/10	1	3
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	04/30/10	1	4
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	05/31/10	4	22
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	06/30/10	3	15
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	07/31/10	4	13
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	08/31/10	3	17
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	09/30/10	6	37
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	10/31/10	6	30
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	11/30/10	3	25
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	12/31/10	4	7
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	01/31/11	4	25
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	02/28/11	2	31
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	03/31/11	4	8
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	04/30/11	2	4
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	05/31/11	2	5
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	06/30/11	2	5
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	07/31/11	3	15
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	08/31/11	5	13
Westport	Westport WPCF	CT0100684	Westport-Fairfield Estuary	09/30/11	4	10
30-Day Geometric Mean Permit Limit = 200 colonies/100 mL						
7-Day Geometric Mean Permit Limit = 400 colonies/100 mL						

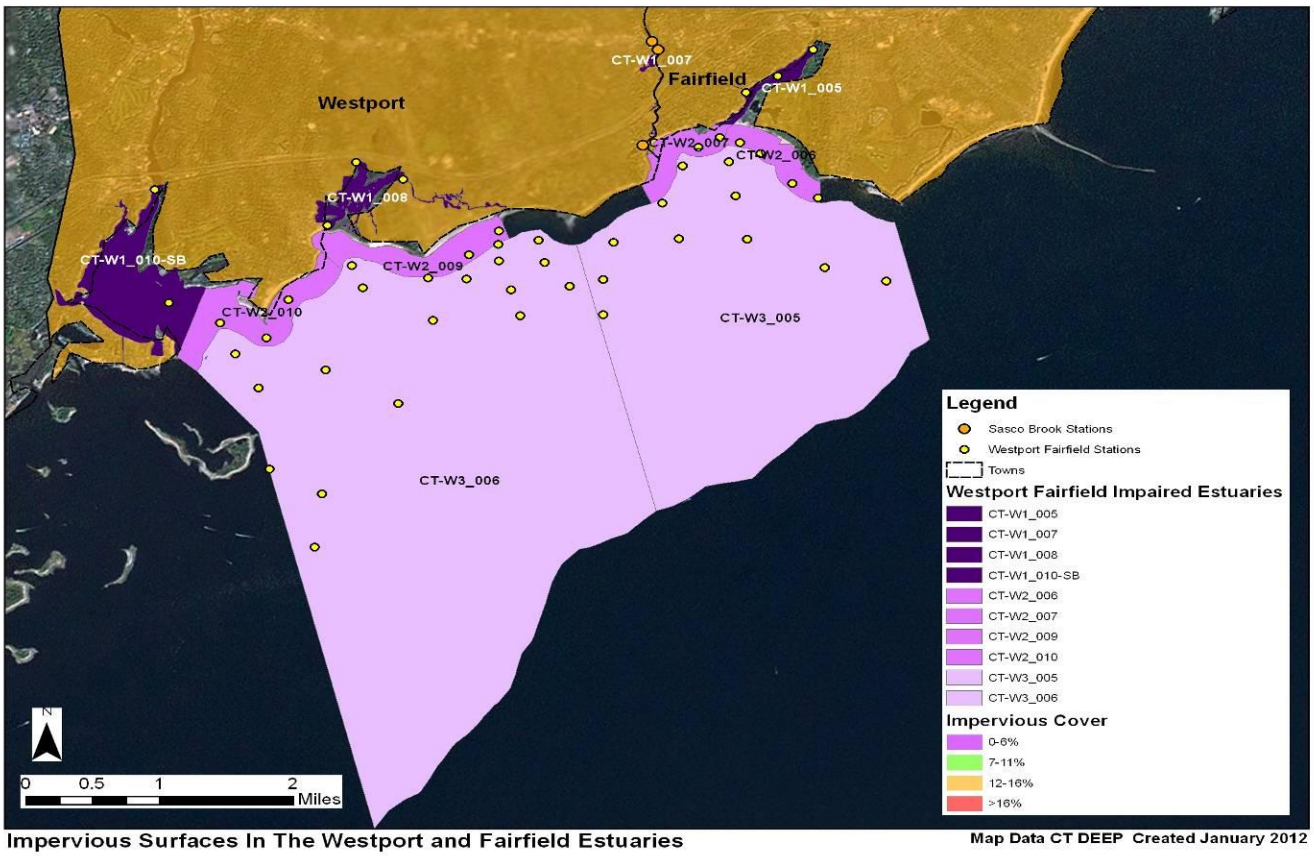
Non-point Sources

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 Westport-Fairfield Estuary being tidally influenced, many bacterial sources downstream of impaired segments may be affecting water quality in upstream segments. Potential sources of NPS to the impaired segments in the Westport-Fairfield Estuary are described below.

Stormwater Runoff from Developed Areas

The Towns of Westport and Fairfield 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). According to the 2008 Westport and Fairfield Estuary Reports, commercial and residential land use has increased total impervious cover along coastal regions of Westport and Fairfield, which has increased stormwater runoff to the estuary. Coastal land bordering the Westport-Fairfield Estuary in Fairfield and Westport has 12-16% impervious cover (Figure 6). Also, stations on Segments 1 (CT-W1_005), 2 (CT-W1_008), 5 (CT-W2_007), 6 (CT-W2_009), and 8 (CT-W3_005) 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 Westport and Fairfield, CT



Illicit Discharges and Insufficient Septic Systems

As shown in Figure 4, portions of Westport and Fairfield rely on a municipal sanitary sewer system, particularly around Southport Harbor, Pine Creek Point, Compo Cove, and Sherwood Millpond. Sewer system leaks and other illicit discharges can contribute bacteria to nearby surface waters. According to the 2008 Westport Estuary Report, the Town of Westport has 17 pump stations, 8 of which have no bypass capabilities and are located near Prohibited and Restricted-Relay/Depuration waters. One pump-out facility at the Compo Yacht Basin in the Saugatuck River serves the Saugatuck Harbor boating community. Westport plans to expand the sewer line to the Saugatuck Shores area. There are 8 pump stations and 12 CSOs in the Town of Fairfield, which may surcharge after heavy rain events (Fairfield, 2008). The Ye Old Yacht Yard is the only marina in Fairfield not connected to public sewers. There are two sewage treatment plants identified in Figure 4 in Westport and Fairfield near the impaired segments.

The majority of Westport and Fairfield, particularly near the shoreline, relies on onsite wastewater treatment systems, such as septic systems. As identified in Figure 4, there are two failing septic systems in Westport near Segments 3 (CT-W1_010-SB) and 6 (CT-W2_009), and one septage lagoon in Fairfield near Segments 4 (CT-W2_006) and 8 (CT-W3_005). Also, stations on Segments 1 (CT-W1_005), 2 (CT-W1_008), and 5 (CT-W2_007) exceeded the WQS for fecal coliform during dry-weather, which may be an indication of septic or sewer system leaks to the estuary. 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 keeping track of any reported insufficient or failing septic systems in a specific municipality. The Town of Westport is part of the Westport-Weston Health District (http://www.wwhd.org). The Town of Fairfield has a full-time health director (http://www.fairfieldct.org/health.htm).

Wildlife and Domestic Animal Waste

Wildlife and domestic animals within the municipalities of Westport and Fairfield, 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 Westport-Fairfield Estuary, including within Segment 2 (CT-W1_008) in Sherwood Millpond, Segments 3 (CT-W1_010-SB) and 7 (CT-W2_010) in the Saugatuck River mouth, and Segments 6 (CT-W2_009) and 7 in Compo Cove (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 these natural sources on water quality (USEPA, 2001).

Westport Longshore Club Park is located at the Saugatuck River mouth near Segments 3 (CT-W1_010-SB) and 7 (CT-W2_010); Birchwood Country Club is located upstream along the Saugatuck River near Segment 3 (CT-W1_010-SB); Country Club of Fairfield is located at Southport Harbor near Segments 1 (CT-W1_005) and 4 (CT-W2_006); and Pine Creek Par 3 Golf Course is located at Pine Creek Point near Segments 4 and 8 (CT-W3_005) (Figure 4). There are also large open recreational fields within the watershed, including Pine Creek Recreation Area, Greens Farms Academy, and Sherwood Island State Park. 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 Westport and Fairfield 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 Westport-Fairfield Estuary.

Marinas

As noted previously, multiple marinas are located within the Westport-Fairfield Estuary, particularly in Southport Harbor in Fairfield (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, http://www.ct.gov/dep/cwp/view.asp?a=2705&q=323708&depNav_GID=1711. There are two pump-out facilities in the Westport-Fairfield 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."

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 several beaches along the shoreline in the Westport-Fairfield Estuary, particularly at Sherwood Island State Park beach, it is probable that some bacterial contamination can be attributed to human activities in the Westport-Fairfield estuary.

Additional Sources

As shown in Figure 4, there are six landfills located in Westport, CT and five landfills located in Fairfield, CT, seven of which are near the shoreline. 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 Westport and Fairfield. There may be other sources not listed here or identified in Figure 4 that contribute to the observed water quality impairments in the Westport-Fairfield 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 Towns of Westport and Fairfield 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: http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FederalStatePrograms/NationalShellfishSanitationProgram/ucm053724.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 assessments for the Shellfish Growing Waters in the Towns of Westport and Fairfield were published in 2008 (Westport, 2008; Fairfield, 2008). According to the 2008 Westport Estuary Report, Station 9.0 was reclassified to Restricted-Relay/Depuration in 2007, and Stations 12.1, 2.2, and 15 were reclassified as Conditionally Approved in 2007. In 2010, the upper portion of the Saugatuck River was reclassified as Prohibited due to marinas and the Westport WPCF; the lower portion of the Saugatuck River was reclassified as Prohibited due to updated marina dilution calculations; and the eastern portion of the Saugatuck River was reclassified as Conditionally Restricted-Relay/Depuration due to the presence of mooring fields. Conditionally Approved Area #1 off Burial Hill Beach is now permitted by Restricted-Relay/Depuration due to a water quality decline in recent years. The area south of Frost Point in Fairfield and the area south of the Cockenoe and Goose Islands were upgraded to Approved waters. According to the 2008 Fairfield Estuary Report, the Sasco Hill Beach Conditionally Approved Area A has been closed for recreation since 2006, and will remain closed because bacteria concentrations are not correlated with rainfall. All other stations in the Town of Fairfield are properly classified based on pollution source re-evaluation and fecal coliform data.

Other efforts have been taken by Westport and Fairfield to reduce bacteria to its surface waters. As indicated previously, Westport and Fairfield 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 bacterial contamination in the watershed are summarized in Tables 9 and 10.

Table 9: Summary of MS4 requirement updates related to the reduction of bacterial contamination from Westport, CT (Permit # GSM000026)

Minimum Measure	Westport Annual Report (2009)
Public Outreach and Education	1) Utilized and updated Town website as method of public outreach on stormwater issues. 2) Updated bulletin board outside Public Works office with information on Phase 2 program.
Public Involvement and Participation	1) Continued to solicit volunteers to aid in community outreach campaign.
Illicit Discharge Detection and Elimination	1) Mapped all outfalls 12" and larger.
Construction Site Stormwater Runoff Control	1) Included sediment and erosion control inspections and enforcement into job responsibilities of Conservation and Zoning enforcement officers.
Post Construction Stormwater Management	1) Actively incorporated post-construction runoff controls into permit requirements by considering water quality in the design of storm drainage systems. At least 1 inch of runoff must be retained from all impervious surfaces.
Pollution Prevention and Good Housekeeping	1) Performed annual cleaning of outfalls, plunge pools, and terminal catch basins. 2) Reduced winter sand use. 3) All Town roads swept in the spring through early summer. High traffic areas swept weekly.

Table 10: Summary of MS4 requirement updates related to the reduction of bacterial contamination from Fairfield, CT (Permit # GSM000012)

Minimum Measure	Fairfield Annual Report (2010)
Public Outreach and Education	1) Sponsored school Environmental Fair to educate students on stormwater quality. 2) Published a month-long series of articles related to groundwater, recharge, and water quality/runoff. 3) Installed collection containers and reviewed current ordinances for pet waste management. 4) Conducted annual collection of household hazardous waste and provided educational brochures on proper handling and disposal.

Table 10: Summary of MS4 requirement updates related to the reduction of bacterial contamination from Fairfield, CT (Permit # GSM000012) (continued)

Minimum Measure	Fairfield Annual Report (2010)
Public Involvement and Participation	1) Involved Boy Scouts in stenciling 52 storm drains. Over 500 drains have been stenciled and Sasco Brook watershed stenciling is complete. 2) Currently developing a stormwater ordinance to satisfy Phase 2 requirements and MS4 regulations. 3) Conducted annual beach and riverfront clean-ups. 4) Created a volunteer watershed organization to help identify outfalls, find illicit discharge, organize clean-ups, and stencil storm drains. 5) Created a Stormwater Phase 2 Advisory Committee. 6) Provided opportunities for stormwater quality volunteers to supply recycled pet waste bags, help the Shellfish Commission determine illicit discharges, and organize clean-ups.
Illicit Discharge Detection and Elimination	1) Currently developing a proposed illicit discharge ordinance. 2) Created brochures related to illicit discharges available in the Engineering office for public information. 3) Mapped 99% of all storm system outfalls with continued investigation of hidden or illegal connections. 4) Performed over 180 dry weather inspections for illicit discharges. All complaints or incidents recorded for review.
Construction Site Stormwater Runoff Control	1) Continued required inspection program, and conducted random inspections of construction sites to determine compliance.
Post Construction Stormwater Management	1) Developed and implemented post-construction BMP strategy for water quality improvement from impervious surfaces.
Pollution Prevention and Good Housekeeping	1) Developed a maintenance plan for cleaning catch basin sumps, swirl concentrators, and other drainage structures. 2) Increased sweeping in the Downtown and Town Hall Green areas.

RECOMMENDED NEXT STEPS

Westport and Fairfield have developed and implemented programs to protect water quality from bacterial contamination. Future mitigative activities are necessary to ensure the long-term protection of Segments 1 – 9 in the Westport-Fairfield Estuary and have been prioritized below.

1) Continue monitoring of permitted sources.

There are at least 18 permitted sources in the Westport-Fairfield 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.

Section 6(k) of the MS4 General Permit requires a municipality to modify their Stormwater Management Plan to implement the TMDL within four months of TMDL approval by EPA if stormwater within the municipality contributes pollutant(s) in excess of the allocation established by the TMDL. For discharges to impaired waterbodies, the municipality must assess and modify the six minimum measures of its plan, if necessary, to meet TMDL standards. Particular focus should be placed on the following plan components: public education, illicit discharge detection and elimination, stormwater structures cleaning, and the repair, upgrade, or retrofit of storm sewer structures. The goal of these modifications is to establish a program that improves water quality consistent with TMDL requirements. Modifications to the Stormwater Management Plan in response to TMDL development should be submitted to the Stormwater Program of DEEP for review and approval.

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 Westport-Fairfield Estuary.

For any municipality subject to an MS4 permit and affected by a TMDL, the permit requires a modification of the SMP to include BMPs that address the included impairment. 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.

Any facilities 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. Facilities that are regulated under the Commercial Activities Stormwater Permit should report any updates to their SMP in their summary documentation submitted to DEEP.

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 2011a). 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 2011a). 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 Westport and Fairfield to implement Best Management Practices (BMPs) to control stormwater runoff.

As noted previously, most of Westport and Fairfield near the Westport-Fairfield Estuary have 12-16% impervious cover and are both urban areas regulated under the MS4 program. As such, stormwater runoff is likely contributing bacteria to the Westport-Fairfield 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 Westport-Fairfield 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) Develop a system to monitor septic systems.

The majority of residents near the Westport-Fairfield Estuary rely on septic systems. If not already in place, Westport and Fairfield 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 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.

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

Portions of Westport and Fairfield near the estuary also rely on a municipal sewer system (Figure 4). It is important for Westport and Fairfield 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.

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 Westport-Fairfield 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 Westport-Fairfield 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 (http://www.ct.gov/dep/cwp/view.asp?a=2705&q=323530&depNav_GID=1635). 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." All 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 recognizes 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 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 – Southport Harbor Bacteria Data

Waterbody ID: CT-W1_005

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 1: LIS WB Inner – Southport Harbor (CT-W1_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-02.2	Pequot YC Southport Harbor	1/5/2000	258	wet	66	40
051-02.2	Pequot YC Southport Harbor	2/16/2000	17	wet		
051-02.2	Pequot YC Southport Harbor	3/15/2001	9	dry	NA	NA
051-02.2	Pequot YC Southport Harbor	1/10/2002	41	dry	81	**90**
051-02.2	Pequot YC Southport Harbor	4/30/2002	258	wet		
051-02.2	Pequot YC Southport Harbor	10/2/2002	50	dry		
051-02.2	Pequot YC Southport Harbor	1/4/2003	17	wet	35	57
051-02.2	Pequot YC Southport Harbor	12/9/2003	51	wet		
051-02.2	Pequot YC Southport Harbor	12/22/2003	51	dry		
051-02.2	Pequot YC Southport Harbor	5/5/2004	67	wet	89	**90**
051-02.2	Pequot YC Southport Harbor	7/6/2004	311	wet		
051-02.2	Pequot YC Southport Harbor	7/20/2004	220	wet		
051-02.2	Pequot YC Southport Harbor	7/27/2004	224	dry		
051-02.2	Pequot YC Southport Harbor	8/10/2004	230	dry		
051-02.2	Pequot YC Southport Harbor	12/5/2004	137	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Southport Harbor (CT-W1_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-02.2	Pequot YC Southport Harbor	12/12/2004	51	wet	30	40
051-02.2	Pequot YC Southport Harbor	12/13/2004	36	wet		
051-02.2	Pequot YC Southport Harbor	12/14/2004	23	dry		
051-02.2	Pequot YC Southport Harbor	12/26/2004	23	wet		
051-02.2	Pequot YC Southport Harbor	2/16/2005	48	wet	41	48
051-02.2	Pequot YC Southport Harbor	4/10/2005	8	wet		
051-02.2	Pequot YC Southport Harbor	4/11/2005	8	dry		
051-02.2	Pequot YC Southport Harbor	9/18/2005	171	wet		
051-02.2	Pequot YC Southport Harbor	9/19/2005	171	wet		
051-02.2	Pequot YC Southport Harbor	10/30/2005	54	dry		
051-02.2	Pequot YC Southport Harbor	11/20/2005	92	dry		
051-02.2	Pequot YC Southport Harbor	11/21/2005	96	dry		
051-02.2	Pequot YC Southport Harbor	11/27/2005	16	dry		
051-02.2	Pequot YC Southport Harbor	12/11/2005	24	wet		
051-02.2	Pequot YC Southport Harbor	12/12/2005	26	dry		
051-02.2	Pequot YC Southport Harbor	12/28/2005	50	wet		
051-02.2	Pequot YC Southport Harbor	1/4/2006	104	wet	75	**90**
051-02.2	Pequot YC Southport Harbor	10/31/2006	81	wet		
051-02.2	Pequot YC Southport Harbor	11/19/2006	54	wet		
051-02.2	Pequot YC Southport Harbor	12/4/2006	70	dry		
051-02.2	Pequot YC Southport Harbor	9/13/2007	810	wet	NA	90
051-02.2	Pequot YC Southport Harbor	5/22/2008	120	dry	68	**90**
051-02.2	Pequot YC Southport Harbor	7/29/2008	81	dry		
051-02.2	Pequot YC Southport Harbor	8/12/2008	33	dry		
051-02.2	Pequot YC Southport Harbor	8/4/2009	20	wet	65	57
051-02.2	Pequot YC Southport Harbor	8/25/2009	30	dry		
051-02.2	Pequot YC Southport Harbor	9/2/2009	47	dry		
051-02.2	Pequot YC Southport Harbor	9/14/2009	33	wet		
051-02.2	Pequot YC Southport Harbor	10/1/2009	72	dry		
051-02.2	Pequot YC Southport Harbor	10/26/2009	610	wet		
051-02.2	Pequot YC Southport Harbor	12/14/2009	81	dry		
051-02.2	Pequot YC Southport Harbor	12/28/2009	100	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Southport Harbor (CT-W1_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-02.2	Pequot YC Southport Harbor	4/27/2010	60	wet	100	78
051-02.2	Pequot YC Southport Harbor	7/20/2010	410	wet		
051-02.2	Pequot YC Southport Harbor	8/16/2010	1300	wet		
051-02.2	Pequot YC Southport Harbor	8/18/2010	74	wet		
051-02.2	Pequot YC Southport Harbor	10/19/2010	8	dry		
051-02.2	Pequot YC Southport Harbor	11/16/2010	81	wet		
051-02.2	Pequot YC Southport Harbor	12/15/2010	64	wet		
051-02.2	Pequot YC Southport Harbor	4/14/2011	33	wet	41	57
051-02.2	Pequot YC Southport Harbor	6/27/2011	26	wet		
051-02.2	Pequot YC Southport Harbor	7/20/2011	81	wet		
051-02.3	Dam in Southport Harbor/Mill River	1/5/2000	258	wet	108	**90**
051-02.3	Dam in Southport Harbor/Mill River	2/16/2000	45	wet		
051-02.3	Dam in Southport Harbor/Mill River	3/15/2001	29	dry	NA	NA
051-02.3	Dam in Southport Harbor/Mill River	1/10/2002	179	dry	133	**90**
051-02.3	Dam in Southport Harbor/Mill River	4/30/2002	258	wet		
051-02.3	Dam in Southport Harbor/Mill River	10/2/2002	51	dry		
051-02.3	Dam in Southport Harbor/Mill River	1/4/2003	45	wet	49	**90**
051-02.3	Dam in Southport Harbor/Mill River	8/5/2003	52	wet		
051-02.3	Dam in Southport Harbor/Mill River	12/9/2003	51	wet		
051-02.3	Dam in Southport Harbor/Mill River	12/22/2003	50	dry		
051-02.3	Dam in Southport Harbor/Mill River	5/5/2004	173	wet	78	61
051-02.3	Dam in Southport Harbor/Mill River	7/6/2004	321	wet		
051-02.3	Dam in Southport Harbor/Mill River	12/5/2004	67	dry		
051-02.3	Dam in Southport Harbor/Mill River	12/12/2004	173	wet		
051-02.3	Dam in Southport Harbor/Mill River	12/13/2004	51	wet		
051-02.3	Dam in Southport Harbor/Mill River	12/14/2004	23	dry		
051-02.3	Dam in Southport Harbor/Mill River	12/26/2004	23	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Southport Harbor (CT-W1_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-02.3	Dam in Southport Harbor/Mill River	2/16/2005	62	wet	79	82
051-02.3	Dam in Southport Harbor/Mill River	4/10/2005	30	wet		
051-02.3	Dam in Southport Harbor/Mill River	4/11/2005	36	dry		
051-02.3	Dam in Southport Harbor/Mill River	9/18/2005	171	wet		
051-02.3	Dam in Southport Harbor/Mill River	9/19/2005	171	wet		
051-02.3	Dam in Southport Harbor/Mill River	10/30/2005	60	dry		
051-02.3	Dam in Southport Harbor/Mill River	11/20/2005	146	dry		
051-02.3	Dam in Southport Harbor/Mill River	11/21/2005	72	dry		
051-02.3	Dam in Southport Harbor/Mill River	11/27/2005	44	dry		
051-02.3	Dam in Southport Harbor/Mill River	12/11/2005	96	wet		
051-02.3	Dam in Southport Harbor/Mill River	12/12/2005	90	dry		
051-02.3	Dam in Southport Harbor/Mill River	12/28/2005	134	wet		
051-02.3	Dam in Southport Harbor/Mill River	1/4/2006	112	wet	NA	90
051-02.3	Dam in Southport Harbor/Mill River	9/13/2007	240	wet	NA	90
051-02.3	Dam in Southport Harbor/Mill River	9/4/2008	650	wet	NA	90
051-02.5	Southport Harbor Horseneck Creek outlet	7/20/2004	790	wet	447	**90**
051-02.5	Southport Harbor Horseneck Creek outlet	7/27/2004	490	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	8/10/2004	230	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	2/4/2008	42	wet	34	40
051-02.5	Southport Harbor Horseneck Creek outlet	7/29/2008	27	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	4/2/2009	13	dry	60	57
051-02.5	Southport Harbor Horseneck Creek outlet	4/14/2009	6	wet		
051-02.5	Southport Harbor Horseneck Creek outlet	5/12/2009	63	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	6/23/2009	81	wet		
051-02.5	Southport Harbor Horseneck Creek outlet	7/27/2009	580	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	7/28/2009	50[†]	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	8/4/2009	40	wet		
051-02.5	Southport Harbor Horseneck Creek outlet	8/25/2009	30	dry		
051-02.5	Southport Harbor Horseneck Creek outlet	10/26/2009	700	wet		
051-02.5	Southport Harbor Horseneck Creek outlet	7/20/2010	570	wet	**893* (98%)**	**90**
051-02.5	Southport Harbor Horseneck Creek outlet	8/16/2010	1400	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 1: LIS WB Inner – Southport Harbor (CT-W1_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-02.8	Southport Harbor, Fairfield	7/20/2004	490	wet	642	**90**
051-02.8	Southport Harbor, Fairfield	7/27/2004	490	dry		
051-02.8	Southport Harbor, Fairfield	8/10/2004	1100	dry		
051-02.8	Southport Harbor, Fairfield	10/31/2006	81	wet	NA	90
051-02.8	Southport Harbor, Fairfield	8/9/2007	81	wet	NA	90
051-02.8	Southport Harbor, Fairfield	2/4/2008	16	wet	51	30
051-02.8	Southport Harbor, Fairfield	5/22/2008	60	dry		
051-02.8	Southport Harbor, Fairfield	7/29/2008	29	dry		
051-02.8	Southport Harbor, Fairfield	8/12/2008	29	dry		
051-02.8	Southport Harbor, Fairfield	9/4/2008	440	wet		
051-02.8	Southport Harbor, Fairfield	2/2/2009	7	dry	16	4
051-02.8	Southport Harbor, Fairfield	2/9/2009	1	wet		
051-02.8	Southport Harbor, Fairfield	4/2/2009	16	dry		
051-02.8	Southport Harbor, Fairfield	4/14/2009	5	wet		
051-02.8	Southport Harbor, Fairfield	7/27/2009	480	dry		
051-02.8	Southport Harbor, Fairfield	8/4/2009	30	wet		
051-02.8	Southport Harbor, Fairfield	8/25/2009	30	dry		
051-02.8	Southport Harbor, Fairfield	8/16/2010	600[†]	wet	NA	90

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 1: LIS WB Inner – Southport Harbor (CT-W1_005)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
051-02.2	Pequot YC Southport Harbor	2000-2011	34	23	64	79	47
051-02.3	dam in Southport Harbor/Mill River	2000-2008	20	12	86	108	59
051-02.5	Southport Harbor Horseneck Creek outlet	2004, 2008-2010	8	9	108	157	78
051-02.8	Southport Harbor, Fairfield	2004, 2006-2010	10	9	67	64	71
Shaded cells indicate an exceedance of water quality criteria							

Table 14: Segment 2: LIS WB Inner – Sherwood Millpond Bacteria Data

Waterbody ID: CT-W1_008

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 – 2002, 2005 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 Inner – Sherwood Millpond (CT-W1_008) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-11.2	Sherwood Park in Pond	1/5/2000	51	wet	59	65
158-11.2	Sherwood Park in Pond	2/16/2000	18	wet		
158-11.2	Sherwood Park in Pond	4/18/2000	51	wet		
158-11.2	Sherwood Park in Pond	9/19/2000	258	wet		
158-11.2	Sherwood Park in Pond	8/23/2001	790	wet	NA	90
158-11.2	Sherwood Park in Pond	1/10/2002	258	dry	**258* (95%)**	**90**
158-11.2	Sherwood Park in Pond	4/30/2002	258	wet		
158-11.2	Sherwood Park in Pond	3/28/2005	810	wet	NA	90
158-11.6	Sherwood Mill Pond, Westport	3/28/2005	10	wet	NA	NA
158-11.7	Sherwood Mill Pond, Westport	3/28/2005	100	wet	NA	90
158-11.8	Sherwood Mill Pond-Grove Pt. Road	3/28/2005	690	wet	NA	90

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 Inner – Sherwood Millpond (CT-W1_008)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
158-11.2	Sherwood Park in Pond	2000-2002, 2005	7	1	164	153	258
158-11.6	Sherwood Mill Pond, Westport	2005	1	0	NA	NA	NA
158-11.7	Sherwood Mill Pond, Westport	2005	1	0	NA	NA	NA
158-11.8	Sherwood Mill Pond-Grove Pt. Road	2005	1	0	NA	NA	NA
Shaded cells indicate an exceedance of water quality criteria							

Table 15: Segment 3: LIS WB Inner – Saugatuck River (mouth) Bacteria Data

Waterbody ID: CT-W1_010-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: 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: **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 3: LIS WB Inner – Saugatuck River (mouth) (CT-W1_010-SB) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-09.1	Saugatuck R. near C"13"	4/24/2000	28	wet	18	NA
158-09.1	Saugatuck R. near C"13"	9/19/2000	11	wet		
158-09.1	Saugatuck R. near C"13"	5/30/2001	51	dry	39	NA
158-09.1	Saugatuck R. near C"13"	6/18/2001	51	wet		
158-09.1	Saugatuck R. near C"13"	8/14/2001	50	wet		
158-09.1	Saugatuck R. near C"13"	8/16/2001	18	dry		
158-09.1	Saugatuck R. near C"13"	6/11/2002	6	wet	7	NA
158-09.1	Saugatuck R. near C"13"	6/17/2002	51	dry		
158-09.1	Saugatuck R. near C"13"	7/1/2002	4	dry		
158-09.1	Saugatuck R. near C"13"	9/30/2002	2	dry		
158-09.1	Saugatuck R. near C"13"	10/28/2002	11	wet		
158-09.1	Saugatuck R. near C"13"	4/30/2003	2	dry	16	NA
158-09.1	Saugatuck R. near C"13"	6/11/2003	50	dry		
158-09.1	Saugatuck R. near C"13"	8/6/2003	51	wet		
158-09.1	Saugatuck R. near C"13"	8/9/2004	2	dry	NA	NA
158-09.1	Saugatuck R. near C"13"	8/16/2005	81	wet	NA	NA

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Inner – Saugatuck River (mouth) (CT-W1_010-SB) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-09.1	Saugatuck R. near C"13"	6/29/2006	64	wet	12	NA
158-09.1	Saugatuck R. near C"13"	7/17/2006	9	dry		
158-09.1	Saugatuck R. near C"13"	10/16/2006	1	dry		
158-09.1	Saugatuck R. near C"13"	10/31/2006	36	wet		
158-09.1	Saugatuck R. near C"13"	6/20/2007	41	dry	24	NA
158-09.1	Saugatuck R. near C"13"	7/9/2007	44	dry		
158-09.1	Saugatuck R. near C"13"	7/24/2007	28	wet		
158-09.1	Saugatuck R. near C"13"	8/8/2007	60	wet		
158-09.1	Saugatuck R. near C"13"	8/23/2007	6	wet		
158-09.1	Saugatuck R. near C"13"	9/13/2007	180	wet		
158-09.1	Saugatuck R. near C"13"	10/15/2007	18	wet		
158-09.1	Saugatuck R. near C"13"	10/22/2007	22	wet		
158-09.1	Saugatuck R. near C"13"	10/30/2007	49	dry		
158-09.1	Saugatuck R. near C"13"	12/5/2007	1	wet		
158-09.1	Saugatuck R. near C"13"	2/4/2008	14	dry	18	NA
158-09.1	Saugatuck R. near C"13"	4/30/2008	30	wet		
158-09.1	Saugatuck R. near C"13"	8/5/2008	10	dry		
158-09.1	Saugatuck R. near C"13"	9/10/2008	77	wet		
158-09.1	Saugatuck R. near C"13"	12/23/2008	6	wet		
158-09.1	Saugatuck R. near C"13"	4/2/2009	3	dry	24	NA
158-09.1	Saugatuck R. near C"13"	4/22/2009	20	wet		
158-09.1	Saugatuck R. near C"13"	6/10/2009	171	wet		
158-09.1	Saugatuck R. near C"13"	7/27/2009	70	dry		
158-09.1	Saugatuck R. near C"13"	8/3/2009	56	wet		
158-09.1	Saugatuck R. near C"13"	8/26/2009	12	dry		
158-09.1	Saugatuck R. near C"13"	8/31/2009	9	wet		
158-09.1	Saugatuck R. near C"13"	3/25/2010	4	wet	6	NA
158-09.1	Saugatuck R. near C"13"	5/4/2010	12	wet		
158-09.1	Saugatuck R. near C"13"	5/19/2010	16	wet		
158-09.1	Saugatuck R. near C"13"	8/17/2010	1	wet		
158-09.1	Saugatuck R. near C"13"	8/25/2010	30	wet		
158-09.1	Saugatuck R. near C"13"	9/16/2010	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 3: LIS WB Inner – Saugatuck River (mouth) (CT-W1_010-SB) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-09.1	Saugatuck R. near C"13"	3/14/2011	9	dry	10	NA
158-09.1	Saugatuck R. near C"13"	4/26/2011	3	dry		
158-09.1	Saugatuck R. near C"13"	6/27/2011	33	dry		
158-09.4	Saugatuck River at RR bridge	1/5/2000	139	wet	**65* (NA)**	NA
158-09.4	Saugatuck River at RR bridge	2/16/2000	40	wet		
158-09.4	Saugatuck River at RR bridge	4/18/2000	50	wet		
158-09.4	Saugatuck River at RR bridge	4/2/2001	2	wet	37	**40**
158-09.4	Saugatuck River at RR bridge	8/23/2001	790	wet		
158-09.4	Saugatuck River at RR bridge	1/10/2002	9	dry	49	23
158-09.4	Saugatuck River at RR bridge	4/30/2002	258	wet		
158-09.4	Saugatuck River at RR bridge	9/3/2002	51	wet		
158-09.4	Saugatuck River at RR bridge	3/28/2005	10	wet	NA	NA
158-09.4	Saugatuck River at RR bridge	6/29/2006	81	wet	NA	NA
158-09.4	Saugatuck River at RR bridge	6/20/2007	81	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 Inner – Saugatuck River (mouth) (CT-W1_010-SB)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
158-09.1	Saugatuck River near C"13"	2000-2011	30	21	16	20	11
158-09.4	Saugatuck River at RR bridge	2000-2002, 2005-2007	9	2	48	54	27
Shaded cells indicate an exceedance of water quality criteria							

Table 16: Segment 4: LIS WB Shore – Southport Harbor (East) Bacteria Data

Waterbody ID: CT-W2_006

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: **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 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-03.0	S. Kensie Pt.	4/24/2000	2	wet	14	19
051-03.0	S. Kensie Pt.	6/8/2000	8	wet		
051-03.0	S. Kensie Pt.	7/17/2000	50	wet		
051-03.0	S. Kensie Pt.	7/18/2000	28	wet		
051-03.0	S. Kensie Pt.	7/19/2000	36	wet		
051-03.0	S. Kensie Pt.	8/15/2000	11	wet		
051-03.0	S. Kensie Pt.	11/13/2000	11	wet		
051-03.0	S. Kensie Pt.	4/2/2001	36	dry	6	4
051-03.0	S. Kensie Pt.	5/30/2001	4	dry		
051-03.0	S. Kensie Pt.	6/18/2001	14	wet		
051-03.0	S. Kensie Pt.	8/13/2001	11	wet		
051-03.0	S. Kensie Pt.	8/16/2001	2	dry		
051-03.0	S. Kensie Pt.	9/17/2001	2	dry		
051-03.0	S. Kensie Pt.	9/24/2001	8	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-03.0	S. Kensie Pt.	5/20/2002	22	wet	7	4
051-03.0	S. Kensie Pt.	6/10/2002	14	wet		
051-03.0	S. Kensie Pt.	6/17/2002	8	wet		
051-03.0	S. Kensie Pt.	9/4/2002	51	wet		
051-03.0	S. Kensie Pt.	9/30/2002	2	wet		
051-03.0	S. Kensie Pt.	10/1/2002	4	dry		
051-03.0	S. Kensie Pt.	10/28/2002	2	wet		
051-03.0	S. Kensie Pt.	4/29/2003	2	wet	7	15
051-03.0	S. Kensie Pt.	6/2/2003	50	wet		
051-03.0	S. Kensie Pt.	6/9/2003	4	wet		
051-03.0	S. Kensie Pt.	6/17/2003	4	dry		
051-03.0	S. Kensie Pt.	8/5/2003	50	wet		
051-03.0	S. Kensie Pt.	8/11/2003	8	wet		
051-03.0	S. Kensie Pt.	8/20/2003	2	dry		
051-03.0	S. Kensie Pt.	9/30/2003	6	wet		
051-03.0	S. Kensie Pt.	4/27/2004	18	wet	13	23
051-03.0	S. Kensie Pt.	7/15/2004	4	wet		
051-03.0	S. Kensie Pt.	9/21/2004	36	wet		
051-03.0	S. Kensie Pt.	3/30/2005	12	wet	5	NA
051-03.0	S. Kensie Pt.	4/5/2005	1	wet		
051-03.0	S. Kensie Pt.	8/15/2005	25	wet		
051-03.0	S. Kensie Pt.	12/28/2005	2	wet		
051-03.0	S. Kensie Pt.	1/4/2006	6	wet	3	NA
051-03.0	S. Kensie Pt.	10/31/2006	4	wet		
051-03.0	S. Kensie Pt.	11/20/2006	1	dry		
051-03.0	S. Kensie Pt.	5/21/2007	1	dry	5	7
051-03.0	S. Kensie Pt.	7/24/2007	35	wet		
051-03.0	S. Kensie Pt.	8/9/2007	5	wet		
051-03.0	S. Kensie Pt.	8/23/2007	4	wet		
051-03.0	S. Kensie Pt.	9/13/2007	5	wet		
051-03.0	S. Kensie Pt.	10/15/2007	3	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-03.0	S. Kensie Pt.	2/4/2008	6	wet	4	4
051-03.0	S. Kensie Pt.	4/30/2008	1	wet		
051-03.0	S. Kensie Pt.	6/23/2008	1	dry		
051-03.0	S. Kensie Pt.	7/29/2008	1	dry		
051-03.0	S. Kensie Pt.	8/12/2008	1	dry		
051-03.0	S. Kensie Pt.	9/4/2008	21	wet		
051-03.0	S. Kensie Pt.	9/15/2008	210	wet		
051-03.0	S. Kensie Pt.	4/2/2009	1	dry	2	NA
051-03.0	S. Kensie Pt.	4/14/2009	1	wet		
051-03.0	S. Kensie Pt.	7/27/2009	3	dry		
051-03.0	S. Kensie Pt.	8/4/2009	1	wet		
051-03.0	S. Kensie Pt.	8/25/2009	7	dry		
051-03.0	S. Kensie Pt.	9/2/2009	1	dry		
051-03.0	S. Kensie Pt.	9/14/2009	1	wet		
051-03.0	S. Kensie Pt.	10/1/2009	2	dry		
051-03.0	S. Kensie Pt.	4/27/2010	6	wet	5	NA
051-03.0	S. Kensie Pt.	6/14/2010	5	dry		
051-03.0	S. Kensie Pt.	7/15/2010	171	wet		
051-03.0	S. Kensie Pt.	8/16/2010	16	wet		
051-03.0	S. Kensie Pt.	8/18/2010	1	wet		
051-03.0	S. Kensie Pt.	8/25/2010	12	wet		
051-03.0	S. Kensie Pt.	10/6/2010	1	dry		
051-03.0	S. Kensie Pt.	10/19/2010	1	dry		
051-03.0	S. Kensie Pt.	11/16/2010	1	wet		
051-03.0	S. Kensie Pt.	12/15/2010	7	wet		
051-03.0	S. Kensie Pt.	3/22/2011	1	dry	2	NA
051-03.0	S. Kensie Pt.	4/14/2011	1	wet		
051-03.0	S. Kensie Pt.	5/25/2011	7	wet		
051-03.0	S. Kensie Pt.	6/15/2011	1	dry		
051-03.0	S. Kensie Pt.	6/22/2011	1	wet		
051-03.0	S. Kensie Pt.	6/27/2011	1	wet		
051-03.0	S. Kensie Pt.	7/20/2011	35	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-03.1	Kensie Point	4/27/2010	2	wet	3	10
051-03.1	Kensie Point	8/25/2010	43	wet		
051-03.1	Kensie Point	9/21/2010	1	dry		
051-03.1	Kensie Point	10/6/2010	2	dry		
051-03.1	Kensie Point	10/19/2010	1	dry		
051-03.1	Kensie Point	6/27/2011	1	wet	5	NA
051-03.1	Kensie Point	7/20/2011	28	wet		
051-09.5	Sasco Beach	5/15/2000	14	wet	**25* (44%)**	19
051-09.5	Sasco Beach	5/22/2000	14	dry		
051-09.5	Sasco Beach	7/17/2000	28	wet		
051-09.5	Sasco Beach	8/2/2000	50	wet		
051-09.5	Sasco Beach	8/7/2000	36	dry		
051-09.5	Sasco Beach	8/8/2000	22	dry		
051-09.5	Sasco Beach	8/14/2000	28	wet		
051-09.5	Sasco Beach	6/18/2001	8	wet	6	15
051-09.5	Sasco Beach	7/30/2001	2	dry		
051-09.5	Sasco Beach	8/13/2001	50	wet		
051-09.5	Sasco Beach	9/17/2001	2	dry		
051-09.5	Sasco Beach	5/20/2002	2	wet	5	3
051-09.5	Sasco Beach	6/3/2002	2	wet		
051-09.5	Sasco Beach	6/10/2002	2	wet		
051-09.5	Sasco Beach	6/17/2002	6	wet		
051-09.5	Sasco Beach	7/1/2002	18	dry		
051-09.5	Sasco Beach	8/5/2002	36	wet		
051-09.5	Sasco Beach	10/2/2002	8	dry		
051-09.5	Sasco Beach	10/28/2002	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-09.5	Sasco Beach	1/4/2003	51	wet	13	**26**
051-09.5	Sasco Beach	4/29/2003	6	wet		
051-09.5	Sasco Beach	6/2/2003	36	wet		
051-09.5	Sasco Beach	6/9/2003	29†	wet		
051-09.5	Sasco Beach	6/16/2003	50	dry		
051-09.5	Sasco Beach	8/4/2003	52	wet		
051-09.5	Sasco Beach	8/5/2003	36	wet		
051-09.5	Sasco Beach	8/6/2003	4	wet		
051-09.5	Sasco Beach	8/11/2003	28†	wet		
051-09.5	Sasco Beach	8/18/2003	6	wet		
051-09.5	Sasco Beach	8/20/2003	2	dry		
051-09.5	Sasco Beach	9/30/2003	2	wet		
051-09.5	Sasco Beach	12/9/2003	8	wet		
051-09.5	Sasco Beach	12/22/2003	11	dry		
051-09.5	Sasco Beach	5/5/2004	2	wet	12	12
051-09.5	Sasco Beach	7/6/2004	11	wet		
051-09.5	Sasco Beach	7/7/2004	2	wet		
051-09.5	Sasco Beach	7/19/2004	11	wet		
051-09.5	Sasco Beach	7/20/2004	14	wet		
051-09.5	Sasco Beach	7/26/2004	2	wet		
051-09.5	Sasco Beach	7/27/2004	28	dry		
051-09.5	Sasco Beach	8/9/2004	6	dry		
051-09.5	Sasco Beach	8/10/2004	51	dry		
051-09.5	Sasco Beach	8/16/2004	51	wet		
051-09.5	Sasco Beach	8/23/2004	14	wet		
051-09.5	Sasco Beach	12/5/2004	18	dry		
051-09.5	Sasco Beach	12/12/2004	6	wet		
051-09.5	Sasco Beach	12/13/2004	36	wet		
051-09.5	Sasco Beach	12/14/2004	50	dry		
051-09.5	Sasco Beach	12/26/2004	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-09.5	Sasco Beach	1/24/2005	1	wet	6	15
051-09.5	Sasco Beach	1/25/2005	8	wet		
051-09.5	Sasco Beach	2/16/2005	1	wet		
051-09.5	Sasco Beach	4/10/2005	7	wet		
051-09.5	Sasco Beach	4/11/2005	19	dry		
051-09.5	Sasco Beach	7/11/2005	7	wet		
051-09.5	Sasco Beach	8/15/2005	37	wet		
051-09.5	Sasco Beach	9/18/2005	81	wet		
051-09.5	Sasco Beach	9/19/2005	81	wet		
051-09.5	Sasco Beach	10/30/2005	1	dry		
051-09.5	Sasco Beach	11/20/2005	5	dry		
051-09.5	Sasco Beach	11/21/2005	2	dry		
051-09.5	Sasco Beach	11/27/2005	1	dry		
051-09.5	Sasco Beach	12/11/2005	2	wet		
051-09.5	Sasco Beach	12/12/2005	6	dry		
051-09.5	Sasco Beach	12/28/2005	41	wet		
051-09.5	Sasco Beach	1/4/2006	49	wet	7	15
051-09.5	Sasco Beach	6/5/2006	3	wet		
051-09.5	Sasco Beach	6/12/2006	6	dry		
051-09.5	Sasco Beach	6/26/2006	16	wet		
051-09.5	Sasco Beach	7/6/2006	21	wet		
051-09.5	Sasco Beach	7/10/2006	52	dry		
051-09.5	Sasco Beach	7/17/2006	3	wet		
051-09.5	Sasco Beach	10/31/2006	29	wet		
051-09.5	Sasco Beach	11/19/2006	3	wet		
051-09.5	Sasco Beach	11/20/2006	1	dry		
051-09.5	Sasco Beach	12/4/2006	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-09.5	Sasco Beach	1/3/2007	1	wet	8	**26**
051-09.5	Sasco Beach	6/4/2007	81	wet		
051-09.5	Sasco Beach	6/18/2007	2	wet		
051-09.5	Sasco Beach	7/2/2007	1	dry		
051-09.5	Sasco Beach	7/9/2007	3	dry		
051-09.5	Sasco Beach	7/23/2007	62	dry		
051-09.5	Sasco Beach	7/24/2007	81	wet		
051-09.5	Sasco Beach	8/9/2007	16	wet		
051-09.5	Sasco Beach	8/13/2007	45	dry		
051-09.5	Sasco Beach	8/23/2007	2	wet		
051-09.5	Sasco Beach	9/13/2007	3	wet		
051-09.5	Sasco Beach	3/13/2008	1	dry	4	7
051-09.5	Sasco Beach	5/22/2008	5	dry		
051-09.5	Sasco Beach	6/16/2008	81	wet		
051-09.5	Sasco Beach	6/23/2008	1[†]	dry		
051-09.5	Sasco Beach	7/28/2008	11	dry		
051-09.5	Sasco Beach	7/29/2008	1	dry		
051-09.5	Sasco Beach	8/4/2008	4	wet		
051-09.5	Sasco Beach	8/11/2008	3	wet		
051-09.5	Sasco Beach	8/12/2008	1	dry		
051-09.5	Sasco Beach	8/18/2008	1	wet		
051-09.5	Sasco Beach	9/4/2008	81	wet		
051-09.5	Sasco Beach	12/16/2008	9	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-09.5	Sasco Beach	2/2/2009	1	dry		
051-09.5	Sasco Beach	2/9/2009	1	wet		
051-09.5	Sasco Beach	4/2/2009	1	dry		
051-09.5	Sasco Beach	4/14/2009	1	wet		
051-09.5	Sasco Beach	5/12/2009	1	dry		
051-09.5	Sasco Beach	6/15/2009	81	dry		
051-09.5	Sasco Beach	6/22/2009	9	wet		
051-09.5	Sasco Beach	6/23/2009	2	wet		
051-09.5	Sasco Beach	6/29/2009	11	wet		
051-09.5	Sasco Beach	7/27/2009	2[†]	dry		
051-09.5	Sasco Beach	7/28/2009	10	dry		
051-09.5	Sasco Beach	8/3/2009	15	wet	4	NA
051-09.5	Sasco Beach	8/4/2009	1	wet		
051-09.5	Sasco Beach	8/24/2009	62	wet		
051-09.5	Sasco Beach	8/25/2009	1	dry		
051-09.5	Sasco Beach	8/31/2009	12	wet		
051-09.5	Sasco Beach	9/2/2009	1	dry		
051-09.5	Sasco Beach	9/14/2009	2	wet		
051-09.5	Sasco Beach	10/1/2009	1	dry		
051-09.5	Sasco Beach	10/8/2009	31	dry		
051-09.5	Sasco Beach	10/26/2009	20	wet		
051-09.5	Sasco Beach	12/14/2009	6	dry		
051-09.5	Sasco Beach	12/28/2009	16	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-09.5	Sasco Beach	4/27/2010	2	wet	5	11
051-09.5	Sasco Beach	6/14/2010	9†	dry		
051-09.5	Sasco Beach	7/15/2010	1	wet		
051-09.5	Sasco Beach	7/19/2010	1	dry		
051-09.5	Sasco Beach	7/20/2010	30	wet		
051-09.5	Sasco Beach	7/26/2010	1	wet		
051-09.5	Sasco Beach	8/16/2010	81	wet		
051-09.5	Sasco Beach	8/18/2010	2	wet		
051-09.5	Sasco Beach	8/23/2010	81	wet		
051-09.5	Sasco Beach	8/25/2010	91	wet		
051-09.5	Sasco Beach	9/21/2010	1	dry		
051-09.5	Sasco Beach	10/6/2010	7	dry		
051-09.5	Sasco Beach	10/19/2010	1	dry		
051-09.5	Sasco Beach	11/16/2010	1	wet		
051-09.5	Sasco Beach	3/22/2011	1	dry	4	1
051-09.5	Sasco Beach	4/14/2011	2	wet		
051-09.5	Sasco Beach	5/24/2011	16	wet		
051-09.5	Sasco Beach	5/25/2011	4	wet		
051-09.5	Sasco Beach	6/15/2011	2	dry		
051-09.5	Sasco Beach	6/20/2011	1	wet		
051-09.5	Sasco Beach	6/22/2011	3	wet		
051-09.5	Sasco Beach	6/27/2011	42†	wet		
051-09.5	Sasco Beach	7/20/2011	3	wet		
051-09.6	Sasco Beach near channel	7/6/2004	11	wet	12	NA
051-09.6	Sasco Beach near channel	12/5/2004	6	dry		
051-09.6	Sasco Beach near channel	12/12/2004	18	wet		
051-09.6	Sasco Beach near channel	12/13/2004	6	wet		
051-09.6	Sasco Beach near channel	12/14/2004	18	dry		
051-09.6	Sasco Beach near channel	12/26/2004	22	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-09.6	Sasco Beach near channel	1/24/2005	1	wet	3	3
051-09.6	Sasco Beach near channel	1/25/2005	10	wet		
051-09.6	Sasco Beach near channel	2/16/2005	1	wet		
051-09.6	Sasco Beach near channel	4/10/2005	1	wet		
051-09.6	Sasco Beach near channel	4/11/2005	1	dry		
051-09.6	Sasco Beach near channel	7/11/2005	2	wet		
051-09.6	Sasco Beach near channel	8/15/2005	52	wet		
051-09.6	Sasco Beach near channel	9/18/2005	49	wet		
051-09.6	Sasco Beach near channel	9/19/2005	15	wet		
051-09.6	Sasco Beach near channel	10/30/2005	1	dry		
051-09.6	Sasco Beach near channel	11/20/2005	7	dry		
051-09.6	Sasco Beach near channel	11/21/2005	3	dry		
051-09.6	Sasco Beach near channel	11/27/2005	1	dry		
051-09.6	Sasco Beach near channel	12/11/2005	1	wet		
051-09.6	Sasco Beach near channel	12/12/2005	9	dry		
051-09.6	Sasco Beach near channel	12/28/2005	1	wet		
051-09.6	Sasco Beach near channel	1/4/2006	5	wet	4	NA
051-09.6	Sasco Beach near channel	6/5/2006	4	wet		
051-09.6	Sasco Beach near channel	6/12/2006	1	dry		
051-09.6	Sasco Beach near channel	6/26/2006	9	wet		
051-09.6	Sasco Beach near channel	7/10/2006	29	dry		
051-09.6	Sasco Beach near channel	7/17/2006	3	wet		
051-09.6	Sasco Beach near channel	10/31/2006	25	wet		
051-09.6	Sasco Beach near channel	11/19/2006	1	wet		
051-09.6	Sasco Beach near channel	11/20/2006	1	dry		
051-09.6	Sasco Beach near channel	12/4/2006	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
051-09.6	Sasco Beach near channel	1/3/2007	3	wet	6	15
051-09.6	Sasco Beach near channel	6/4/2007	81	wet		
051-09.6	Sasco Beach near channel	6/18/2007	32	wet		
051-09.6	Sasco Beach near channel	6/19/2007	1	wet		
051-09.6	Sasco Beach near channel	7/2/2007	1	dry		
051-09.6	Sasco Beach near channel	7/9/2007	1	dry		
051-09.6	Sasco Beach near channel	7/23/2007	6	dry		
051-09.6	Sasco Beach near channel	7/24/2007	63	wet		
051-09.6	Sasco Beach near channel	8/9/2007	19	wet		
051-09.6	Sasco Beach near channel	8/13/2007	1	dry		
051-09.6	Sasco Beach near channel	8/23/2007	3	wet		
051-09.6	Sasco Beach near channel	9/13/2007	10	wet		
051-09.6	Sasco Beach near channel	3/13/2008	1	dry	6	8
051-09.6	Sasco Beach near channel	5/22/2008	14	dry		
051-09.6	Sasco Beach near channel	6/16/2008	81	wet		
051-09.6	Sasco Beach near channel	6/23/2008	2[†]	dry		
051-09.6	Sasco Beach near channel	7/28/2008	4	dry		
051-09.6	Sasco Beach near channel	7/29/2008	10	dry		
051-09.6	Sasco Beach near channel	8/4/2008	5	wet		
051-09.6	Sasco Beach near channel	8/11/2008	8	wet		
051-09.6	Sasco Beach near channel	8/12/2008	1	dry		
051-09.6	Sasco Beach near channel	8/18/2008	2	wet		
051-09.6	Sasco Beach near channel	9/4/2008	68	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-09.6	Sasco Beach near channel	2/2/2009	1	dry		
051-09.6	Sasco Beach near channel	2/9/2009	1	wet		
051-09.6	Sasco Beach near channel	4/2/2009	1	dry		
051-09.6	Sasco Beach near channel	4/14/2009	1	wet		
051-09.6	Sasco Beach near channel	5/12/2009	1	dry		
051-09.6	Sasco Beach near channel	6/15/2009	81	dry		
051-09.6	Sasco Beach near channel	6/22/2009	7	wet		
051-09.6	Sasco Beach near channel	6/23/2009	3	wet		
051-09.6	Sasco Beach near channel	6/29/2009	13	wet		
051-09.6	Sasco Beach near channel	7/27/2009	30[†]	dry		
051-09.6	Sasco Beach near channel	8/3/2009	14	wet	4	NA
051-09.6	Sasco Beach near channel	8/4/2009	1	wet		
051-09.6	Sasco Beach near channel	8/24/2009	81	wet		
051-09.6	Sasco Beach near channel	8/25/2009	1	dry		
051-09.6	Sasco Beach near channel	8/31/2009	10	wet		
051-09.6	Sasco Beach near channel	9/2/2009	1	dry		
051-09.6	Sasco Beach near channel	9/14/2009	3	wet		
051-09.6	Sasco Beach near channel	10/1/2009	2	dry		
051-09.6	Sasco Beach near channel	10/8/2009	21	dry		
051-09.6	Sasco Beach near channel	12/14/2009	9	dry		
051-09.6	Sasco Beach near channel	12/28/2009	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006) with annual geometric geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-09.6	Sasco Beach near channel	4/27/2010	6	wet	3	5
051-09.6	Sasco Beach near channel	6/14/2010	7†	dry		
051-09.6	Sasco Beach near channel	7/15/2010	2	wet		
051-09.6	Sasco Beach near channel	7/19/2010	1	dry		
051-09.6	Sasco Beach near channel	7/26/2010	1	wet		
051-09.6	Sasco Beach near channel	8/16/2010	81	wet		
051-09.6	Sasco Beach near channel	8/18/2010	4	wet		
051-09.6	Sasco Beach near channel	8/23/2010	81	wet		
051-09.6	Sasco Beach near channel	8/25/2010	4	wet		
051-09.6	Sasco Beach near channel	9/21/2010	1	dry		
051-09.6	Sasco Beach near channel	10/6/2010	1	dry		
051-09.6	Sasco Beach near channel	10/19/2010	1	dry		
051-09.6	Sasco Beach near channel	11/16/2010	1	wet		
051-09.6	Sasco Beach near channel	3/22/2011	1	dry	3	NA
051-09.6	Sasco Beach near channel	4/14/2011	1	wet		
051-09.6	Sasco Beach near channel	5/24/2011	15	wet		
051-09.6	Sasco Beach near channel	5/25/2011	3	wet		
051-09.6	Sasco Beach near channel	6/15/2011	1	dry		
051-09.6	Sasco Beach near channel	6/20/2011	2	wet		
051-09.6	Sasco Beach near channel	6/22/2011	1	wet		
051-09.6	Sasco Beach near channel	6/27/2011	19†	wet		
051-09.6	Sasco Beach near channel	7/20/2011	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 geometric mean values for all monitoring stations on Segment 4: LIS WB Shore – Southport Harbor (East) (CT-W2_006)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
051-03.0	S. Kensie Pt.	2000-2011	54	23	5	7	2
051-03.1	Kensie Point	2010-2011	4	3	3	7	1
051-09.5	Sasco Beach	2000-2011	96	55	7	8	5
051-09.6	Sasco Beach near channel	2004-2011	61	41	4	6	3
Shaded cells indicate an exceedance of water quality criteria							

Table 17: Segment 5: LIS WB Shore – Southport Harbor (West) Bacteria Data

Waterbody ID: CT-W2_007

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: **83%**

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 – Southport Harbor (West) (CT-W2_007) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.1	C"11" channel	4/24/2000	11	wet	41	76
051-02.1	C"11" channel	6/8/2000	51	wet		
051-02.1	C"11" channel	7/17/2000	50	wet		
051-02.1	C"11" channel	7/18/2000	51	wet		
051-02.1	C"11" channel	7/19/2000	50	wet		
051-02.1	C"11" channel	8/15/2000	51	wet		
051-02.1	C"11" channel	11/13/2000	51	wet		
051-02.1	C"11" channel	3/15/2001	18	dry	20	19
051-02.1	C"11" channel	4/2/2001	22	dry		
051-02.1	C"11" channel	5/30/2001	51	dry		
051-02.1	C"11" channel	6/18/2001	51	wet		
051-02.1	C"11" channel	8/16/2001	22	dry		
051-02.1	C"11" channel	9/17/2001	4	dry		
051-02.1	C"11" channel	9/24/2001	18	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Southport Harbor (West) (CT-W2_007) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.1	C"11" channel	1/10/2002	9	dry	16	15
051-02.1	C"11" channel	4/30/2002	258	wet		
051-02.1	C"11" channel	5/20/2002	14	wet		
051-02.1	C"11" channel	6/10/2002	36	wet		
051-02.1	C"11" channel	6/17/2002	18	wet		
051-02.1	C"11" channel	7/1/2002	6	dry		
051-02.1	C"11" channel	10/2/2002	26[†]	dry		
051-02.1	C"11" channel	10/28/2002	2	wet		
051-02.1	C"11" channel	1/4/2003	78	wet	31	57
051-02.1	C"11" channel	4/29/2003	2	wet		
051-02.1	C"11" channel	6/2/2003	51	wet		
051-02.1	C"11" channel	6/9/2003	52	wet		
051-02.1	C"11" channel	8/11/2003	18	wet		
051-02.1	C"11" channel	8/20/2003	50	dry		
051-02.1	C"11" channel	9/30/2003	36	wet		
051-02.1	C"11" channel	12/9/2003	88	wet		
051-02.1	C"11" channel	12/22/2003	28	dry		
051-02.1	C"11" channel	4/27/2004	51	wet	**42* (67%)**	63
051-02.1	C"11" channel	5/5/2004	36	wet		
051-02.1	C"11" channel	7/6/2004	311	wet		
051-02.1	C"11" channel	7/20/2004	36	wet		
051-02.1	C"11" channel	7/27/2004	14	dry		
051-02.1	C"11" channel	8/10/2004	51	dry		
051-02.1	C"11" channel	12/5/2004	36	dry		
051-02.1	C"11" channel	12/12/2004	67	wet		
051-02.1	C"11" channel	12/13/2004	10	wet		
051-02.1	C"11" channel	12/14/2004	224	dry		
051-02.1	C"11" channel	12/26/2004	10	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Southport Harbor (West) (CT-W2_007) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.1	C"11" channel	2/16/2005	36	wet	30	59
051-02.1	C"11" channel	4/10/2005	1	wet		
051-02.1	C"11" channel	4/11/2005	10	dry		
051-02.1	C"11" channel	8/15/2005	81	wet		
051-02.1	C"11" channel	9/18/2005	171	wet		
051-02.1	C"11" channel	9/19/2005	40	wet		
051-02.1	C"11" channel	10/30/2005	52	dry		
051-02.1	C"11" channel	11/20/2005	44	dry		
051-02.1	C"11" channel	11/21/2005	72	dry		
051-02.1	C"11" channel	11/27/2005	34	dry		
051-02.1	C"11" channel	12/11/2005	20	wet		
051-02.1	C"11" channel	12/12/2005	20	dry		
051-02.1	C"11" channel	12/28/2005	34	wet		
051-02.1	C"11" channel	1/4/2006	48	wet	41	**83**
051-02.1	C"11" channel	7/10/2006	34	dry		
051-02.1	C"11" channel	10/31/2006	31	wet		
051-02.1	C"11" channel	11/19/2006	171	wet		
051-02.1	C"11" channel	11/20/2006	4	dry		
051-02.1	C"11" channel	12/4/2006	130	dry		
051-02.1	C"11" channel	1/3/2007	1	wet	10	23
051-02.1	C"11" channel	5/21/2007	3	dry		
051-02.1	C"11" channel	7/24/2007	92	wet		
051-02.1	C"11" channel	8/9/2007	81	wet		
051-02.1	C"11" channel	8/23/2007	28	wet		
051-02.1	C"11" channel	9/13/2007	2	wet		
051-02.1	C"11" channel	2/4/2008	8	wet	20	4
051-02.1	C"11" channel	4/30/2008	50	wet		
051-02.1	C"11" channel	5/22/2008	24	dry		
051-02.1	C"11" channel	6/23/2008	27	dry		
051-02.1	C"11" channel	7/29/2008	19	dry		
051-02.1	C"11" channel	8/12/2008	9	dry		
051-02.1	C"11" channel	9/4/2008	26	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 5: LIS WB Shore – Southport Harbor (West) (CT-W2_007) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.1	C"11" channel	2/2/2009	2	dry	12	11
051-02.1	C"11" channel	2/9/2009	2	wet		
051-02.1	C"11" channel	4/2/2009	2	dry		
051-02.1	C"11" channel	4/14/2009	5	wet		
051-02.1	C"11" channel	5/12/2009	8	dry		
051-02.1	C"11" channel	6/23/2009	22	wet		
051-02.1	C"11" channel	7/27/2009	250	dry		
051-02.1	C"11" channel	8/4/2009	40	wet		
051-02.1	C"11" channel	8/25/2009	8	dry		
051-02.1	C"11" channel	9/2/2009	8	dry		
051-02.1	C"11" channel	9/14/2009	14	wet		
051-02.1	C"11" channel	10/1/2009	16	dry		
051-02.1	C"11" channel	12/14/2009	81	dry		
051-02.1	C"11" channel	12/28/2009	20	wet		
051-02.1	C"11" channel	4/27/2010	21	wet	31	28
051-02.1	C"11" channel	7/15/2010	300	wet		
051-02.1	C"11" channel	8/16/2010	400	wet		
051-02.1	C"11" channel	8/18/2010	19	wet		
051-02.1	C"11" channel	8/25/2010	9	wet		
051-02.1	C"11" channel	10/19/2010	5	dry		
051-02.1	C"11" channel	11/16/2010	12	wet		
051-02.1	C"11" channel	12/15/2010	36	wet		
051-02.1	C"11" channel	4/14/2011	22	wet	24	23
051-02.1	C"11" channel	6/27/2011	16	wet		
051-02.1	C"11" channel	7/20/2011	37	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 5: LIS WB Shore – Southport Harbor (West) (CT-W2_007)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
051-02.1	C"11" channel	2000-2011	62	38	24	28	18
Shaded cells indicate an exceedance of water quality criteria							

Table 18: Segment 6: LIS WB Shore – Compo Cove, SISP Bacteria Data

Waterbody ID: CT-W2_009

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: **57%**

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 – Compo Cove, SISP (CT-W2_009) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.3	S. Sherwood Island Park	4/24/2000	6	wet	10	19
158-12.3	S. Sherwood Island Park	6/20/2000	2	wet		
158-12.3	S. Sherwood Island Park	7/18/2000	50	dry		
158-12.3	S. Sherwood Island Park	7/19/2000	18	dry		
158-12.3	S. Sherwood Island Park	8/15/2000	4	wet		
158-12.3	S. Sherwood Island Park	9/19/2000	51	wet		
158-12.3	S. Sherwood Island Park	11/13/2000	8	wet		
158-12.3	S. Sherwood Island Park	4/2/2001	28	wet	7	NA
158-12.3	S. Sherwood Island Park	5/30/2001	11	dry		
158-12.3	S. Sherwood Island Park	6/18/2001	14	wet		
158-12.3	S. Sherwood Island Park	8/13/2001	2	wet		
158-12.3	S. Sherwood Island Park	8/16/2001	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB Shore – Compo Cove, SISP (CT-W2_009) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.3	S. Sherwood Island Park	5/22/2002	2	dry	3	NA
158-12.3	S. Sherwood Island Park	6/11/2002	4	wet		
158-12.3	S. Sherwood Island Park	6/17/2002	4	dry		
158-12.3	S. Sherwood Island Park	7/1/2002	4	dry		
158-12.3	S. Sherwood Island Park	9/4/2002	22	wet		
158-12.3	S. Sherwood Island Park	9/30/2002	2	dry		
158-12.3	S. Sherwood Island Park	10/28/2002	2	wet		
158-12.3	S. Sherwood Island Park	4/29/2003	2	dry	8	23
158-12.3	S. Sherwood Island Park	8/6/2003	36	wet		
158-12.3	S. Sherwood Island Park	8/19/2003	8	wet		
158-12.3	S. Sherwood Island Park	4/27/2004	2	wet	3	NA
158-12.3	S. Sherwood Island Park	7/15/2004	8	wet		
158-12.3	S. Sherwood Island Park	8/9/2004	2	dry		
158-12.3	S. Sherwood Island Park	8/23/2004	4	wet		
158-12.3	S. Sherwood Island Park	7/17/2006	2	dry	4	NA
158-12.3	S. Sherwood Island Park	9/6/2006	24	dry		
158-12.3	S. Sherwood Island Park	10/16/2006	1	dry		
158-12.3	S. Sherwood Island Park	10/31/2006	1	wet		
158-12.3	S. Sherwood Island Park	11/27/2006	23	dry		
158-12.3	S. Sherwood Island Park	6/7/2007	1	wet	4	3
158-12.3	S. Sherwood Island Park	6/18/2007	47	wet		
158-12.3	S. Sherwood Island Park	6/20/2007	12	dry		
158-12.3	S. Sherwood Island Park	7/9/2007	3	dry		
158-12.3	S. Sherwood Island Park	7/24/2007	11	wet		
158-12.3	S. Sherwood Island Park	8/8/2007	5	wet		
158-12.3	S. Sherwood Island Park	9/13/2007	1	wet		
158-12.3	S. Sherwood Island Park	12/5/2007	1	wet		
158-12.3	S. Sherwood Island Park	2/4/2008	21	dry	6	NA
158-12.3	S. Sherwood Island Park	9/10/2008	20	wet		
158-12.3	S. Sherwood Island Park	9/16/2008	1	wet		
158-12.3	S. Sherwood Island Park	12/16/2008	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB Shore – Compo Cove, SISP (CT-W2_009) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.3	S. Sherwood Island Park	4/2/2009	1	dry	3	NA
158-12.3	S. Sherwood Island Park	4/22/2009	1	wet		
158-12.3	S. Sherwood Island Park	6/10/2009	78	wet		
158-12.3	S. Sherwood Island Park	6/29/2009	10	dry		
158-12.3	S. Sherwood Island Park	7/27/2009	9	dry		
158-12.3	S. Sherwood Island Park	8/3/2009	1	wet		
158-12.3	S. Sherwood Island Park	8/26/2009	1	dry		
158-12.3	S. Sherwood Island Park	8/31/2009	1	wet		
158-12.3	S. Sherwood Island Park	9/15/2009	1	dry		
158-12.3	S. Sherwood Island Park	10/29/2009	6	wet		
158-12.3	S. Sherwood Island Park	11/16/2009	1	wet		
158-12.3	S. Sherwood Island Park	3/2/2010	1	wet	5	12
158-12.3	S. Sherwood Island Park	3/17/2010	1	wet		
158-12.3	S. Sherwood Island Park	5/4/2010	18	wet		
158-12.3	S. Sherwood Island Park	5/19/2010	10	wet		
158-12.3	S. Sherwood Island Park	8/17/2010	1	wet		
158-12.3	S. Sherwood Island Park	8/26/2010	81	dry		
158-12.3	S. Sherwood Island Park	9/16/2010	1	wet		
158-12.3	S. Sherwood Island Park	10/16/2010	6	wet		
158-12.3	S. Sherwood Island Park	12/13/2010	46	wet		
158-12.3	S. Sherwood Island Park	3/14/2011	1	dry	3	NA
158-12.3	S. Sherwood Island Park	4/19/2011	1	wet		
158-12.3	S. Sherwood Island Park	4/27/2011	8	dry		
158-12.3	S. Sherwood Island Park	5/26/2011	2	wet		
158-12.3	S. Sherwood Island Park	6/20/2011	7	wet		
158-12.3	S. Sherwood Island Park	6/27/2011	1	dry		
158-12.3	S. Sherwood Island Park	7/20/2011	26[†]	wet		
158-13.0	mouth Burial Hill Creek	4/24/2000	18	wet	20	10
158-13.0	mouth Burial Hill Creek	6/20/2000	11	wet		
158-13.0	mouth Burial Hill Creek	7/18/2000	51	dry		
158-13.0	mouth Burial Hill Creek	9/19/2000	22	wet		
158-13.0	mouth Burial Hill Creek	11/13/2000	14	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB Shore – Compo Cove, SISP (CT-W2_009) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-13.0	mouth Burial Hill Creek	5/30/2001	51	dry	9	40
158-13.0	mouth Burial Hill Creek	6/18/2001	51	wet		
158-13.0	mouth Burial Hill Creek	8/13/2001	2	wet		
158-13.0	mouth Burial Hill Creek	8/16/2001	2	dry		
158-13.0	mouth Burial Hill Creek	6/11/2002	6	wet	8	23
158-13.0	mouth Burial Hill Creek	6/17/2002	6	dry		
158-13.0	mouth Burial Hill Creek	7/1/2002	2	dry		
158-13.0	mouth Burial Hill Creek	9/4/2002	51	wet		
158-13.0	mouth Burial Hill Creek	9/30/2002	51	dry		
158-13.0	mouth Burial Hill Creek	10/28/2002	2	wet		
158-13.0	mouth Burial Hill Creek	4/29/2003	4	dry	21	**57**
158-13.0	mouth Burial Hill Creek	8/6/2003	51	wet		
158-13.0	mouth Burial Hill Creek	8/19/2003	51	wet		
158-13.0	mouth Burial Hill Creek	4/27/2004	36	wet	26	**57**
158-13.0	mouth Burial Hill Creek	8/9/2004	6	dry		
158-13.0	mouth Burial Hill Creek	12/5/2004	81	dry		
158-13.0	mouth Burial Hill Creek	7/17/2006	1	dry	9	40
158-13.0	mouth Burial Hill Creek	10/16/2006	1	dry		
158-13.0	mouth Burial Hill Creek	10/31/2006	81	wet		
158-13.0	mouth Burial Hill Creek	11/27/2006	81	dry		
158-13.0	mouth Burial Hill Creek	6/7/2007	1	wet	13	12
158-13.0	mouth Burial Hill Creek	6/20/2007	12	dry		
158-13.0	mouth Burial Hill Creek	7/24/2007	171	wet		
158-13.0	mouth Burial Hill Creek	8/8/2007	171	wet		
158-13.0	mouth Burial Hill Creek	8/23/2007	45	wet		
158-13.0	mouth Burial Hill Creek	9/13/2007	1	wet		
158-13.0	mouth Burial Hill Creek	10/15/2007	6	wet		
158-13.0	mouth Burial Hill Creek	10/22/2007	1	wet		
158-13.0	mouth Burial Hill Creek	10/30/2007	81	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 6: LIS WB Shore – Compo Cove, SISP (CT-W2_009) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-13.0	mouth Burial Hill Creek	2/4/2008	46	dry	**29* (52%)**	50
158-13.0	mouth Burial Hill Creek	4/30/2008	30	wet		
158-13.0	mouth Burial Hill Creek	8/5/2008	3	dry		
158-13.0	mouth Burial Hill Creek	9/10/2008	58	wet		
158-13.0	mouth Burial Hill Creek	12/23/2008	81	wet		
158-13.0	mouth Burial Hill Creek	4/2/2009	81	dry	23	40
158-13.0	mouth Burial Hill Creek	4/22/2009	63	wet		
158-13.0	mouth Burial Hill Creek	6/10/2009	81	wet		
158-13.0	mouth Burial Hill Creek	6/29/2009	30	dry		
158-13.0	mouth Burial Hill Creek	7/27/2009	110	dry		
158-13.0	mouth Burial Hill Creek	8/3/2009	10	wet		
158-13.0	mouth Burial Hill Creek	8/26/2009	1	dry		
158-13.0	mouth Burial Hill Creek	8/31/2009	5	wet		
158-13.0	mouth Burial Hill Creek	3/2/2010	1	wet	12	33
158-13.0	mouth Burial Hill Creek	3/25/2010	10	wet		
158-13.0	mouth Burial Hill Creek	5/4/2010	39	wet		
158-13.0	mouth Burial Hill Creek	5/19/2010	42	wet		
158-13.0	mouth Burial Hill Creek	8/17/2010	26	wet		
158-13.0	mouth Burial Hill Creek	8/26/2010	81	dry		
158-13.0	mouth Burial Hill Creek	9/16/2010	1	wet		
158-13.0	mouth Burial Hill Creek	3/14/2011	1	dry	10	**57**
158-13.0	mouth Burial Hill Creek	4/27/2011	33	dry		
158-13.0	mouth Burial Hill Creek	6/27/2011	33	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 – Compo Cove, SISP (CT-W2_009)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
158-12.3	S. Sherwood Island Park	2000-2011	45	26	5	5	4
158-13.0	mouth Burial Hill Creek	2000-2011	33	24	15	16	13
Shaded cells indicate an exceedance of water quality criteria							

Table 19: Segment 7: LIS WB Shore – Compo Beach, Cedar Point Bacteria Data

Waterbody ID: CT-W2_010

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: **50%**

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 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-08.0	Cedar Pt.	6/21/2000	8	dry	4	NA
158-08.0	Cedar Pt.	9/19/2000	2	wet		
158-08.0	Cedar Pt.	1/23/2001	2	dry	4	10
158-08.0	Cedar Pt.	2/2/2001	36	dry		
158-08.0	Cedar Pt.	4/2/2001	2	wet		
158-08.0	Cedar Pt.	8/14/2001	8	wet		
158-08.0	Cedar Pt.	8/30/2001	2	dry		
158-08.0	Cedar Pt.	6/17/2002	22	dry	4	NA
158-08.0	Cedar Pt.	7/1/2002	2	dry		
158-08.0	Cedar Pt.	10/28/2002	2	wet		
158-08.0	Cedar Pt.	4/29/2003	2	dry	6	NA
158-08.0	Cedar Pt.	8/6/2003	28	wet		
158-08.0	Cedar Pt.	8/19/2003	6	wet		
158-08.0	Cedar Pt.	4/27/2004	28	wet	13	23
158-08.0	Cedar Pt.	7/7/2004	2	wet		
158-08.0	Cedar Pt.	8/23/2004	51	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-08.0	Cedar Pt.	6/29/2006	81	wet	7	10
158-08.0	Cedar Pt.	7/17/2006	1	dry		
158-08.0	Cedar Pt.	9/6/2006	9	dry		
158-08.0	Cedar Pt.	10/16/2006	1	dry		
158-08.0	Cedar Pt.	10/31/2006	28	wet		
158-08.0	Cedar Pt.	6/18/2007	7	wet	5	NA
158-08.0	Cedar Pt.	6/20/2007	18	dry		
158-08.0	Cedar Pt.	7/9/2007	2	dry		
158-08.0	Cedar Pt.	7/24/2007	2	wet		
158-08.0	Cedar Pt.	8/8/2007	12	wet		
158-08.0	Cedar Pt.	9/13/2007	12	wet		
158-08.0	Cedar Pt.	12/5/2007	2	wet		
158-08.0	Cedar Pt.	8/11/2008	1	dry	3	NA
158-08.0	Cedar Pt.	9/10/2008	25	wet		
158-08.0	Cedar Pt.	9/16/2008	7	wet		
158-08.0	Cedar Pt.	12/16/2008	2	wet		
158-08.0	Cedar Pt.	12/23/2008	1	wet		
158-08.0	Cedar Pt.	4/2/2009	1	dry	6	32
158-08.0	Cedar Pt.	4/22/2009	25	wet		
158-08.0	Cedar Pt.	6/10/2009	32	wet		
158-08.0	Cedar Pt.	6/29/2009	70	dry		
158-08.0	Cedar Pt.	7/27/2009	17	dry		
158-08.0	Cedar Pt.	8/3/2009	7	wet		
158-08.0	Cedar Pt.	8/26/2009	5	dry		
158-08.0	Cedar Pt.	8/31/2009	1	wet		
158-08.0	Cedar Pt.	9/15/2009	1	dry		
158-08.0	Cedar Pt.	10/29/2009	12	wet		
158-08.0	Cedar Pt.	11/16/2009	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-08.0	Cedar Pt.	3/2/2010	1	wet	4	12
158-08.0	Cedar Pt.	3/17/2010	1	wet		
158-08.0	Cedar Pt.	5/4/2010	38	wet		
158-08.0	Cedar Pt.	5/19/2010	11	wet		
158-08.0	Cedar Pt.	8/17/2010	1	wet		
158-08.0	Cedar Pt.	8/26/2010	4	dry		
158-08.0	Cedar Pt.	9/16/2010	1	wet		
158-08.0	Cedar Pt.	10/16/2010	4	wet		
158-08.0	Cedar Pt.	12/13/2010	66	wet		
158-08.0	Cedar Pt.	3/14/2011	5	dry	5	NA
158-08.0	Cedar Pt.	4/19/2011	5	wet		
158-08.0	Cedar Pt.	4/27/2011	3	dry		
158-08.0	Cedar Pt.	5/26/2011	5	wet		
158-08.0	Cedar Pt.	6/20/2011	1	wet		
158-08.0	Cedar Pt.	6/27/2011	25	dry		
158-08.0	Cedar Pt.	7/20/2011	15[†]	wet		
158-09.0	N"8" mouth of Saugatuck River	4/24/2000	51	wet	10	15
158-09.0	N"8" mouth of Saugatuck River	5/15/2000	4	wet		
158-09.0	N"8" mouth of Saugatuck River	5/25/2000	51	wet		
158-09.0	N"8" mouth of Saugatuck River	6/20/2000	2	wet		
158-09.0	N"8" mouth of Saugatuck River	6/21/2000	14	dry		
158-09.0	N"8" mouth of Saugatuck River	8/15/2000	28	wet		
158-09.0	N"8" mouth of Saugatuck River	9/13/2000	11	wet		
158-09.0	N"8" mouth of Saugatuck River	9/19/2000	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-09.0	N"8" mouth of Saugatuck River	2/2/2001	6	dry	16	26
158-09.0	N"8" mouth of Saugatuck River	4/2/2001	4	wet		
158-09.0	N"8" mouth of Saugatuck River	5/29/2001	50	dry		
158-09.0	N"8" mouth of Saugatuck River	5/30/2001	28	dry		
158-09.0	N"8" mouth of Saugatuck River	6/18/2001	51	wet		
158-09.0	N"8" mouth of Saugatuck River	6/20/2001	14	dry		
158-09.0	N"8" mouth of Saugatuck River	8/14/2001	51	wet		
158-09.0	N"8" mouth of Saugatuck River	8/15/2001	18	wet		
158-09.0	N"8" mouth of Saugatuck River	8/16/2001	6	dry		
158-09.0	N"8" mouth of Saugatuck River	8/28/2001	51	wet		
158-09.0	N"8" mouth of Saugatuck River	8/30/2001	4	dry		
158-09.0	N"8" mouth of Saugatuck River	6/17/2002	36	dry	8	23
158-09.0	N"8" mouth of Saugatuck River	7/1/2002	2	dry		
158-09.0	N"8" mouth of Saugatuck River	10/28/2002	8	wet		
158-09.0	N"8" mouth of Saugatuck River	4/29/2003	2	dry	13	**50**
158-09.0	N"8" mouth of Saugatuck River	6/11/2003	50	dry		
158-09.0	N"8" mouth of Saugatuck River	8/6/2003	51	wet		
158-09.0	N"8" mouth of Saugatuck River	8/18/2003	51	wet		
158-09.0	N"8" mouth of Saugatuck River	8/19/2003	2	wet		
158-09.0	N"8" mouth of Saugatuck River	4/27/2004	51	wet	9	40
158-09.0	N"8" mouth of Saugatuck River	7/7/2004	2	wet		
158-09.0	N"8" mouth of Saugatuck River	8/9/2004	2	dry		
158-09.0	N"8" mouth of Saugatuck River	8/23/2004	51	wet		
158-09.0	N"8" mouth of Saugatuck River	8/16/2005	25	wet	NA	NA
158-09.0	N"8" mouth of Saugatuck River	6/2/2006	13	wet	**18* (22%)**	40
158-09.0	N"8" mouth of Saugatuck River	6/29/2006	81	wet		
158-09.0	N"8" mouth of Saugatuck River	7/17/2006	6	dry		
158-09.0	N"8" mouth of Saugatuck River	9/6/2006	44	dry		
158-09.0	N"8" mouth of Saugatuck River	10/16/2006	3	dry		
158-09.0	N"8" mouth of Saugatuck River	10/31/2006	43	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-09.0	N"8" mouth of Saugatuck River	6/7/2007	28	wet	11	NA
158-09.0	N"8" mouth of Saugatuck River	6/20/2007	24	dry		
158-09.0	N"8" mouth of Saugatuck River	7/24/2007	6	wet		
158-09.0	N"8" mouth of Saugatuck River	8/8/2007	12	wet		
158-09.0	N"8" mouth of Saugatuck River	8/23/2007	1	wet		
158-09.0	N"8" mouth of Saugatuck River	9/13/2007	9	wet		
158-09.0	N"8" mouth of Saugatuck River	10/15/2007	30	wet		
158-09.0	N"8" mouth of Saugatuck River	10/22/2007	22	wet		
158-09.0	N"8" mouth of Saugatuck River	10/30/2007	14	dry		
158-09.0	N"8" mouth of Saugatuck River	12/5/2007	5	wet		
158-09.0	N"8" mouth of Saugatuck River	2/4/2008	4	dry	9	10
158-09.0	N"8" mouth of Saugatuck River	4/30/2008	10	wet		
158-09.0	N"8" mouth of Saugatuck River	8/5/2008	8	dry		
158-09.0	N"8" mouth of Saugatuck River	9/10/2008	76	wet		
158-09.0	N"8" mouth of Saugatuck River	12/23/2008	3	wet		
158-09.0	N"8" mouth of Saugatuck River	4/2/2009	2	dry	11	23
158-09.0	N"8" mouth of Saugatuck River	4/22/2009	15	wet		
158-09.0	N"8" mouth of Saugatuck River	6/10/2009	81	wet		
158-09.0	N"8" mouth of Saugatuck River	7/27/2009	44	dry		
158-09.0	N"8" mouth of Saugatuck River	8/26/2009	5	dry		
158-09.0	N"8" mouth of Saugatuck River	8/31/2009	4	wet		
158-09.0	N"8" mouth of Saugatuck River	3/25/2010	4	wet	8	7
158-09.0	N"8" mouth of Saugatuck River	5/4/2010	36	wet		
158-09.0	N"8" mouth of Saugatuck River	5/19/2010	29	wet		
158-09.0	N"8" mouth of Saugatuck River	8/17/2010	4	wet		
158-09.0	N"8" mouth of Saugatuck River	8/25/2010	10	wet		
158-09.0	N"8" mouth of Saugatuck River	9/16/2010	2	wet		
158-09.0	N"8" mouth of Saugatuck River	3/14/2011	2	dry	4	NA
158-09.0	N"8" mouth of Saugatuck River	4/26/2011	5	dry		
158-09.0	N"8" mouth of Saugatuck River	6/27/2011	5	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-10.0	Compo Beach	6/21/2000	2	dry	2	2
158-10.0	Compo Beach	9/19/2000	2	wet		
158-10.0	Compo Beach	1/23/2001	6	dry	6	10
158-10.0	Compo Beach	2/2/2001	36	dry		
158-10.0	Compo Beach	4/2/2001	4	wet		
158-10.0	Compo Beach	8/14/2001	6	wet		
158-10.0	Compo Beach	8/30/2001	2	dry		
158-10.0	Compo Beach	6/17/2002	6	dry	3	NA
158-10.0	Compo Beach	7/1/2002	2	dry		
158-10.0	Compo Beach	10/28/2002	2	wet		
158-10.0	Compo Beach	4/29/2003	2	dry	4	NA
158-10.0	Compo Beach	8/6/2003	18	wet		
158-10.0	Compo Beach	8/19/2003	2	wet		
158-10.0	Compo Beach	4/27/2004	18	wet	8	NA
158-10.0	Compo Beach	7/7/2004	2	wet		
158-10.0	Compo Beach	8/23/2004	18	wet		
158-10.0	Compo Beach	6/29/2006	81	wet	3	10
158-10.0	Compo Beach	7/17/2006	1	dry		
158-10.0	Compo Beach	9/6/2006	2	dry		
158-10.0	Compo Beach	10/16/2006	1	dry		
158-10.0	Compo Beach	10/31/2006	2	wet		
158-10.0	Compo Beach	6/18/2007	1	wet	1	NA
158-10.0	Compo Beach	6/20/2007	1	dry		
158-10.0	Compo Beach	7/9/2007	1	dry		
158-10.0	Compo Beach	7/24/2007	3	wet		
158-10.0	Compo Beach	8/8/2007	1	wet		
158-10.0	Compo Beach	9/13/2007	1	wet		
158-10.0	Compo Beach	12/5/2007	2	wet		
158-10.0	Compo Beach	8/11/2008	1	dry	1	NA
158-10.0	Compo Beach	9/10/2008	1	wet		
158-10.0	Compo Beach	9/16/2008	2	wet		
158-10.0	Compo Beach	12/23/2008	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-10.0	Compo Beach	4/2/2009	1	dry		
158-10.0	Compo Beach	4/22/2009	5	wet		
158-10.0	Compo Beach	6/10/2009	19	wet		
158-10.0	Compo Beach	6/29/2009	1	dry		
158-10.0	Compo Beach	7/27/2009	1	dry		
158-10.0	Compo Beach	8/3/2009	2	wet	2	NA
158-10.0	Compo Beach	8/26/2009	1	dry		
158-10.0	Compo Beach	8/31/2009	1	wet		
158-10.0	Compo Beach	9/15/2009	1	dry		
158-10.0	Compo Beach	10/29/2009	12	wet		
158-10.0	Compo Beach	11/16/2009	3	wet		
158-10.0	Compo Beach	3/2/2010	1	wet		
158-10.0	Compo Beach	3/17/2010	1	wet		
158-10.0	Compo Beach	5/4/2010	15	wet		
158-10.0	Compo Beach	5/19/2010	5	wet		
158-10.0	Compo Beach	8/17/2010	1	wet	3	NA
158-10.0	Compo Beach	8/26/2010	2	dry		
158-10.0	Compo Beach	9/16/2010	1	wet		
158-10.0	Compo Beach	10/16/2010	3	wet		
158-10.0	Compo Beach	12/13/2010	21	wet		
158-10.0	Compo Beach	3/14/2011	1	dry		
158-10.0	Compo Beach	4/19/2011	9	wet		
158-10.0	Compo Beach	4/27/2011	1	dry		
158-10.0	Compo Beach	5/26/2011	2	wet	3	NA
158-10.0	Compo Beach	6/20/2011	1	wet		
158-10.0	Compo Beach	6/27/2011	9	dry		
158-10.0	Compo Beach	7/20/2011	6†	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 7: LIS WB Shore – Compo Beach, Cedar Point (CT-W2_010)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
158-08.0	Cedar Pt.	2000-2004, 2006-2011	39	22	5	6	4
158-09.0	N"8" mouth of Saugatuck River	2000-2004, 2006-2011	38	22	3	3	2
158-10.0	Compo Beach	2000-2011	43	25	11	13	8
Shaded cells indicate an exceedance of water quality criteria							

Table 20: Segment 8: LIS WB Midshore – Southport Harbor Bacteria Data

Waterbody ID: CT-W3_005

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: **65%**

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 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.0	S. Sasco Brook	4/24/2000	8	wet	21	33
051-01.0	S. Sasco Brook	6/8/2000	51	wet		
051-01.0	S. Sasco Brook	7/17/2000	28	wet		
051-01.0	S. Sasco Brook	7/18/2000	51	wet		
051-01.0	S. Sasco Brook	7/19/2000	8	wet		
051-01.0	S. Sasco Brook	8/15/2000	36	wet		
051-01.0	S. Sasco Brook	11/13/2000	11	wet		
051-01.0	S. Sasco Brook	4/2/2001	18	dry	6	4
051-01.0	S. Sasco Brook	5/30/2001	2	dry		
051-01.0	S. Sasco Brook	6/18/2001	51	wet		
051-01.0	S. Sasco Brook	8/13/2001	2	wet		
051-01.0	S. Sasco Brook	8/16/2001	4	dry		
051-01.0	S. Sasco Brook	9/17/2001	2	dry		
051-01.0	S. Sasco Brook	9/24/2001	11	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.0	S. Sasco Brook	5/20/2002	4	wet	3	4
051-01.0	S. Sasco Brook	6/10/2002	2	wet		
051-01.0	S. Sasco Brook	6/17/2002	4	wet		
051-01.0	S. Sasco Brook	9/4/2002	50	wet		
051-01.0	S. Sasco Brook	9/30/2002	2	wet		
051-01.0	S. Sasco Brook	10/1/2002	2	dry		
051-01.0	S. Sasco Brook	10/28/2002	2	wet		
051-01.0	S. Sasco Brook	4/29/2003	2	wet	9	44
051-01.0	S. Sasco Brook	6/2/2003	2	wet		
051-01.0	S. Sasco Brook	6/9/2003	52	wet		
051-01.0	S. Sasco Brook	6/17/2003	2	dry		
051-01.0	S. Sasco Brook	8/5/2003	52	wet		
051-01.0	S. Sasco Brook	8/11/2003	52	wet		
051-01.0	S. Sasco Brook	8/20/2003	4	dry		
051-01.0	S. Sasco Brook	9/30/2003	4	wet		
051-01.0	S. Sasco Brook	10/2/2003	50	dry		
051-01.0	S. Sasco Brook	4/27/2004	51	wet	18	33
051-01.0	S. Sasco Brook	7/15/2004	6	wet		
051-01.0	S. Sasco Brook	7/20/2004	22	wet		
051-01.0	S. Sasco Brook	7/27/2004	2	dry		
051-01.0	S. Sasco Brook	8/10/2004	51	dry		
051-01.0	S. Sasco Brook	9/13/2004	22	wet		
051-01.0	S. Sasco Brook	9/21/2004	51	wet		
051-01.0	S. Sasco Brook	4/5/2005	1	wet	6	23
051-01.0	S. Sasco Brook	8/15/2005	81	wet		
051-01.0	S. Sasco Brook	12/28/2005	3	wet		
051-01.0	S. Sasco Brook	1/4/2006	2	wet	2	NA
051-01.0	S. Sasco Brook	7/10/2006	1	dry		
051-01.0	S. Sasco Brook	10/31/2006	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.0	S. Sasco Brook	7/24/2007	6	wet	4	NA
051-01.0	S. Sasco Brook	8/9/2007	10	wet		
051-01.0	S. Sasco Brook	8/23/2007	1	wet		
051-01.0	S. Sasco Brook	9/13/2007	1	wet		
051-01.0	S. Sasco Brook	10/15/2007	11	dry		
051-01.0	S. Sasco Brook	2/4/2008	1	wet	3	19
051-01.0	S. Sasco Brook	4/30/2008	1	wet		
051-01.0	S. Sasco Brook	6/23/2008	3	dry		
051-01.0	S. Sasco Brook	7/29/2008	1	dry		
051-01.0	S. Sasco Brook	8/12/2008	1	dry		
051-01.0	S. Sasco Brook	9/4/2008	41	wet		
051-01.0	S. Sasco Brook	9/15/2008	40	wet		
051-01.0	S. Sasco Brook	4/2/2009	9	dry	7	20
051-01.0	S. Sasco Brook	4/14/2009	1	wet		
051-01.0	S. Sasco Brook	7/27/2009	90	dry		
051-01.0	S. Sasco Brook	7/28/2009	9	dry		
051-01.0	S. Sasco Brook	8/4/2009	1	wet		
051-01.0	S. Sasco Brook	8/25/2009	47	dry		
051-01.0	S. Sasco Brook	9/2/2009	1	dry		
051-01.0	S. Sasco Brook	9/14/2009	1	wet		
051-01.0	S. Sasco Brook	10/1/2009	1	dry		
051-01.0	S. Sasco Brook	10/26/2009	680	wet		
051-01.0	S. Sasco Brook	4/27/2010	2	wet	9	3
051-01.0	S. Sasco Brook	7/15/2010	44	wet		
051-01.0	S. Sasco Brook	7/20/2010	110	wet		
051-01.0	S. Sasco Brook	8/16/2010	12	wet		
051-01.0	S. Sasco Brook	8/25/2010	4	wet		
051-01.0	S. Sasco Brook	10/19/2010	1	dry		
051-01.0	S. Sasco Brook	11/18/2010	10	wet		
051-01.0	S. Sasco Brook	12/15/2010	12	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.0	S. Sasco Brook	4/14/2011	1	wet	1	NA
051-01.0	S. Sasco Brook	6/15/2011	3	dry		
051-01.0	S. Sasco Brook	6/27/2011	1	wet		
051-01.2	Southport Beach	7/17/2000	51	wet	**44* (68%)**	**65**
051-01.2	Southport Beach	8/2/2000	51	wet		
051-01.2	Southport Beach	8/7/2000	28	dry		
051-01.2	Southport Beach	8/14/2000	51	wet		
051-01.2	Southport Beach	6/18/2001	11	wet	5	NA
051-01.2	Southport Beach	7/30/2001	2	dry		
051-01.2	Southport Beach	9/17/2001	6	dry		
051-01.2	Southport Beach	5/20/2002	6	wet	7	15
051-01.2	Southport Beach	6/3/2002	2	wet		
051-01.2	Southport Beach	6/10/2002	50	wet		
051-01.2	Southport Beach	6/17/2002	6†	wet		
051-01.2	Southport Beach	7/1/2002	2	dry		
051-01.2	Southport Beach	8/5/2002	2	wet		
051-01.2	Southport Beach	10/2/2002	22	dry		
051-01.2	Southport Beach	10/28/2002	50	wet		
051-01.2	Southport Beach	1/4/2003	18	wet	25	54
051-01.2	Southport Beach	4/29/2003	4	wet		
051-01.2	Southport Beach	6/2/2003	50	wet		
051-01.2	Southport Beach	6/9/2003	52†	wet		
051-01.2	Southport Beach	6/16/2003	52	dry		
051-01.2	Southport Beach	8/4/2003	52	wet		
051-01.2	Southport Beach	8/5/2003	52	wet		
051-01.2	Southport Beach	8/6/2003	52	wet		
051-01.2	Southport Beach	8/11/2003	52	wet		
051-01.2	Southport Beach	8/18/2003	52	wet		
051-01.2	Southport Beach	8/20/2003	6	dry		
051-01.2	Southport Beach	9/30/2003	52	wet		
051-01.2	Southport Beach	12/9/2003	8	wet		
051-01.2	Southport Beach	12/22/2003	6	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.2	Southport Beach	5/5/2004	14	wet	23	46
051-01.2	Southport Beach	7/6/2004	36	wet		
051-01.2	Southport Beach	7/7/2004	50	wet		
051-01.2	Southport Beach	7/19/2004	28	wet		
051-01.2	Southport Beach	7/20/2004	36	wet		
051-01.2	Southport Beach	7/26/2004	4	wet		
051-01.2	Southport Beach	7/27/2004	67	dry		
051-01.2	Southport Beach	8/9/2004	8	dry		
051-01.2	Southport Beach	8/10/2004	137	dry		
051-01.2	Southport Beach	8/16/2004	51	wet		
051-01.2	Southport Beach	8/23/2004	51	wet		
051-01.2	Southport Beach	12/5/2004	51	dry		
051-01.2	Southport Beach	12/12/2004	2	wet		
051-01.2	Southport Beach	12/13/2004	18	wet		
051-01.2	Southport Beach	12/14/2004	51	dry		
051-01.2	Southport Beach	12/26/2004	6	wet		
051-01.2	Southport Beach	1/24/2005	6	wet	15	21
051-01.2	Southport Beach	1/25/2005	30	wet		
051-01.2	Southport Beach	2/16/2005	11	wet		
051-01.2	Southport Beach	4/10/2005	24	wet		
051-01.2	Southport Beach	4/11/2005	16	dry		
051-01.2	Southport Beach	7/11/2005	55	wet		
051-01.2	Southport Beach	8/15/2005	81	wet		
051-01.2	Southport Beach	9/18/2005	81	wet		
051-01.2	Southport Beach	9/19/2005	81	wet		
051-01.2	Southport Beach	10/30/2005	9	dry		
051-01.2	Southport Beach	11/20/2005	2	dry		
051-01.2	Southport Beach	11/21/2005	3	dry		
051-01.2	Southport Beach	11/27/2005	7	dry		
051-01.2	Southport Beach	12/11/2005	1	wet		
051-01.2	Southport Beach	12/12/2005	43	dry		
051-01.2	Southport Beach	12/28/2005	13	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.2	Southport Beach	1/4/2006	33	wet	28	56
051-01.2	Southport Beach	6/5/2006	4	wet		
051-01.2	Southport Beach	6/12/2006	20	dry		
051-01.2	Southport Beach	6/26/2006	81	wet		
051-01.2	Southport Beach	7/10/2006	40	dry		
051-01.2	Southport Beach	7/17/2006	53	wet		
051-01.2	Southport Beach	6/4/2007	81	wet	10	12
051-01.2	Southport Beach	6/18/2007	14	wet		
051-01.2	Southport Beach	7/2/2007	1	dry		
051-01.2	Southport Beach	7/9/2007	22	dry		
051-01.2	Southport Beach	7/23/2007	12	dry		
051-01.2	Southport Beach	8/9/2007	47	wet		
051-01.2	Southport Beach	8/13/2007	9	dry		
051-01.2	Southport Beach	8/23/2007	7	wet		
051-01.2	Southport Beach	9/13/2007	1	wet		
051-01.2	Southport Beach	2/4/2008	2	wet	6	NA
051-01.2	Southport Beach	4/30/2008	9	wet		
051-01.2	Southport Beach	6/16/2008	81	wet		
051-01.2	Southport Beach	6/23/2008	10	dry		
051-01.2	Southport Beach	7/28/2008	7	dry		
051-01.2	Southport Beach	7/29/2008	4	dry		
051-01.2	Southport Beach	8/4/2008	2	wet		
051-01.2	Southport Beach	8/11/2008	2	wet		
051-01.2	Southport Beach	8/12/2008	1	dry		
051-01.2	Southport Beach	8/18/2008	10	wet		
051-01.2	Southport Beach	9/4/2008	30	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-01.2	Southport Beach	4/2/2009	1	dry	4	11
051-01.2	Southport Beach	4/14/2009	1	wet		
051-01.2	Southport Beach	6/15/2009	28	dry		
051-01.2	Southport Beach	6/22/2009	80	wet		
051-01.2	Southport Beach	6/29/2009	2	wet		
051-01.2	Southport Beach	7/27/2009	53†	dry		
051-01.2	Southport Beach	8/3/2009	15	wet		
051-01.2	Southport Beach	8/4/2009	1	wet		
051-01.2	Southport Beach	8/24/2009	150	wet		
051-01.2	Southport Beach	8/25/2009	1	dry		
051-01.2	Southport Beach	8/31/2009	2	wet		
051-01.2	Southport Beach	9/2/2009	1	dry		
051-01.2	Southport Beach	9/14/2009	1	wet		
051-01.2	Southport Beach	10/1/2009	1	dry		
051-01.2	Southport Beach	4/27/2010	1	wet	18	40
051-01.2	Southport Beach	6/14/2010	171	dry		
051-01.2	Southport Beach	7/19/2010	3	dry		
051-01.2	Southport Beach	8/16/2010	81†	wet		
051-01.2	Southport Beach	8/23/2010	171	wet		
051-01.2	Southport Beach	8/25/2010	24	wet		
051-01.2	Southport Beach	10/19/2010	1	dry		
051-01.2	Southport Beach	11/18/2010	70	wet		
051-01.2	Southport Beach	4/14/2011	1	wet	5	10
051-01.2	Southport Beach	5/24/2011	81	wet		
051-01.2	Southport Beach	6/15/2011	3	dry		
051-01.2	Southport Beach	6/20/2011	1	wet		
051-01.2	Southport Beach	6/27/2011	10†	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.0	N"2" entrance to channel	4/24/2000	4	wet	9	NA
051-02.0	N"2" entrance to channel	6/8/2000	28	wet		
051-02.0	N"2" entrance to channel	7/17/2000	14	wet		
051-02.0	N"2" entrance to channel	7/18/2000	28	wet		
051-02.0	N"2" entrance to channel	7/19/2000	2	wet		
051-02.0	N"2" entrance to channel	8/15/2000	18	wet		
051-02.0	N"2" entrance to channel	11/13/2000	6	wet		
051-02.0	N"2" entrance to channel	4/2/2001	28	dry	6	4
051-02.0	N"2" entrance to channel	5/30/2001	6	dry		
051-02.0	N"2" entrance to channel	6/18/2001	51	wet		
051-02.0	N"2" entrance to channel	8/13/2001	2	wet		
051-02.0	N"2" entrance to channel	8/16/2001	6	dry		
051-02.0	N"2" entrance to channel	9/17/2001	2	dry		
051-02.0	N"2" entrance to channel	9/24/2001	4	wet		
051-02.0	N"2" entrance to channel	5/20/2002	2	wet	3	4
051-02.0	N"2" entrance to channel	6/10/2002	2	wet		
051-02.0	N"2" entrance to channel	6/17/2002	4	wet		
051-02.0	N"2" entrance to channel	9/4/2002	51	wet		
051-02.0	N"2" entrance to channel	9/30/2002	4	wet		
051-02.0	N"2" entrance to channel	10/1/2002	2	dry		
051-02.0	N"2" entrance to channel	10/28/2002	2	wet		
051-02.0	N"2" entrance to channel	4/29/2003	2	wet	10	12
051-02.0	N"2" entrance to channel	6/2/2003	50	wet		
051-02.0	N"2" entrance to channel	6/9/2003	8	wet		
051-02.0	N"2" entrance to channel	6/17/2003	14	dry		
051-02.0	N"2" entrance to channel	8/5/2003	50	wet		
051-02.0	N"2" entrance to channel	8/11/2003	2	wet		
051-02.0	N"2" entrance to channel	8/20/2003	11	dry		
051-02.0	N"2" entrance to channel	9/30/2003	14	wet		
051-02.0	N"2" entrance to channel	10/2/2003	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.0	N"2" entrance to channel	4/27/2004	51	wet	10	33
051-02.0	N"2" entrance to channel	7/15/2004	4	wet		
051-02.0	N"2" entrance to channel	7/20/2004	11	wet		
051-02.0	N"2" entrance to channel	7/27/2004	2	dry		
051-02.0	N"2" entrance to channel	8/10/2004	51	dry		
051-02.0	N"2" entrance to channel	9/13/2004	2	wet		
051-02.0	N"2" entrance to channel	9/21/2004	36	wet		
051-02.0	N"2" entrance to channel	4/5/2005	1	wet	4	23
051-02.0	N"2" entrance to channel	8/15/2005	54	wet		
051-02.0	N"2" entrance to channel	12/28/2005	1	wet		
051-02.0	N"2" entrance to channel	1/4/2006	9	wet	6	10
051-02.0	N"2" entrance to channel	7/6/2006	58	wet		
051-02.0	N"2" entrance to channel	7/10/2006	1	dry		
051-02.0	N"2" entrance to channel	10/31/2006	12	wet		
051-02.0	N"2" entrance to channel	11/20/2006	1	dry		
051-02.0	N"2" entrance to channel	1/3/2007	1	wet	1	NA
051-02.0	N"2" entrance to channel	5/21/2007	1	dry		
051-02.0	N"2" entrance to channel	6/19/2007	1	wet		
051-02.0	N"2" entrance to channel	7/24/2007	4	wet		
051-02.0	N"2" entrance to channel	8/9/2007	3	wet		
051-02.0	N"2" entrance to channel	8/23/2007	1	wet		
051-02.0	N"2" entrance to channel	9/13/2007	1	wet		
051-02.0	N"2" entrance to channel	10/15/2007	1	dry		
051-02.0	N"2" entrance to channel	2/4/2008	1	wet	4	15
051-02.0	N"2" entrance to channel	3/13/2008	1	dry		
051-02.0	N"2" entrance to channel	5/22/2008	2	dry		
051-02.0	N"2" entrance to channel	6/23/2008	1	dry		
051-02.0	N"2" entrance to channel	7/29/2008	4	dry		
051-02.0	N"2" entrance to channel	8/12/2008	1	dry		
051-02.0	N"2" entrance to channel	9/4/2008	61	wet		
051-02.0	N"2" entrance to channel	9/15/2008	70	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.0	N"2" entrance to channel	2/2/2009	1	dry	2	NA
051-02.0	N"2" entrance to channel	2/9/2009	2	wet		
051-02.0	N"2" entrance to channel	4/2/2009	1	dry		
051-02.0	N"2" entrance to channel	4/14/2009	1	wet		
051-02.0	N"2" entrance to channel	5/12/2009	1	dry		
051-02.0	N"2" entrance to channel	6/23/2009	7	wet		
051-02.0	N"2" entrance to channel	7/27/2009	1	dry		
051-02.0	N"2" entrance to channel	8/4/2009	1	wet		
051-02.0	N"2" entrance to channel	8/25/2009	5	dry		
051-02.0	N"2" entrance to channel	9/2/2009	1	dry		
051-02.0	N"2" entrance to channel	9/14/2009	1	wet		
051-02.0	N"2" entrance to channel	10/1/2009	1	dry		
051-02.0	N"2" entrance to channel	10/8/2009	16	dry		
051-02.0	N"2" entrance to channel	12/8/2009	1	wet		
051-02.0	N"2" entrance to channel	12/14/2009	51	dry		
051-02.0	N"2" entrance to channel	12/28/2009	16	wet		
051-02.0	N"2" entrance to channel	4/27/2010	2	wet	2	NA
051-02.0	N"2" entrance to channel	6/14/2010	1	dry		
051-02.0	N"2" entrance to channel	7/15/2010	40	wet		
051-02.0	N"2" entrance to channel	7/26/2010	1	wet		
051-02.0	N"2" entrance to channel	8/16/2010	6	wet		
051-02.0	N"2" entrance to channel	8/18/2010	6	wet		
051-02.0	N"2" entrance to channel	8/25/2010	4	wet		
051-02.0	N"2" entrance to channel	9/21/2010	1	dry		
051-02.0	N"2" entrance to channel	10/6/2010	1	dry		
051-02.0	N"2" entrance to channel	10/19/2010	1	dry		
051-02.0	N"2" entrance to channel	11/16/2010	1	wet		
051-02.0	N"2" entrance to channel	12/15/2010	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.0	N"2" entrance to channel	3/22/2011	3	dry	3	NA
051-02.0	N"2" entrance to channel	4/14/2011	5	wet		
051-02.0	N"2" entrance to channel	5/25/2011	18	wet		
051-02.0	N"2" entrance to channel	6/15/2011	3	dry		
051-02.0	N"2" entrance to channel	6/22/2011	2	wet		
051-02.0	N"2" entrance to channel	6/27/2011	1	wet		
051-02.0	N"2" entrance to channel	7/20/2011	1	wet		
051-02.4	N"8" channel	7/17/2000	50	wet	30	40
051-02.4	N"8" channel	7/18/2000	51	wet		
051-02.4	N"8" channel	7/19/2000	11	wet		
051-02.4	N"8" channel	8/8/2000	28	dry		
051-02.4	N"8" channel	1/23/2001	2	dry	8	23
051-02.4	N"8" channel	4/2/2001	18	dry		
051-02.4	N"8" channel	6/18/2001	51	wet		
051-02.4	N"8" channel	8/13/2001	50	wet		
051-02.4	N"8" channel	8/16/2001	2	dry		
051-02.4	N"8" channel	9/17/2001	2	dry		
051-02.4	N"8" channel	5/20/2002	2	wet	5	10
051-02.4	N"8" channel	6/17/2002	36	wet		
051-02.4	N"8" channel	7/1/2002	2	dry		
051-02.4	N"8" channel	10/2/2002	11	dry		
051-02.4	N"8" channel	10/28/2002	4	wet		
051-02.4	N"8" channel	4/29/2003	2	wet	19	33
051-02.4	N"8" channel	6/2/2003	51	wet		
051-02.4	N"8" channel	6/9/2003	8	wet		
051-02.4	N"8" channel	8/5/2003	52	wet		
051-02.4	N"8" channel	8/11/2003	22	wet		
051-02.4	N"8" channel	8/20/2003	22	dry		
051-02.4	N"8" channel	9/30/2003	50	wet		
051-02.4	N"8" channel	4/27/2004	51	wet	36	**65**
051-02.4	N"8" channel	7/20/2004	36	wet		
051-02.4	N"8" channel	7/27/2004	8	dry		
051-02.4	N"8" channel	8/10/2004	107	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for sample

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.4	N"8" channel	8/15/2005	63	wet	8	40
051-02.4	N"8" channel	12/28/2005	1	wet		
051-02.4	N"8" channel	1/4/2006	10	wet	7	NA
051-02.4	N"8" channel	7/10/2006	2	dry		
051-02.4	N"8" channel	10/31/2006	19	wet		
051-02.4	N"8" channel	11/20/2006	6	dry		
051-02.4	N"8" channel	1/3/2007	1	wet	5	7
051-02.4	N"8" channel	5/21/2007	1	dry		
051-02.4	N"8" channel	7/24/2007	74	wet		
051-02.4	N"8" channel	8/9/2007	14	wet		
051-02.4	N"8" channel	8/23/2007	18	wet		
051-02.4	N"8" channel	9/13/2007	1	wet		
051-02.4	N"8" channel	2/4/2008	2	wet	4	4
051-02.4	N"8" channel	4/30/2008	9	wet		
051-02.4	N"8" channel	5/22/2008	3	dry		
051-02.4	N"8" channel	6/23/2008	1	dry		
051-02.4	N"8" channel	7/29/2008	4	dry		
051-02.4	N"8" channel	8/12/2008	1	dry		
051-02.4	N"8" channel	9/4/2008	55	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-02.4	N"8" channel	2/2/2009	1	dry	2	NA
051-02.4	N"8" channel	2/9/2009	1	wet		
051-02.4	N"8" channel	4/2/2009	1	dry		
051-02.4	N"8" channel	4/14/2009	1	wet		
051-02.4	N"8" channel	5/12/2009	1	dry		
051-02.4	N"8" channel	6/23/2009	1	wet		
051-02.4	N"8" channel	7/27/2009	16	dry		
051-02.4	N"8" channel	8/4/2009	1	wet		
051-02.4	N"8" channel	8/25/2009	1	dry		
051-02.4	N"8" channel	9/2/2009	1	dry		
051-02.4	N"8" channel	9/14/2009	1	wet		
051-02.4	N"8" channel	10/1/2009	8	dry		
051-02.4	N"8" channel	12/14/2009	30	dry		
051-02.4	N"8" channel	12/28/2009	20	wet		
051-02.4	N"8" channel	4/27/2010	1	wet	5	1
051-02.4	N"8" channel	7/15/2010	91	wet		
051-02.4	N"8" channel	8/16/2010	30	wet		
051-02.4	N"8" channel	8/18/2010	2	wet		
051-02.4	N"8" channel	8/25/2010	9	wet		
051-02.4	N"8" channel	9/21/2010	1	dry		
051-02.4	N"8" channel	10/19/2010	2	dry		
051-02.4	N"8" channel	11/16/2010	2	wet		
051-02.4	N"8" channel	12/15/2010	8	wet		
051-02.4	N"8" channel	4/14/2011	1	wet	2	NA
051-02.4	N"8" channel	6/27/2011	7	wet		
051-02.4	N"8" channel	7/20/2011	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.0	R"22" bell	4/24/2000	2	wet		
051-04.0	R"22" bell	6/8/2000	22	wet		
051-04.0	R"22" bell	7/17/2000	51	wet		
051-04.0	R"22" bell	7/18/2000	50	wet	11	19
051-04.0	R"22" bell	7/19/2000	2	wet		
051-04.0	R"22" bell	8/15/2000	14	wet		
051-04.0	R"22" bell	11/13/2000	11	wet		
051-04.0	R"22" bell	4/2/2001	28	dry		
051-04.0	R"22" bell	5/30/2001	2	dry		
051-04.0	R"22" bell	6/18/2001	22	wet		
051-04.0	R"22" bell	8/13/2001	11	wet	5	NA
051-04.0	R"22" bell	8/16/2001	2	dry		
051-04.0	R"22" bell	9/17/2001	4	dry		
051-04.0	R"22" bell	9/24/2001	2	wet		
051-04.0	R"22" bell	5/20/2002	8	wet		
051-04.0	R"22" bell	6/10/2002	11	wet		
051-04.0	R"22" bell	6/17/2002	2	wet		
051-04.0	R"22" bell	9/4/2002	6	wet	3	NA
051-04.0	R"22" bell	9/30/2002	2	wet		
051-04.0	R"22" bell	10/1/2002	2	dry		
051-04.0	R"22" bell	10/28/2002	2	wet		
051-04.0	R"22" bell	4/29/2003	2	wet		
051-04.0	R"22" bell	6/2/2003	4	wet		
051-04.0	R"22" bell	6/9/2003	11	wet		
051-04.0	R"22" bell	6/17/2003	22	dry		
051-04.0	R"22" bell	8/5/2003	11	wet	4	NA
051-04.0	R"22" bell	8/11/2003	2	wet		
051-04.0	R"22" bell	8/20/2003	2	dry		
051-04.0	R"22" bell	9/30/2003	2	wet		
051-04.0	R"22" bell	10/2/2003	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.0	R"22" bell	4/27/2004	8	wet	8	23
051-04.0	R"22" bell	7/15/2004	2	wet		
051-04.0	R"22" bell	9/21/2004	36	wet		
051-04.0	R"22" bell	3/30/2005	11	wet	5	15
051-04.0	R"22" bell	4/5/2005	1	wet		
051-04.0	R"22" bell	8/15/2005	41	wet		
051-04.0	R"22" bell	12/28/2005	1	wet		
051-04.0	R"22" bell	1/4/2006	20	wet	3	NA
051-04.0	R"22" bell	7/6/2006	6	wet		
051-04.0	R"22" bell	7/10/2006	1	dry		
051-04.0	R"22" bell	10/31/2006	4	wet		
051-04.0	R"22" bell	11/20/2006	1	dry		
051-04.0	R"22" bell	1/3/2007	1	wet	2	1
051-04.0	R"22" bell	5/17/2007	49	wet		
051-04.0	R"22" bell	5/21/2007	1	dry		
051-04.0	R"22" bell	6/19/2007	1	wet		
051-04.0	R"22" bell	7/24/2007	3	wet		
051-04.0	R"22" bell	8/9/2007	1	wet		
051-04.0	R"22" bell	8/23/2007	7	wet		
051-04.0	R"22" bell	9/13/2007	1	wet		
051-04.0	R"22" bell	10/15/2007	1	dry		
051-04.0	R"22" bell	3/13/2008	1	dry	3	4
051-04.0	R"22" bell	5/22/2008	1	dry		
051-04.0	R"22" bell	6/23/2008	1	dry		
051-04.0	R"22" bell	7/29/2008	3	dry		
051-04.0	R"22" bell	8/12/2008	1	dry		
051-04.0	R"22" bell	9/4/2008	1	wet		
051-04.0	R"22" bell	9/15/2008	340	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.0	R"22" bell	2/2/2009	1	dry	1	NA
051-04.0	R"22" bell	2/9/2009	1	wet		
051-04.0	R"22" bell	4/2/2009	1	dry		
051-04.0	R"22" bell	4/14/2009	1	wet		
051-04.0	R"22" bell	5/12/2009	1	dry		
051-04.0	R"22" bell	6/23/2009	11	wet		
051-04.0	R"22" bell	6/29/2009	1	wet		
051-04.0	R"22" bell	7/27/2009	1	dry		
051-04.0	R"22" bell	8/4/2009	1	wet		
051-04.0	R"22" bell	8/25/2009	5	dry		
051-04.0	R"22" bell	9/2/2009	1	dry		
051-04.0	R"22" bell	9/14/2009	1	wet		
051-04.0	R"22" bell	10/1/2009	1	dry		
051-04.0	R"22" bell	10/8/2009	5	dry		
051-04.0	R"22" bell	12/8/2009	1	wet		
051-04.0	R"22" bell	12/14/2009	1	dry		
051-04.0	R"22" bell	12/28/2009	2	wet		
051-04.0	R"22" bell	4/27/2010	2	wet	2	NA
051-04.0	R"22" bell	6/14/2010	1	dry		
051-04.0	R"22" bell	7/15/2010	16	wet		
051-04.0	R"22" bell	7/26/2010	1	wet		
051-04.0	R"22" bell	8/16/2010	1	wet		
051-04.0	R"22" bell	8/18/2010	1	wet		
051-04.0	R"22" bell	8/25/2010	3	wet		
051-04.0	R"22" bell	9/21/2010	1	dry		
051-04.0	R"22" bell	10/6/2010	1	dry		
051-04.0	R"22" bell	10/19/2010	1	dry		
051-04.0	R"22" bell	11/16/2010	1	wet		
051-04.0	R"22" bell	12/15/2010	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.0	R"22" bell	3/22/2011	1	dry	1	NA
051-04.0	R"22" bell	4/14/2011	1	wet		
051-04.0	R"22" bell	5/25/2011	8	wet		
051-04.0	R"22" bell	6/15/2011	1	dry		
051-04.0	R"22" bell	6/22/2011	1	wet		
051-04.0	R"22" bell	6/27/2011	1	wet		
051-04.0	R"22" bell	7/20/2011	1	wet		
051-04.1	NW R"22" bell	4/24/2000	8	wet	15	19
051-04.1	NW R"22" bell	6/8/2000	22	wet		
051-04.1	NW R"22" bell	7/17/2000	51	wet		
051-04.1	NW R"22" bell	7/18/2000	50	wet		
051-04.1	NW R"22" bell	7/19/2000	6	wet		
051-04.1	NW R"22" bell	8/15/2000	11	wet		
051-04.1	NW R"22" bell	11/13/2000	6	wet		
051-04.1	NW R"22" bell	4/2/2001	28	dry	5	NA
051-04.1	NW R"22" bell	5/30/2001	4	dry		
051-04.1	NW R"22" bell	6/18/2001	18	wet		
051-04.1	NW R"22" bell	8/13/2001	8	wet		
051-04.1	NW R"22" bell	8/16/2001	2	dry		
051-04.1	NW R"22" bell	9/17/2001	2	dry		
051-04.1	NW R"22" bell	9/24/2001	2	wet		
051-04.1	NW R"22" bell	5/20/2002	14	wet	3	NA
051-04.1	NW R"22" bell	6/10/2002	11	wet		
051-04.1	NW R"22" bell	6/17/2002	4	wet		
051-04.1	NW R"22" bell	9/4/2002	2	wet		
051-04.1	NW R"22" bell	9/30/2002	2	wet		
051-04.1	NW R"22" bell	10/1/2002	2	dry		
051-04.1	NW R"22" bell	10/28/2002	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.1	NW R"22" bell	4/29/2003	2	wet	5	1
051-04.1	NW R"22" bell	6/2/2003	22	wet		
051-04.1	NW R"22" bell	6/9/2003	8	wet		
051-04.1	NW R"22" bell	6/17/2003	14	dry		
051-04.1	NW R"22" bell	8/5/2003	52	wet		
051-04.1	NW R"22" bell	8/11/2003	2	wet		
051-04.1	NW R"22" bell	8/20/2003	2	dry		
051-04.1	NW R"22" bell	9/30/2003	2	wet		
051-04.1	NW R"22" bell	10/2/2003	2	dry		
051-04.1	NW R"22" bell	4/27/2004	14	wet	12	NA
051-04.1	NW R"22" bell	7/15/2004	4	wet		
051-04.1	NW R"22" bell	9/21/2004	36	wet		
051-04.1	NW R"22" bell	3/30/2005	15	wet	6	15
051-04.1	NW R"22" bell	4/5/2005	1	wet		
051-04.1	NW R"22" bell	8/15/2005	53	wet		
051-04.1	NW R"22" bell	12/28/2005	2	wet		
051-04.1	NW R"22" bell	1/4/2006	8	wet	4	NA
051-04.1	NW R"22" bell	7/6/2006	17	wet		
051-04.1	NW R"22" bell	7/10/2006	1	dry		
051-04.1	NW R"22" bell	10/31/2006	5	wet		
051-04.1	NW R"22" bell	11/20/2006	1	dry		
051-04.1	NW R"22" bell	1/3/2007	1	wet	2	NA
051-04.1	NW R"22" bell	5/17/2007	7	wet		
051-04.1	NW R"22" bell	5/21/2007	1	dry		
051-04.1	NW R"22" bell	6/19/2007	1	wet		
051-04.1	NW R"22" bell	7/24/2007	8	wet		
051-04.1	NW R"22" bell	8/9/2007	6	wet		
051-04.1	NW R"22" bell	8/23/2007	5	wet		
051-04.1	NW R"22" bell	9/13/2007	1	wet		
051-04.1	NW R"22" bell	10/15/2007	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.1	NW R"22" bell	3/13/2008	1	dry	1	NA
051-04.1	NW R"22" bell	5/22/2008	1	dry		
051-04.1	NW R"22" bell	6/23/2008	1	dry		
051-04.1	NW R"22" bell	7/29/2008	2	dry		
051-04.1	NW R"22" bell	8/12/2008	1	dry		
051-04.1	NW R"22" bell	9/4/2008	1	wet		
051-04.1	NW R"22" bell	2/2/2009	1	dry	2	NA
051-04.1	NW R"22" bell	2/9/2009	1	wet		
051-04.1	NW R"22" bell	4/2/2009	1	dry		
051-04.1	NW R"22" bell	4/14/2009	1	wet		
051-04.1	NW R"22" bell	5/12/2009	1	dry		
051-04.1	NW R"22" bell	6/23/2009	7	wet		
051-04.1	NW R"22" bell	6/29/2009	1	wet		
051-04.1	NW R"22" bell	7/27/2009	2	dry		
051-04.1	NW R"22" bell	8/4/2009	1	wet		
051-04.1	NW R"22" bell	8/25/2009	1	dry		
051-04.1	NW R"22" bell	9/2/2009	1	dry		
051-04.1	NW R"22" bell	9/14/2009	2	wet		
051-04.1	NW R"22" bell	10/1/2009	1	dry		
051-04.1	NW R"22" bell	10/8/2009	4	dry		
051-04.1	NW R"22" bell	12/8/2009	1	wet		
051-04.1	NW R"22" bell	12/14/2009	8	dry		
051-04.1	NW R"22" bell	12/28/2009	5	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.1	NW R"22" bell	4/27/2010	1	wet	1	NA
051-04.1	NW R"22" bell	6/14/2010	1	dry		
051-04.1	NW R"22" bell	7/15/2010	10	wet		
051-04.1	NW R"22" bell	7/26/2010	1	wet		
051-04.1	NW R"22" bell	8/16/2010	1	wet		
051-04.1	NW R"22" bell	8/18/2010	1	wet		
051-04.1	NW R"22" bell	8/25/2010	8	wet		
051-04.1	NW R"22" bell	9/21/2010	1	dry		
051-04.1	NW R"22" bell	10/6/2010	1	dry		
051-04.1	NW R"22" bell	10/19/2010	1	dry		
051-04.1	NW R"22" bell	11/16/2010	1	wet		
051-04.1	NW R"22" bell	12/15/2010	1	wet		
051-04.1	NW R"22" bell	3/22/2011	1	dry	1	NA
051-04.1	NW R"22" bell	4/14/2011	1	wet		
051-04.1	NW R"22" bell	5/25/2011	1	wet		
051-04.1	NW R"22" bell	6/15/2011	1	dry		
051-04.1	NW R"22" bell	6/22/2011	1	wet		
051-04.1	NW R"22" bell	6/27/2011	1	wet		
051-04.1	NW R"22" bell	7/20/2011	2	wet		
051-04.2	S. channel to harbor	4/24/2000	2	wet	12	19
051-04.2	S. channel to harbor	6/8/2000	51	wet		
051-04.2	S. channel to harbor	7/17/2000	18	wet		
051-04.2	S. channel to harbor	7/18/2000	36	wet		
051-04.2	S. channel to harbor	7/19/2000	4	wet		
051-04.2	S. channel to harbor	8/15/2000	18	wet		
051-04.2	S. channel to harbor	11/13/2000	8	wet		
051-04.2	S. channel to harbor	4/2/2001	6	dry	3	4
051-04.2	S. channel to harbor	5/30/2001	2	dry		
051-04.2	S. channel to harbor	6/18/2001	51	wet		
051-04.2	S. channel to harbor	8/13/2001	2	wet		
051-04.2	S. channel to harbor	8/16/2001	2	dry		
051-04.2	S. channel to harbor	9/17/2001	2	dry		
051-04.2	S. channel to harbor	9/24/2001	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.2	S. channel to harbor	5/20/2002	2	wet	2	NA
051-04.2	S. channel to harbor	6/10/2002	2	wet		
051-04.2	S. channel to harbor	6/17/2002	2	wet		
051-04.2	S. channel to harbor	9/4/2002	2	wet		
051-04.2	S. channel to harbor	9/30/2002	2	wet		
051-04.2	S. channel to harbor	10/1/2002	2	dry		
051-04.2	S. channel to harbor	10/28/2002	2	wet		
051-04.2	S. channel to harbor	4/29/2003	2	wet	4	NA
051-04.2	S. channel to harbor	6/2/2003	28	wet		
051-04.2	S. channel to harbor	6/9/2003	8	wet		
051-04.2	S. channel to harbor	6/17/2003	4	dry		
051-04.2	S. channel to harbor	8/5/2003	11	wet		
051-04.2	S. channel to harbor	8/11/2003	2	wet		
051-04.2	S. channel to harbor	8/20/2003	2	dry		
051-04.2	S. channel to harbor	9/30/2003	2	wet		
051-04.2	S. channel to harbor	10/2/2003	2	dry		
051-04.2	S. channel to harbor	4/27/2004	14	wet	8	NA
051-04.2	S. channel to harbor	7/15/2004	8	wet		
051-04.2	S. channel to harbor	9/13/2004	2	wet		
051-04.2	S. channel to harbor	9/21/2004	28	wet		
051-04.2	S. channel to harbor	4/5/2005	1	wet	4	23
051-04.2	S. channel to harbor	8/15/2005	65	wet		
051-04.2	S. channel to harbor	12/28/2005	1	wet		
051-04.2	S. channel to harbor	1/4/2006	10	wet	2	NA
051-04.2	S. channel to harbor	7/6/2006	1	wet		
051-04.2	S. channel to harbor	7/10/2006	1	dry		
051-04.2	S. channel to harbor	11/20/2006	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.2	S. channel to harbor	1/3/2007	1	wet	2	NA
051-04.2	S. channel to harbor	5/17/2007	7	wet		
051-04.2	S. channel to harbor	5/21/2007	1	dry		
051-04.2	S. channel to harbor	6/19/2007	1	wet		
051-04.2	S. channel to harbor	7/24/2007	6	wet		
051-04.2	S. channel to harbor	8/9/2007	20	wet		
051-04.2	S. channel to harbor	8/23/2007	1	wet		
051-04.2	S. channel to harbor	9/13/2007	1	wet		
051-04.2	S. channel to harbor	10/15/2007	2	dry		
051-04.2	S. channel to harbor	3/13/2008	1	dry	2	NA
051-04.2	S. channel to harbor	5/22/2008	3	dry		
051-04.2	S. channel to harbor	6/23/2008	1	dry		
051-04.2	S. channel to harbor	7/29/2008	1	dry		
051-04.2	S. channel to harbor	8/12/2008	1	dry		
051-04.2	S. channel to harbor	9/4/2008	8	wet		
051-04.2	S. channel to harbor	2/2/2009	1	dry	2	NA
051-04.2	S. channel to harbor	2/9/2009	3	wet		
051-04.2	S. channel to harbor	4/2/2009	1	dry		
051-04.2	S. channel to harbor	4/14/2009	1	wet		
051-04.2	S. channel to harbor	5/12/2009	1	dry		
051-04.2	S. channel to harbor	6/23/2009	2	wet		
051-04.2	S. channel to harbor	6/29/2009	9	wet		
051-04.2	S. channel to harbor	7/27/2009	3	dry		
051-04.2	S. channel to harbor	8/4/2009	1	wet		
051-04.2	S. channel to harbor	8/25/2009	3	dry		
051-04.2	S. channel to harbor	9/2/2009	1	dry		
051-04.2	S. channel to harbor	9/14/2009	1	wet		
051-04.2	S. channel to harbor	10/1/2009	1	dry		
051-04.2	S. channel to harbor	10/8/2009	32	dry		
051-04.2	S. channel to harbor	12/8/2009	1	wet		
051-04.2	S. channel to harbor	12/14/2009	2	dry		
051-04.2	S. channel to harbor	12/28/2009	15	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.2	S. channel to harbor	4/27/2010	1	wet	2	NA
051-04.2	S. channel to harbor	6/14/2010	1	dry		
051-04.2	S. channel to harbor	7/15/2010	58	wet		
051-04.2	S. channel to harbor	7/26/2010	1	wet		
051-04.2	S. channel to harbor	8/16/2010	1	wet		
051-04.2	S. channel to harbor	8/18/2010	1	wet		
051-04.2	S. channel to harbor	8/25/2010	4	wet		
051-04.2	S. channel to harbor	9/21/2010	1	dry		
051-04.2	S. channel to harbor	10/6/2010	1	dry		
051-04.2	S. channel to harbor	10/19/2010	1	dry		
051-04.2	S. channel to harbor	11/16/2010	1	wet		
051-04.2	S. channel to harbor	12/15/2010	1	wet		
051-04.2	S. channel to harbor	3/22/2011	1	dry	2	NA
051-04.2	S. channel to harbor	4/14/2011	3	wet		
051-04.2	S. channel to harbor	5/25/2011	3	wet		
051-04.2	S. channel to harbor	6/15/2011	1	dry		
051-04.2	S. channel to harbor	6/22/2011	1	wet		
051-04.2	S. channel to harbor	6/27/2011	1	wet		
051-04.2	S. channel to harbor	7/20/2011	2	wet		
051-04.3	S. Sasco Brook	4/24/2000	22	wet	16	19
051-04.3	S. Sasco Brook	6/8/2000	14	wet		
051-04.3	S. Sasco Brook	7/17/2000	50	wet		
051-04.3	S. Sasco Brook	7/18/2000	51	wet		
051-04.3	S. Sasco Brook	7/19/2000	2	wet		
051-04.3	S. Sasco Brook	8/15/2000	18	wet		
051-04.3	S. Sasco Brook	11/13/2000	11	wet		
051-04.3	S. Sasco Brook	4/2/2001	11	dry	4	4
051-04.3	S. Sasco Brook	5/30/2001	2	dry		
051-04.3	S. Sasco Brook	6/18/2001	51	wet		
051-04.3	S. Sasco Brook	8/13/2001	2	wet		
051-04.3	S. Sasco Brook	8/16/2001	2	dry		
051-04.3	S. Sasco Brook	9/17/2001	2	dry		
051-04.3	S. Sasco Brook	9/24/2001	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.3	S. Sasco Brook	5/20/2002	6	wet	4	4
051-04.3	S. Sasco Brook	6/10/2002	18	wet		
051-04.3	S. Sasco Brook	6/17/2002	2	wet		
051-04.3	S. Sasco Brook	9/4/2002	51	wet		
051-04.3	S. Sasco Brook	9/30/2002	2	wet		
051-04.3	S. Sasco Brook	10/1/2002	2	dry		
051-04.3	S. Sasco Brook	10/28/2002	2	wet		
051-04.3	S. Sasco Brook	4/29/2003	2	wet	9	12
051-04.3	S. Sasco Brook	6/2/2003	4	wet		
051-04.3	S. Sasco Brook	6/9/2003	52	wet		
051-04.3	S. Sasco Brook	6/17/2003	11	dry		
051-04.3	S. Sasco Brook	8/5/2003	52	wet		
051-04.3	S. Sasco Brook	8/11/2003	4	wet		
051-04.3	S. Sasco Brook	8/20/2003	2	dry		
051-04.3	S. Sasco Brook	9/30/2003	14	wet		
051-04.3	S. Sasco Brook	10/2/2003	22	dry		
051-04.3	S. Sasco Brook	4/27/2004	18	wet	7	15
051-04.3	S. Sasco Brook	7/15/2004	2	wet		
051-04.3	S. Sasco Brook	9/13/2004	2	wet		
051-04.3	S. Sasco Brook	9/21/2004	50	wet		
051-04.3	S. Sasco Brook	4/5/2005	1	wet	4	23
051-04.3	S. Sasco Brook	8/15/2005	67	wet		
051-04.3	S. Sasco Brook	12/28/2005	1	wet		
051-04.3	S. Sasco Brook	1/4/2006	6	wet	3	NA
051-04.3	S. Sasco Brook	4/25/2006	1	wet		
051-04.3	S. Sasco Brook	7/6/2006	21	wet		
051-04.3	S. Sasco Brook	7/10/2006	1	dry		
051-04.3	S. Sasco Brook	10/31/2006	3	wet		
051-04.3	S. Sasco Brook	11/20/2006	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.3	S. Sasco Brook	1/3/2007	1	wet	2	NA
051-04.3	S. Sasco Brook	5/17/2007	7	wet		
051-04.3	S. Sasco Brook	5/21/2007	1	dry		
051-04.3	S. Sasco Brook	6/19/2007	2	wet		
051-04.3	S. Sasco Brook	7/24/2007	1	wet		
051-04.3	S. Sasco Brook	8/9/2007	5	wet		
051-04.3	S. Sasco Brook	8/23/2007	1	wet		
051-04.3	S. Sasco Brook	9/13/2007	1	wet		
051-04.3	S. Sasco Brook	10/15/2007	4	dry		
051-04.3	S. Sasco Brook	3/13/2008	1	dry	4	7
051-04.3	S. Sasco Brook	5/22/2008	4	dry		
051-04.3	S. Sasco Brook	6/23/2008	2	dry		
051-04.3	S. Sasco Brook	7/29/2008	10	dry		
051-04.3	S. Sasco Brook	8/12/2008	1	dry		
051-04.3	S. Sasco Brook	9/4/2008	81	wet		
051-04.3	S. Sasco Brook	2/2/2009	1	dry	2	NA
051-04.3	S. Sasco Brook	2/9/2009	1	wet		
051-04.3	S. Sasco Brook	4/2/2009	1	dry		
051-04.3	S. Sasco Brook	4/14/2009	1	wet		
051-04.3	S. Sasco Brook	5/12/2009	1	dry		
051-04.3	S. Sasco Brook	6/23/2009	5	wet		
051-04.3	S. Sasco Brook	6/29/2009	3	wet		
051-04.3	S. Sasco Brook	7/27/2009	1	dry		
051-04.3	S. Sasco Brook	8/4/2009	1	wet		
051-04.3	S. Sasco Brook	8/25/2009	1	dry		
051-04.3	S. Sasco Brook	9/2/2009	1	dry		
051-04.3	S. Sasco Brook	9/14/2009	1	wet		
051-04.3	S. Sasco Brook	10/1/2009	1	dry		
051-04.3	S. Sasco Brook	10/8/2009	24	dry		
051-04.3	S. Sasco Brook	12/8/2009	5	wet		
051-04.3	S. Sasco Brook	12/14/2009	1	dry		
051-04.3	S. Sasco Brook	12/28/2009	7	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
051-04.3	S. Sasco Brook	4/27/2010	1	wet	2	NA
051-04.3	S. Sasco Brook	6/14/2010	1	dry		
051-04.3	S. Sasco Brook	7/15/2010	22	wet		
051-04.3	S. Sasco Brook	7/26/2010	1	wet		
051-04.3	S. Sasco Brook	8/16/2010	1	wet		
051-04.3	S. Sasco Brook	8/18/2010	1	wet		
051-04.3	S. Sasco Brook	8/25/2010	5	wet		
051-04.3	S. Sasco Brook	9/21/2010	1	dry		
051-04.3	S. Sasco Brook	10/6/2010	3	dry		
051-04.3	S. Sasco Brook	10/19/2010	1	dry		
051-04.3	S. Sasco Brook	11/16/2010	1	wet		
051-04.3	S. Sasco Brook	12/15/2010	13	wet		
051-04.3	S. Sasco Brook	3/22/2011	3	dry	2	NA
051-04.3	S. Sasco Brook	4/14/2011	1	wet		
051-04.3	S. Sasco Brook	5/25/2011	5	wet		
051-04.3	S. Sasco Brook	6/15/2011	2	dry		
051-04.3	S. Sasco Brook	6/22/2011	1	wet		
051-04.3	S. Sasco Brook	6/27/2011	1	wet		
051-04.3	S. Sasco Brook	7/20/2011	3	wet		
158-15.0	SE Frost Pt.	4/24/2000	2	wet	9	NA
158-15.0	SE Frost Pt.	6/20/2000	2	wet		
158-15.0	SE Frost Pt.	7/18/2000	28	dry		
158-15.0	SE Frost Pt.	7/19/2000	18	dry		
158-15.0	SE Frost Pt.	8/15/2000	14	wet		
158-15.0	SE Frost Pt.	9/19/2000	28	wet		
158-15.0	SE Frost Pt.	11/13/2000	11	wet		
158-15.0	SE Frost Pt.	4/2/2001	18	wet	5	NA
158-15.0	SE Frost Pt.	5/30/2001	4	dry		
158-15.0	SE Frost Pt.	6/18/2001	18	wet		
158-15.0	SE Frost Pt.	8/13/2001	2	wet		
158-15.0	SE Frost Pt.	8/16/2001	6	dry		
158-15.0	SE Frost Pt.	9/24/2001	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-15.0	SE Frost Pt.	5/20/2002	4	wet	5	7
158-15.0	SE Frost Pt.	6/10/2002	4	wet		
158-15.0	SE Frost Pt.	6/17/2002	4	dry		
158-15.0	SE Frost Pt.	9/4/2002	51	wet		
158-15.0	SE Frost Pt.	9/30/2002	4	dry		
158-15.0	SE Frost Pt.	10/28/2002	2	wet		
158-15.0	SE Frost Pt.	4/29/2003	2	dry	8	12
158-15.0	SE Frost Pt.	6/2/2003	14	wet		
158-15.0	SE Frost Pt.	6/9/2003	51	wet		
158-15.0	SE Frost Pt.	6/17/2003	11	dry		
158-15.0	SE Frost Pt.	8/5/2003	51	wet		
158-15.0	SE Frost Pt.	8/11/2003	6	wet		
158-15.0	SE Frost Pt.	8/19/2003	6	wet		
158-15.0	SE Frost Pt.	8/20/2003	2	dry		
158-15.0	SE Frost Pt.	9/30/2003	6	wet		
158-15.0	SE Frost Pt.	4/27/2004	8	wet	7	10
158-15.0	SE Frost Pt.	7/15/2004	6	wet		
158-15.0	SE Frost Pt.	8/9/2004	2	dry		
158-15.0	SE Frost Pt.	9/13/2004	6	wet		
158-15.0	SE Frost Pt.	9/21/2004	36	wet		
158-15.0	SE Frost Pt.	8/15/2005	81	wet	9	40
158-15.0	SE Frost Pt.	12/28/2005	1	wet		
158-15.0	SE Frost Pt.	1/4/2006	6	wet	2	NA
158-15.0	SE Frost Pt.	7/17/2006	1	dry		
158-15.0	SE Frost Pt.	8/31/2006	13	wet		
158-15.0	SE Frost Pt.	9/5/2006	1	wet		
158-15.0	SE Frost Pt.	9/6/2006	1	dry		
158-15.0	SE Frost Pt.	10/16/2006	1	dry		
158-15.0	SE Frost Pt.	10/31/2006	1	wet		
158-15.0	SE Frost Pt.	11/20/2006	1	dry		
158-15.0	SE Frost Pt.	11/27/2006	13	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-15.0	SE Frost Pt.	3/5/2007	1	wet	3	1
158-15.0	SE Frost Pt.	6/7/2007	2	wet		
158-15.0	SE Frost Pt.	6/18/2007	1	wet		
158-15.0	SE Frost Pt.	6/20/2007	10	dry		
158-15.0	SE Frost Pt.	7/9/2007	1	dry		
158-15.0	SE Frost Pt.	7/24/2007	16	wet		
158-15.0	SE Frost Pt.	8/8/2007	53	wet		
158-15.0	SE Frost Pt.	10/15/2007	3	wet		
158-15.0	SE Frost Pt.	12/5/2007	1	wet		
158-15.0	SE Frost Pt.	2/4/2008	1	dry	2	NA
158-15.0	SE Frost Pt.	9/10/2008	6	wet		
158-15.0	SE Frost Pt.	9/16/2008	2	wet		
158-15.0	SE Frost Pt.	12/23/2008	1	wet		
158-15.0	SE Frost Pt.	4/2/2009	1	dry	3	8
158-15.0	SE Frost Pt.	4/22/2009	1	wet		
158-15.0	SE Frost Pt.	6/10/2009	54	wet		
158-15.0	SE Frost Pt.	6/29/2009	2	dry		
158-15.0	SE Frost Pt.	7/27/2009	44	dry		
158-15.0	SE Frost Pt.	8/3/2009	3	wet		
158-15.0	SE Frost Pt.	8/26/2009	2	dry		
158-15.0	SE Frost Pt.	8/31/2009	1	wet		
158-15.0	SE Frost Pt.	9/15/2009	1	dry		
158-15.0	SE Frost Pt.	10/29/2009	2	wet		
158-15.0	SE Frost Pt.	11/16/2009	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-15.0	SE Frost Pt.	3/2/2010	1	wet	4	1
158-15.0	SE Frost Pt.	3/17/2010	1	wet		
158-15.0	SE Frost Pt.	5/4/2010	16	wet		
158-15.0	SE Frost Pt.	5/19/2010	9	wet		
158-15.0	SE Frost Pt.	6/23/2010	5	wet		
158-15.0	SE Frost Pt.	8/17/2010	1	wet		
158-15.0	SE Frost Pt.	8/26/2010	9	dry		
158-15.0	SE Frost Pt.	9/16/2010	1	wet		
158-15.0	SE Frost Pt.	12/13/2010	48	wet		
158-15.0	SE Frost Pt.	3/14/2011	1	dry	3	NA
158-15.0	SE Frost Pt.	4/19/2011	1	wet		
158-15.0	SE Frost Pt.	4/27/2011	3	dry		
158-15.0	SE Frost Pt.	5/26/2011	2	wet		
158-15.0	SE Frost Pt.	6/20/2011	7	wet		
158-15.0	SE Frost Pt.	6/27/2011	2	dry		
158-15.0	SE Frost Pt.	7/20/2011	8[†]	wet		
158-15.1	SE Frost Point(Mid-lot 359)	7/17/2006	1	dry	2	NA
158-15.1	SE Frost Point(Mid-lot 359)	8/31/2006	17	wet		
158-15.1	SE Frost Point(Mid-lot 359)	9/5/2006	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	9/6/2006	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	10/16/2006	2	dry		
158-15.1	SE Frost Point(Mid-lot 359)	10/31/2006	4	wet		
158-15.1	SE Frost Point(Mid-lot 359)	11/20/2006	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	11/27/2006	2	dry		
158-15.1	SE Frost Point(Mid-lot 359)	6/7/2007	1	wet	2	NA
158-15.1	SE Frost Point(Mid-lot 359)	6/18/2007	18	wet		
158-15.1	SE Frost Point(Mid-lot 359)	6/20/2007	10	dry		
158-15.1	SE Frost Point(Mid-lot 359)	7/9/2007	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	7/24/2007	10	wet		
158-15.1	SE Frost Point(Mid-lot 359)	8/8/2007	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	9/13/2007	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	10/15/2007	2	wet		
158-15.1	SE Frost Point(Mid-lot 359)	12/5/2007	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 8: LIS WB Midshore – Southport Harbor (CT-W3_005) with annual geometric means and reduction goals

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-15.1	SE Frost Point(Mid-lot 359)	2/4/2008	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	9/10/2008	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	9/16/2008	1	wet	2	NA
158-15.1	SE Frost Point(Mid-lot 359)	12/16/2008	8	wet		
158-15.1	SE Frost Point(Mid-lot 359)	12/23/2008	2	wet		
158-15.1	SE Frost Point(Mid-lot 359)	4/2/2009	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	4/22/2009	5	wet		
158-15.1	SE Frost Point(Mid-lot 359)	6/10/2009	22	wet		
158-15.1	SE Frost Point(Mid-lot 359)	6/29/2009	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	7/27/2009	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	8/3/2009	1	wet	2	NA
158-15.1	SE Frost Point(Mid-lot 359)	8/26/2009	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	8/31/2009	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	9/15/2009	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	10/29/2009	5	wet		
158-15.1	SE Frost Point(Mid-lot 359)	11/16/2009	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	3/2/2010	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	3/17/2010	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	5/4/2010	9	wet		
158-15.1	SE Frost Point(Mid-lot 359)	5/19/2010	16	wet		
158-15.1	SE Frost Point(Mid-lot 359)	8/17/2010	1	wet	3	1
158-15.1	SE Frost Point(Mid-lot 359)	8/26/2010	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	9/16/2010	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	10/16/2010	1	wet		
158-15.1	SE Frost Point(Mid-lot 359)	12/13/2010	36	wet		
158-15.1	SE Frost Point(Mid-lot 359)	3/14/2011	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	4/27/2011	1	dry		
158-15.1	SE Frost Point(Mid-lot 359)	5/26/2011	1	wet	1	NA
158-15.1	SE Frost Point(Mid-lot 359)	6/27/2011	1	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 Midshore – Southport Harbor (CT-W3_005)

Station Name	Station Location	Years Sampled	Number of Samples		Geometric Mean		
			Wet	Dry	All	Wet	Dry
051-01.0	S. Sasco Brook	2000-2011	53	23	7	8	4
051-01.2	Southport Beach	2000-2011	80	39	12	15	9
051-02.0	N"2" entrance to channel	2000-2011	62	34	4	5	3
051-02.4	N"8" channel	2000-2011	44	27	6	8	4
051-04.0	R"22" bell	2000-2011	62	32	3	4	2
051-04.1	NW R"22" bell	2000-2011	61	32	3	4	2
051-04.2	S. channel to harbor	2000-2011	60	32	3	4	2
051-04.3	S. Sasco Brook	2000-2011	62	32	3	4	2
158-15.0	SE Frost Pt.	2000-2011	58	27	4	5	3
158-15.1	SE Frost Point(Mid-lot 359)	2006-2011	29	17	2	3	1
Shaded cells indicate an exceedance of water quality criteria							

Table 21: Segment 9: LIS WB Midshore – Sherwood Point Bacteria Data

Waterbody ID: CT-W3_006

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 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-02.3	S. Cockenoe Is. N"2"	4/24/2000	6	wet	6	15
158-02.3	S. Cockenoe Is. N"2"	5/25/2000	51	wet		
158-02.3	S. Cockenoe Is. N"2"	6/20/2000	2	wet		
158-02.3	S. Cockenoe Is. N"2"	6/21/2000	2	dry		
158-02.3	S. Cockenoe Is. N"2"	7/18/2000	36	dry		
158-02.3	S. Cockenoe Is. N"2"	7/19/2000	2	dry		
158-02.3	S. Cockenoe Is. N"2"	9/14/2000	2	wet		
158-02.3	S. Cockenoe Is. N"2"	11/13/2000	11	wet		
158-02.3	S. Cockenoe Is. N"2"	2/2/2001	2	dry	3	NA
158-02.3	S. Cockenoe Is. N"2"	4/2/2001	8	wet		
158-02.3	S. Cockenoe Is. N"2"	5/29/2001	2	dry		
158-02.3	S. Cockenoe Is. N"2"	6/20/2001	6	dry		
158-02.3	S. Cockenoe Is. N"2"	8/14/2001	2	wet		
158-02.3	S. Cockenoe Is. N"2"	8/16/2001	6	dry		
158-02.3	S. Cockenoe Is. N"2"	8/30/2001	2	dry		
158-02.3	S. Cockenoe Is. N"2"	9/24/2001	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-02.3	S. Cockenoe Is. N"2"	5/22/2002	2	dry	4	4
158-02.3	S. Cockenoe Is. N"2"	6/11/2002	2	wet		
158-02.3	S. Cockenoe Is. N"2"	6/17/2002	4	dry		
158-02.3	S. Cockenoe Is. N"2"	9/3/2002	51	wet		
158-02.3	S. Cockenoe Is. N"2"	9/4/2002	8	wet		
158-02.3	S. Cockenoe Is. N"2"	9/30/2002	2	dry		
158-02.3	S. Cockenoe Is. N"2"	10/28/2002	2	wet		
158-02.3	S. Cockenoe Is. N"2"	4/30/2003	2	dry	3	4
158-02.3	S. Cockenoe Is. N"2"	6/2/2003	50	wet		
158-02.3	S. Cockenoe Is. N"2"	6/11/2003	2	dry		
158-02.3	S. Cockenoe Is. N"2"	6/17/2003	18	dry		
158-02.3	S. Cockenoe Is. N"2"	8/6/2003	2	wet		
158-02.3	S. Cockenoe Is. N"2"	8/18/2003	2	wet		
158-02.3	S. Cockenoe Is. N"2"	10/2/2003	2	dry		
158-02.3	S. Cockenoe Is. N"2"	7/7/2004	2	wet	1	NA
158-02.3	S. Cockenoe Is. N"2"	8/9/2004	2	dry		
158-02.3	S. Cockenoe Is. N"2"	9/13/2004	8	wet		
158-02.3	S. Cockenoe Is. N"2"	9/21/2004	22	wet		
158-02.3	S. Cockenoe Is. N"2"	8/16/2005	1	wet	NA	NA
158-02.3	S. Cockenoe Is. N"2"	7/17/2006	3	dry	3	NA
158-02.3	S. Cockenoe Is. N"2"	8/31/2006	12	wet		
158-02.3	S. Cockenoe Is. N"2"	9/5/2006	6	wet		
158-02.3	S. Cockenoe Is. N"2"	9/6/2006	3	dry		
158-02.3	S. Cockenoe Is. N"2"	10/16/2006	1	dry		
158-02.3	S. Cockenoe Is. N"2"	11/1/2006	1	wet		
158-02.3	S. Cockenoe Is. N"2"	11/27/2006	8	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-02.3	S. Cockenoe Is. N"2"	3/5/2007	1	wet	2	NA
158-02.3	S. Cockenoe Is. N"2"	5/1/2007	1	wet		
158-02.3	S. Cockenoe Is. N"2"	6/5/2007	70	wet		
158-02.3	S. Cockenoe Is. N"2"	6/7/2007	1	wet		
158-02.3	S. Cockenoe Is. N"2"	6/20/2007	3	dry		
158-02.3	S. Cockenoe Is. N"2"	7/24/2007	1	wet		
158-02.3	S. Cockenoe Is. N"2"	8/8/2007	2	wet		
158-02.3	S. Cockenoe Is. N"2"	9/13/2007	1	wet		
158-02.3	S. Cockenoe Is. N"2"	10/15/2007	5	wet		
158-02.3	S. Cockenoe Is. N"2"	10/22/2007	3	wet		
158-02.3	S. Cockenoe Is. N"2"	10/30/2007	4	dry		
158-02.3	S. Cockenoe Is. N"2"	12/5/2007	1	wet		
158-02.3	S. Cockenoe Is. N"2"	2/4/2008	1	dry	3	NA
158-02.3	S. Cockenoe Is. N"2"	4/30/2008	3	wet		
158-02.3	S. Cockenoe Is. N"2"	7/28/2008	1	dry		
158-02.3	S. Cockenoe Is. N"2"	8/5/2008	1	dry		
158-02.3	S. Cockenoe Is. N"2"	9/10/2008	8	wet		
158-02.3	S. Cockenoe Is. N"2"	12/16/2008	4	wet		
158-02.3	S. Cockenoe Is. N"2"	12/23/2008	9	wet		
158-02.3	S. Cockenoe Is. N"2"	4/2/2009	1	dry	1	NA
158-02.3	S. Cockenoe Is. N"2"	4/22/2009	1	wet		
158-02.3	S. Cockenoe Is. N"2"	6/10/2009	1	wet		
158-02.3	S. Cockenoe Is. N"2"	6/23/2009	4	wet		
158-02.3	S. Cockenoe Is. N"2"	7/28/2009	1	dry		
158-02.3	S. Cockenoe Is. N"2"	8/3/2009	1	wet		
158-02.3	S. Cockenoe Is. N"2"	8/26/2009	1	dry		
158-02.3	S. Cockenoe Is. N"2"	8/31/2009	1	wet		
158-02.3	S. Cockenoe Is. N"2"	10/29/2009	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of
158-02.3	S. Cockenoe Is. N"2"	3/2/2010	1	wet	2	N/A
158-02.3	S. Cockenoe Is. N"2"	3/17/2010	1	wet		
158-02.3	S. Cockenoe Is. N"2"	3/25/2010	1	wet		
158-02.3	S. Cockenoe Is. N"2"	5/4/2010	18	wet		
158-02.3	S. Cockenoe Is. N"2"	5/19/2010	2	wet		
158-02.3	S. Cockenoe Is. N"2"	6/23/2010	1	wet		
158-02.3	S. Cockenoe Is. N"2"	8/17/2010	1	wet		
158-02.3	S. Cockenoe Is. N"2"	9/16/2010	1	wet		
158-02.3	S. Cockenoe Is. N"2"	3/14/2011	1	dry	1	NA
158-02.3	S. Cockenoe Is. N"2"	4/26/2011	1	dry		
158-02.3	S. Cockenoe Is. N"2"	6/27/2011	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	5/25/2000	28	wet	5	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/21/2000	2	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/19/2000	4	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	1/23/2001	2	dry	3	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	2/2/2001	2	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/2/2001	6	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/14/2001	2	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/28/2001	18	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/30/2001	2	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/17/2002	28	dry	6	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	7/1/2002	2	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	10/28/2002	6	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/29/2003	2	dry	4	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/2/2003	2	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/6/2003	8	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/19/2003	14	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/27/2004	2	wet	5	23
158-07.0	between Cedar Pt. and NE Cockenoe Island	7/7/2004	2	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/23/2004	51	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/29/2006	5	wet	2	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	7/17/2006	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/6/2006	4	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	10/16/2006	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/18/2007	81	wet	3	7
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/20/2007	20	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	7/9/2007	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/8/2007	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/13/2007	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	12/5/2007	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/11/2008	1	dry	5	15
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/10/2008	52	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/16/2008	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	12/16/2008	10	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/2/2009	1	dry	3	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/22/2009	6	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/10/2009	2	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/29/2009	4	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	7/27/2009	12	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/3/2009	6	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/26/2009	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/31/2009	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/15/2009	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	10/29/2009	25	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	11/16/2009	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-07.0	between Cedar Pt. and NE Cockenoe Island	3/2/2010	1	wet	5	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	3/17/2010	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	5/4/2010	17	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	5/19/2010	11	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/23/2010	10	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/17/2010	4	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	8/25/2010	18	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	9/16/2010	1	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	10/16/2010	5	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	12/13/2010	19	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	3/14/2011	4	dry	6	NA
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/19/2011	10	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	4/26/2011	3	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	5/23/2011	15	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/20/2011	15	wet		
158-07.0	between Cedar Pt. and NE Cockenoe Island	6/27/2011	1	dry		
158-07.0	between Cedar Pt. and NE Cockenoe Island	7/20/2011	6[†]	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	4/24/2000	2	wet	6	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/20/2000	6	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/21/2000	2	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/18/2000	22	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/19/2000	11	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/19/2000	8	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	11/13/2000	8	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	2/2/2001	2	dry	4	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	5/29/2001	8	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/18/2001	22	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/20/2001	6	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/13/2001	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/16/2001	2	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/24/2001	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	5/22/2002	2	dry	6	7
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/11/2002	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/17/2002	14	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/3/2002	51	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/4/2002	11	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/30/2002	2	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/9/2003	11	wet	6	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/11/2003	11	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/17/2003	14	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/6/2003	6	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/18/2003	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/19/2003	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/2/2003	6	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	4/27/2004	36	wet	6	7
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/7/2004	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/15/2004	14	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/9/2004	2	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/13/2004	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/21/2004	14	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/15/2005	11	wet	NA	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/29/2006	6	wet	6	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/17/2006	2	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/31/2006	29	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/5/2006	11	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/6/2006	6	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/16/2006	1	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	11/1/2006	13	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	11/27/2006	9	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	3/5/2007	3	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	5/1/2007	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/5/2007	34	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/7/2007	13	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/18/2007	8	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/20/2007	2	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/24/2007	5	wet	3	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/23/2007	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/13/2007	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/15/2007	13	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/22/2007	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/30/2007	3	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	12/5/2007	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	2/4/2008	4	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	4/30/2008	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/5/2008	1	dry	2	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/10/2008	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	12/16/2008	2	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	12/23/2008	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	4/2/2009	1	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	4/22/2009	34	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/10/2009	4	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/23/2009	10	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/29/2009	3	dry	3	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	7/27/2009	8	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/3/2009	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/26/2009	1	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/31/2009	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/29/2009	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	3/17/2010	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	3/25/2010	3	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	5/4/2010	17	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	5/19/2010	36	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/23/2010	13	wet	3	1
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/17/2010	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	8/26/2010	1	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	9/16/2010	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	10/16/2010	1	wet		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	3/14/2011	1	dry		
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	4/27/2011	2	dry	1	NA
158-07.1	between NE Cockenoe Is. and Sherwood Pt.	6/27/2011	1	dry		
158-08.1	G"5"	6/18/2007	81	wet		
158-08.1	G"5"	6/20/2007	20	dry		
158-08.1	G"5"	7/9/2007	3	dry		
158-08.1	G"5"	7/24/2007	6	wet	12	19
158-08.1	G"5"	8/8/2007	81	wet		
158-08.1	G"5"	9/13/2007	4	wet		
158-08.1	G"5"	12/5/2007	4	wet		
158-08.1	G"5"	8/11/2008	1	dry		
158-08.1	G"5"	9/10/2008	32	wet		
158-08.1	G"5"	9/16/2008	10	wet	8	10
158-08.1	G"5"	12/16/2008	20	wet		
158-08.1	G"5"	12/23/2008	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-08.1	G"5"	4/2/2009	2	dry	5	NA
158-08.1	G"5"	4/22/2009	6	wet		
158-08.1	G"5"	6/10/2009	27	wet		
158-08.1	G"5"	6/29/2009	3	dry		
158-08.1	G"5"	7/27/2009	18	dry		
158-08.1	G"5"	8/3/2009	11	wet		
158-08.1	G"5"	8/26/2009	3	dry		
158-08.1	G"5"	8/31/2009	1	wet		
158-08.1	G"5"	9/15/2009	1	dry		
158-08.1	G"5"	10/29/2009	48	wet		
158-08.1	G"5"	11/16/2009	1	wet		
158-08.1	G"5"	3/2/2010	1	wet	4	NA
158-08.1	G"5"	3/17/2010	1	wet		
158-08.1	G"5"	5/4/2010	24	wet		
158-08.1	G"5"	5/19/2010	1	wet		
158-08.1	G"5"	6/23/2010	19	wet		
158-08.1	G"5"	8/17/2010	3	wet		
158-08.1	G"5"	8/25/2010	10	wet		
158-08.1	G"5"	9/16/2010	1	wet		
158-08.1	G"5"	10/16/2010	4	wet		
158-08.1	G"5"	12/13/2010	43	wet		
158-08.1	G"5"	3/14/2011	1	dry	5	NA
158-08.1	G"5"	5/23/2011	23	wet		
158-10.1	S. Compo Mill Cove	6/21/2000	8	dry	4	NA
158-10.1	S. Compo Mill Cove	9/19/2000	2	wet		
158-10.1	S. Compo Mill Cove	1/23/2001	2	dry	3	NA
158-10.1	S. Compo Mill Cove	2/2/2001	11	dry		
158-10.1	S. Compo Mill Cove	4/2/2001	8	wet		
158-10.1	S. Compo Mill Cove	8/13/2001	2	wet		
158-10.1	S. Compo Mill Cove	8/16/2001	2	dry		
158-10.1	S. Compo Mill Cove	8/30/2001	2	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-10.1	S. Compo Mill Cove	6/17/2002	4	dry	3	NA
158-10.1	S. Compo Mill Cove	7/1/2002	2	dry		
158-10.1	S. Compo Mill Cove	10/28/2002	4	wet		
158-10.1	S. Compo Mill Cove	4/29/2003	2	dry	3	NA
158-10.1	S. Compo Mill Cove	8/6/2003	6	wet		
158-10.1	S. Compo Mill Cove	8/19/2003	2	wet		
158-10.1	S. Compo Mill Cove	4/27/2004	4	wet	5	NA
158-10.1	S. Compo Mill Cove	7/7/2004	2	wet		
158-10.1	S. Compo Mill Cove	8/23/2004	22	wet		
158-10.1	S. Compo Mill Cove	6/29/2006	31	wet	4	10
158-10.1	S. Compo Mill Cove	7/17/2006	4	dry		
158-10.1	S. Compo Mill Cove	9/6/2006	7	dry		
158-10.1	S. Compo Mill Cove	10/16/2006	1	dry		
158-10.1	S. Compo Mill Cove	10/31/2006	1	wet		
158-10.1	S. Compo Mill Cove	6/18/2007	3	wet	2	NA
158-10.1	S. Compo Mill Cove	6/20/2007	3	dry		
158-10.1	S. Compo Mill Cove	7/9/2007	2	dry		
158-10.1	S. Compo Mill Cove	7/24/2007	3	wet		
158-10.1	S. Compo Mill Cove	8/8/2007	1	wet		
158-10.1	S. Compo Mill Cove	9/13/2007	6	wet		
158-10.1	S. Compo Mill Cove	12/5/2007	1	wet		
158-10.1	S. Compo Mill Cove	9/10/2008	5	wet	1	NA
158-10.1	S. Compo Mill Cove	9/16/2008	1	wet		
158-10.1	S. Compo Mill Cove	12/16/2008	1	wet		
158-10.1	S. Compo Mill Cove	12/23/2008	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-10.1	S. Compo Mill Cove	4/2/2009	2	dry	4	NA
158-10.1	S. Compo Mill Cove	4/22/2009	14	wet		
158-10.1	S. Compo Mill Cove	6/10/2009	22	wet		
158-10.1	S. Compo Mill Cove	6/29/2009	6	dry		
158-10.1	S. Compo Mill Cove	7/27/2009	18	dry		
158-10.1	S. Compo Mill Cove	8/3/2009	1	wet		
158-10.1	S. Compo Mill Cove	8/26/2009	1	dry		
158-10.1	S. Compo Mill Cove	8/31/2009	1	wet		
158-10.1	S. Compo Mill Cove	9/15/2009	1	dry		
158-10.1	S. Compo Mill Cove	10/29/2009	14	wet		
158-10.1	S. Compo Mill Cove	11/16/2009	4	wet		
158-10.1	S. Compo Mill Cove	3/2/2010	1	wet	4	NA
158-10.1	S. Compo Mill Cove	3/17/2010	1	wet		
158-10.1	S. Compo Mill Cove	5/4/2010	19	wet		
158-10.1	S. Compo Mill Cove	5/19/2010	4	wet		
158-10.1	S. Compo Mill Cove	6/23/2010	10	wet		
158-10.1	S. Compo Mill Cove	8/17/2010	1	wet		
158-10.1	S. Compo Mill Cove	8/26/2010	2	dry		
158-10.1	S. Compo Mill Cove	9/16/2010	1	wet		
158-10.1	S. Compo Mill Cove	10/16/2010	3	wet		
158-10.1	S. Compo Mill Cove	12/13/2010	72	wet		
158-10.1	S. Compo Mill Cove	3/14/2011	2	dry	2	NA
158-10.1	S. Compo Mill Cove	4/19/2011	14	wet		
158-10.1	S. Compo Mill Cove	4/27/2011	1	dry		
158-10.1	S. Compo Mill Cove	5/26/2011	3	wet		
158-10.1	S. Compo Mill Cove	6/20/2011	1	wet		
158-10.1	S. Compo Mill Cove	6/27/2011	1	dry		
158-10.1	S. Compo Mill Cove	7/20/2011	4†	wet		
158-11.0	Compo Mill Cove	4/24/2000	2	wet	3	NA
158-11.0	Compo Mill Cove	6/21/2000	2	dry		
158-11.0	Compo Mill Cove	9/19/2000	14	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-11.0	Compo Mill Cove	1/23/2001	2	dry	7	15
158-11.0	Compo Mill Cove	2/2/2001	18	dry		
158-11.0	Compo Mill Cove	4/2/2001	8	wet		
158-11.0	Compo Mill Cove	5/30/2001	4	dry		
158-11.0	Compo Mill Cove	6/18/2001	50	wet		
158-11.0	Compo Mill Cove	8/13/2001	51	wet		
158-11.0	Compo Mill Cove	8/16/2001	2	dry		
158-11.0	Compo Mill Cove	8/30/2001	2	dry		
158-11.0	Compo Mill Cove	6/11/2002	2	wet	3	7
158-11.0	Compo Mill Cove	6/17/2002	2	dry		
158-11.0	Compo Mill Cove	7/1/2002	2	dry		
158-11.0	Compo Mill Cove	9/4/2002	51	wet		
158-11.0	Compo Mill Cove	9/30/2002	2	dry		
158-11.0	Compo Mill Cove	10/28/2002	2	wet		
158-11.0	Compo Mill Cove	4/29/2003	2	dry	9	**40**
158-11.0	Compo Mill Cove	6/9/2003	36	wet		
158-11.0	Compo Mill Cove	8/6/2003	51	wet		
158-11.0	Compo Mill Cove	8/19/2003	3	wet		
158-11.0	Compo Mill Cove	4/27/2004	2	wet	5	23
158-11.0	Compo Mill Cove	8/9/2004	2	dry		
158-11.0	Compo Mill Cove	8/23/2004	36	wet		
158-11.0	Compo Mill Cove	6/29/2006	71	wet	4	10
158-11.0	Compo Mill Cove	7/17/2006	3	dry		
158-11.0	Compo Mill Cove	10/16/2006	1	dry		
158-11.0	Compo Mill Cove	10/31/2006	4	wet		
158-11.0	Compo Mill Cove	11/27/2006	1	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-11.0	Compo Mill Cove	6/20/2007	1	dry	5	12
158-11.0	Compo Mill Cove	7/9/2007	4	dry		
158-11.0	Compo Mill Cove	7/24/2007	4	wet		
158-11.0	Compo Mill Cove	8/8/2007	81	wet		
158-11.0	Compo Mill Cove	8/23/2007	6	wet		
158-11.0	Compo Mill Cove	9/13/2007	53	wet		
158-11.0	Compo Mill Cove	10/22/2007	1	wet		
158-11.0	Compo Mill Cove	10/30/2007	4	dry		
158-11.0	Compo Mill Cove	12/5/2007	1	wet		
158-11.0	Compo Mill Cove	2/4/2008	1	dry	7	7
158-11.0	Compo Mill Cove	8/5/2008	142	dry		
158-11.0	Compo Mill Cove	9/10/2008	7	wet		
158-11.0	Compo Mill Cove	9/16/2008	6	wet		
158-11.0	Compo Mill Cove	12/16/2008	4	wet		
158-11.0	Compo Mill Cove	12/23/2008	5	wet		
158-11.0	Compo Mill Cove	4/2/2009	16	dry	5	NA
158-11.0	Compo Mill Cove	4/22/2009	15	wet		
158-11.0	Compo Mill Cove	6/10/2009	13	wet		
158-11.0	Compo Mill Cove	6/29/2009	12	dry		
158-11.0	Compo Mill Cove	7/27/2009	42	dry		
158-11.0	Compo Mill Cove	8/3/2009	1	wet		
158-11.0	Compo Mill Cove	8/26/2009	10	dry		
158-11.0	Compo Mill Cove	8/31/2009	1	wet		
158-11.0	Compo Mill Cove	9/15/2009	1	dry		
158-11.0	Compo Mill Cove	10/29/2009	6	wet		
158-11.0	Compo Mill Cove	11/16/2009	1	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-11.0	Compo Mill Cove	3/2/2010	1	wet	4	1
158-11.0	Compo Mill Cove	3/17/2010	1	wet		
158-11.0	Compo Mill Cove	5/4/2010	13	wet		
158-11.0	Compo Mill Cove	5/19/2010	2	wet		
158-11.0	Compo Mill Cove	8/17/2010	1	wet		
158-11.0	Compo Mill Cove	8/26/2010	3	dry		
158-11.0	Compo Mill Cove	9/16/2010	1	wet		
158-11.0	Compo Mill Cove	10/16/2010	17	wet		
158-11.0	Compo Mill Cove	12/13/2010	81	wet		
158-11.0	Compo Mill Cove	3/14/2011	1	dry	4	NA
158-11.0	Compo Mill Cove	4/19/2011	12	wet		
158-11.0	Compo Mill Cove	4/27/2011	3	dry		
158-11.0	Compo Mill Cove	5/26/2011	13	wet		
158-11.0	Compo Mill Cove	6/20/2011	1	wet		
158-11.0	Compo Mill Cove	6/27/2011	1	dry		
158-11.0	Compo Mill Cove	7/20/2011	24†	wet		
158-12.0	Sherwood Pt.	4/24/2000	2	wet	5	NA
158-12.0	Sherwood Pt.	6/20/2000	2	wet		
158-12.0	Sherwood Pt.	7/18/2000	18	dry		
158-12.0	Sherwood Pt.	7/19/2000	4	dry		
158-12.0	Sherwood Pt.	8/15/2000	22	wet		
158-12.0	Sherwood Pt.	9/19/2000	2	wet		
158-12.0	Sherwood Pt.	11/13/2000	11	wet		
158-12.0	Sherwood Pt.	2/2/2001	6	dry	4	NA
158-12.0	Sherwood Pt.	4/2/2001	11	wet		
158-12.0	Sherwood Pt.	5/30/2001	4	dry		
158-12.0	Sherwood Pt.	6/18/2001	11	wet		
158-12.0	Sherwood Pt.	8/13/2001	2	wet		
158-12.0	Sherwood Pt.	8/16/2001	2	dry		
158-12.0	Sherwood Pt.	9/24/2001	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.0	Sherwood Pt.	5/22/2002	2	dry	3	NA
158-12.0	Sherwood Pt.	6/11/2002	8	wet		
158-12.0	Sherwood Pt.	6/17/2002	2	dry		
158-12.0	Sherwood Pt.	9/4/2002	22	wet		
158-12.0	Sherwood Pt.	9/30/2002	2	dry		
158-12.0	Sherwood Pt.	10/28/2002	2	wet		
158-12.0	Sherwood Pt.	4/29/2003	2	dry	3	NA
158-12.0	Sherwood Pt.	6/9/2003	6	wet		
158-12.0	Sherwood Pt.	8/6/2003	6	wet		
158-12.0	Sherwood Pt.	8/19/2003	2	wet		
158-12.0	Sherwood Pt.	10/2/2003	2	dry		
158-12.0	Sherwood Pt.	4/27/2004	2	wet	4	NA
158-12.0	Sherwood Pt.	7/15/2004	6	wet		
158-12.0	Sherwood Pt.	8/9/2004	2	dry		
158-12.0	Sherwood Pt.	8/23/2004	14	wet		
158-12.0	Sherwood Pt.	9/13/2004	2	wet		
158-12.0	Sherwood Pt.	9/21/2004	11	wet		
158-12.0	Sherwood Pt.	8/15/2005	50	wet	NA	90
158-12.0	Sherwood Pt.	6/29/2006	9	wet	4	NA
158-12.0	Sherwood Pt.	7/17/2006	8	dry		
158-12.0	Sherwood Pt.	8/31/2006	20	wet		
158-12.0	Sherwood Pt.	9/5/2006	2	wet		
158-12.0	Sherwood Pt.	9/6/2006	1	dry		
158-12.0	Sherwood Pt.	10/16/2006	1	dry		
158-12.0	Sherwood Pt.	10/31/2006	3	wet		
158-12.0	Sherwood Pt.	11/27/2006	3	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.0	Sherwood Pt.	5/1/2007	1	wet	3	NA
158-12.0	Sherwood Pt.	6/5/2007	81	wet		
158-12.0	Sherwood Pt.	6/7/2007	1	wet		
158-12.0	Sherwood Pt.	6/18/2007	22	wet		
158-12.0	Sherwood Pt.	6/20/2007	3	dry		
158-12.0	Sherwood Pt.	7/24/2007	2	wet		
158-12.0	Sherwood Pt.	8/8/2007	1	wet		
158-12.0	Sherwood Pt.	9/13/2007	1	wet		
158-12.0	Sherwood Pt.	10/15/2007	3	wet		
158-12.0	Sherwood Pt.	10/22/2007	2	wet		
158-12.0	Sherwood Pt.	10/30/2007	3	dry		
158-12.0	Sherwood Pt.	12/5/2007	5	wet		
158-12.0	Sherwood Pt.	2/4/2008	1	dry	2	NA
158-12.0	Sherwood Pt.	4/30/2008	1	wet		
158-12.0	Sherwood Pt.	8/5/2008	5	dry		
158-12.0	Sherwood Pt.	9/10/2008	1	wet		
158-12.0	Sherwood Pt.	12/16/2008	4	wet		
158-12.0	Sherwood Pt.	12/23/2008	1	wet		
158-12.0	Sherwood Pt.	4/2/2009	1	dry	3	NA
158-12.0	Sherwood Pt.	4/22/2009	4	wet		
158-12.0	Sherwood Pt.	6/10/2009	81	wet		
158-12.0	Sherwood Pt.	6/23/2009	3	wet		
158-12.0	Sherwood Pt.	6/29/2009	2	dry		
158-12.0	Sherwood Pt.	7/27/2009	1	dry		
158-12.0	Sherwood Pt.	8/3/2009	3	wet		
158-12.0	Sherwood Pt.	8/26/2009	1	dry		
158-12.0	Sherwood Pt.	8/31/2009	1	wet		
158-12.0	Sherwood Pt.	10/29/2009	9	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.0	Sherwood Pt.	3/2/2010	1	wet	3	10
158-12.0	Sherwood Pt.	3/17/2010	1	wet		
158-12.0	Sherwood Pt.	3/25/2010	1	wet		
158-12.0	Sherwood Pt.	5/4/2010	6	wet		
158-12.0	Sherwood Pt.	5/19/2010	3	wet		
158-12.0	Sherwood Pt.	6/23/2010	32	wet		
158-12.0	Sherwood Pt.	8/17/2010	1	wet		
158-12.0	Sherwood Pt.	8/26/2010	41	dry		
158-12.0	Sherwood Pt.	9/16/2010	1	wet		
158-12.0	Sherwood Pt.	10/16/2010	4	wet		
158-12.0	Sherwood Pt.	3/14/2011	1	dry	1	NA
158-12.0	Sherwood Pt.	4/27/2011	3	dry		
158-12.0	Sherwood Pt.	6/27/2011	1	dry		
158-12.2	S. Burial Hill Creek	4/24/2000	51	wet	**14* (0%)**	19
158-12.2	S. Burial Hill Creek	6/20/2000	6	wet		
158-12.2	S. Burial Hill Creek	7/18/2000	11	dry		
158-12.2	S. Burial Hill Creek	7/19/2000	8	dry		
158-12.2	S. Burial Hill Creek	8/15/2000	8	wet		
158-12.2	S. Burial Hill Creek	9/19/2000	51	wet		
158-12.2	S. Burial Hill Creek	11/13/2000	8	wet		
158-12.2	S. Burial Hill Creek	4/2/2001	22	wet	7	10
158-12.2	S. Burial Hill Creek	5/30/2001	36	dry		
158-12.2	S. Burial Hill Creek	6/18/2001	11	wet		
158-12.2	S. Burial Hill Creek	8/13/2001	2	wet		
158-12.2	S. Burial Hill Creek	8/16/2001	2	dry		
158-12.2	S. Burial Hill Creek	5/22/2002	4	dry	3	NA
158-12.2	S. Burial Hill Creek	6/11/2002	6	wet		
158-12.2	S. Burial Hill Creek	6/17/2002	2	dry		
158-12.2	S. Burial Hill Creek	7/1/2002	2	dry		
158-12.2	S. Burial Hill Creek	9/4/2002	6	wet		
158-12.2	S. Burial Hill Creek	9/30/2002	2	dry		
158-12.2	S. Burial Hill Creek	10/28/2002	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/ Dry	Geo Mean	Reduction of Exceeding Samples
158-12.2	S. Burial Hill Creek	4/29/2003	2	dry	2	NA
158-12.2	S. Burial Hill Creek	8/6/2003	4	wet		
158-12.2	S. Burial Hill Creek	8/19/2003	2	wet		
158-12.2	S. Burial Hill Creek	4/27/2004	2	wet	8	10
158-12.2	S. Burial Hill Creek	7/15/2004	28	wet		
158-12.2	S. Burial Hill Creek	8/9/2004	2	dry		
158-12.2	S. Burial Hill Creek	8/23/2004	50	wet		
158-12.2	S. Burial Hill Creek	9/21/2004	11	wet		
158-12.2	S. Burial Hill Creek	8/15/2005	81	wet	NA	90
158-12.2	S. Burial Hill Creek	7/17/2006	1	dry	2	NA
158-12.2	S. Burial Hill Creek	8/31/2006	29	wet		
158-12.2	S. Burial Hill Creek	9/5/2006	1	wet		
158-12.2	S. Burial Hill Creek	9/6/2006	1	dry		
158-12.2	S. Burial Hill Creek	10/16/2006	1	dry		
158-12.2	S. Burial Hill Creek	10/31/2006	1	wet		
158-12.2	S. Burial Hill Creek	11/27/2006	11	dry		
158-12.2	S. Burial Hill Creek	6/7/2007	1	wet	3	NA
158-12.2	S. Burial Hill Creek	6/18/2007	15	wet		
158-12.2	S. Burial Hill Creek	6/20/2007	3	dry		
158-12.2	S. Burial Hill Creek	7/9/2007	6	dry		
158-12.2	S. Burial Hill Creek	7/24/2007	3	wet		
158-12.2	S. Burial Hill Creek	8/8/2007	1	wet		
158-12.2	S. Burial Hill Creek	9/13/2007	1	wet		
158-12.2	S. Burial Hill Creek	10/30/2007	2	dry		
158-12.2	S. Burial Hill Creek	12/5/2007	4	wet		
158-12.2	S. Burial Hill Creek	2/4/2008	1	dry	5	7
158-12.2	S. Burial Hill Creek	4/30/2008	1	wet		
158-12.2	S. Burial Hill Creek	8/5/2008	2	dry		
158-12.2	S. Burial Hill Creek	9/10/2008	15	wet		
158-12.2	S. Burial Hill Creek	12/16/2008	78	wet		
158-12.2	S. Burial Hill Creek	12/23/2008	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.2	S. Burial Hill Creek	4/2/2009	1	dry	4	12
158-12.2	S. Burial Hill Creek	4/22/2009	1	wet		
158-12.2	S. Burial Hill Creek	6/10/2009	81	wet		
158-12.2	S. Burial Hill Creek	6/23/2009	1	wet		
158-12.2	S. Burial Hill Creek	6/29/2009	10	dry		
158-12.2	S. Burial Hill Creek	7/27/2009	43	dry		
158-12.2	S. Burial Hill Creek	8/3/2009	3	wet		
158-12.2	S. Burial Hill Creek	8/26/2009	1	dry		
158-12.2	S. Burial Hill Creek	8/31/2009	3	wet		
158-12.2	S. Burial Hill Creek	10/29/2009	9	wet		
158-12.2	S. Burial Hill Creek	3/2/2010	1	wet	3	NA
158-12.2	S. Burial Hill Creek	3/17/2010	1	wet		
158-12.2	S. Burial Hill Creek	3/25/2010	1	wet		
158-12.2	S. Burial Hill Creek	5/4/2010	20	wet		
158-12.2	S. Burial Hill Creek	5/19/2010	6	wet		
158-12.2	S. Burial Hill Creek	6/23/2010	12	wet		
158-12.2	S. Burial Hill Creek	8/17/2010	1	wet		
158-12.2	S. Burial Hill Creek	8/26/2010	7	dry		
158-12.2	S. Burial Hill Creek	9/16/2010	1	wet		
158-12.2	S. Burial Hill Creek	10/16/2010	3	wet		
158-12.2	S. Burial Hill Creek	4/27/2011	4	dry	2	NA
158-12.2	S. Burial Hill Creek	6/27/2011	1	dry		
158-12.4	S. Burial Hill Beach	4/24/2000	2	wet	5	4
158-12.4	S. Burial Hill Beach	6/20/2000	2	wet		
158-12.4	S. Burial Hill Beach	7/18/2000	50	dry		
158-12.4	S. Burial Hill Beach	7/19/2000	4	dry		
158-12.4	S. Burial Hill Beach	8/15/2000	14	wet		
158-12.4	S. Burial Hill Beach	9/19/2000	2	wet		
158-12.4	S. Burial Hill Beach	11/13/2000	6	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.4	S. Burial Hill Beach	4/2/2001	22	wet	6	10
158-12.4	S. Burial Hill Beach	5/30/2001	2	dry		
158-12.4	S. Burial Hill Beach	6/18/2001	51	wet		
158-12.4	S. Burial Hill Beach	8/13/2001	2	wet		
158-12.4	S. Burial Hill Beach	8/16/2001	2	dry		
158-12.4	S. Burial Hill Beach	5/22/2002	2	dry	5	4
158-12.4	S. Burial Hill Beach	6/11/2002	11	wet		
158-12.4	S. Burial Hill Beach	6/17/2002	6	dry		
158-12.4	S. Burial Hill Beach	7/1/2002	2	dry		
158-12.4	S. Burial Hill Beach	9/4/2002	51	wet		
158-12.4	S. Burial Hill Beach	9/30/2002	2	dry		
158-12.4	S. Burial Hill Beach	10/28/2002	4	wet		
158-12.4	S. Burial Hill Beach	4/29/2003	2	dry	10	23
158-12.4	S. Burial Hill Beach	8/6/2003	50	wet		
158-12.4	S. Burial Hill Beach	8/19/2003	14	wet		
158-12.4	S. Burial Hill Beach	4/27/2004	51	wet	12	23
158-12.4	S. Burial Hill Beach	8/9/2004	2	dry		
158-12.4	S. Burial Hill Beach	8/23/2004	22	wet		
158-12.4	S. Burial Hill Beach	7/17/2006	1	dry	5	10
158-12.4	S. Burial Hill Beach	9/6/2006	27	dry		
158-12.4	S. Burial Hill Beach	10/16/2006	1	dry		
158-12.4	S. Burial Hill Beach	10/31/2006	31	wet		
158-12.4	S. Burial Hill Beach	11/27/2006	5	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.4	S. Burial Hill Beach	3/5/2007	3	wet	3	1
158-12.4	S. Burial Hill Beach	6/7/2007	1	wet		
158-12.4	S. Burial Hill Beach	6/18/2007	10	wet		
158-12.4	S. Burial Hill Beach	6/20/2007	1	dry		
158-12.4	S. Burial Hill Beach	7/9/2007	2	dry		
158-12.4	S. Burial Hill Beach	7/24/2007	6	wet		
158-12.4	S. Burial Hill Beach	8/8/2007	41†	wet		
158-12.4	S. Burial Hill Beach	9/13/2007	1	wet		
158-12.4	S. Burial Hill Beach	12/5/2007	1	wet		
158-12.4	S. Burial Hill Beach	2/4/2008	6	dry	4	NA
158-12.4	S. Burial Hill Beach	9/10/2008	2	wet		
158-12.4	S. Burial Hill Beach	9/16/2008	3	wet		
158-12.4	S. Burial Hill Beach	12/16/2008	4	wet		
158-12.4	S. Burial Hill Beach	12/23/2008	7	wet		
158-12.4	S. Burial Hill Beach	4/2/2009	3	dry	4	NA
158-12.4	S. Burial Hill Beach	4/22/2009	3	wet		
158-12.4	S. Burial Hill Beach	6/10/2009	77	wet		
158-12.4	S. Burial Hill Beach	6/29/2009	4	dry		
158-12.4	S. Burial Hill Beach	7/27/2009	22	dry		
158-12.4	S. Burial Hill Beach	8/3/2009	2	wet		
158-12.4	S. Burial Hill Beach	8/26/2009	1	dry		
158-12.4	S. Burial Hill Beach	8/31/2009	1	wet		
158-12.4	S. Burial Hill Beach	9/15/2009	1	dry		
158-12.4	S. Burial Hill Beach	10/29/2009	4	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.4	S. Burial Hill Beach	3/2/2010	1	wet	2	1
158-12.4	S. Burial Hill Beach	3/17/2010	1	wet		
158-12.4	S. Burial Hill Beach	3/25/2010	1	wet		
158-12.4	S. Burial Hill Beach	5/4/2010	31	wet		
158-12.4	S. Burial Hill Beach	5/19/2010	3	wet		
158-12.4	S. Burial Hill Beach	8/17/2010	1	wet		
158-12.4	S. Burial Hill Beach	8/26/2010	1	dry		
158-12.4	S. Burial Hill Beach	10/16/2010	1	wet		
158-12.4	S. Burial Hill Beach	12/13/2010	20	wet		
158-12.4	S. Burial Hill Beach	4/19/2011	1	wet	1	NA
158-12.4	S. Burial Hill Beach	5/26/2011	1	wet		
158-12.4	S. Burial Hill Beach	6/20/2011	1	wet		
158-12.4	S. Burial Hill Beach	6/27/2011	1	dry		
158-12.4	S. Burial Hill Beach	7/20/2011	7[†]	wet		
158-12.5	S. Sherwood Island Park	4/2/2001	14	wet	6	NA
158-12.5	S. Sherwood Island Park	5/30/2001	22	dry		
158-12.5	S. Sherwood Island Park	6/18/2001	6	wet		
158-12.5	S. Sherwood Island Park	8/13/2001	2	wet		
158-12.5	S. Sherwood Island Park	8/16/2001	6	dry		
158-12.5	S. Sherwood Island Park	9/24/2001	2	wet		
158-12.5	S. Sherwood Island Park	5/22/2002	2	dry	4	NA
158-12.5	S. Sherwood Island Park	6/11/2002	6	wet		
158-12.5	S. Sherwood Island Park	6/17/2002	4	dry		
158-12.5	S. Sherwood Island Park	7/1/2002	2	dry		
158-12.5	S. Sherwood Island Park	9/4/2002	14	wet		
158-12.5	S. Sherwood Island Park	9/30/2002	2	dry		
158-12.5	S. Sherwood Island Park	10/28/2002	6	wet		
158-12.5	S. Sherwood Island Park	4/29/2003	2	dry	2	NA
158-12.5	S. Sherwood Island Park	8/6/2003	4	wet		
158-12.5	S. Sherwood Island Park	8/19/2003	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.5	S. Sherwood Island Park	4/27/2004	2	wet	4	NA
158-12.5	S. Sherwood Island Park	7/15/2004	6	wet		
158-12.5	S. Sherwood Island Park	8/9/2004	2	dry		
158-12.5	S. Sherwood Island Park	9/21/2004	18	wet		
158-12.5	S. Sherwood Island Park	8/15/2005	44	wet	NA	90
158-12.5	S. Sherwood Island Park	7/17/2006	1	dry	1	NA
158-12.5	S. Sherwood Island Park	9/5/2006	2	wet		
158-12.5	S. Sherwood Island Park	9/6/2006	1	dry		
158-12.5	S. Sherwood Island Park	10/16/2006	1	dry		
158-12.5	S. Sherwood Island Park	10/31/2006	2	wet		
158-12.5	S. Sherwood Island Park	11/27/2006	2	dry		
158-12.5	S. Sherwood Island Park	5/1/2007	1	wet	2	NA
158-12.5	S. Sherwood Island Park	6/5/2007	67	wet		
158-12.5	S. Sherwood Island Park	6/7/2007	1	wet		
158-12.5	S. Sherwood Island Park	6/18/2007	11	wet		
158-12.5	S. Sherwood Island Park	6/20/2007	1	dry		
158-12.5	S. Sherwood Island Park	7/24/2007	1	wet		
158-12.5	S. Sherwood Island Park	8/8/2007	1	wet		
158-12.5	S. Sherwood Island Park	9/13/2007	1	wet		
158-12.5	S. Sherwood Island Park	10/15/2007	3	wet		
158-12.5	S. Sherwood Island Park	10/22/2007	2	wet		
158-12.5	S. Sherwood Island Park	10/30/2007	2	dry		
158-12.5	S. Sherwood Island Park	12/5/2007	1	wet		
158-12.5	S. Sherwood Island Park	2/4/2008	1	dry	3	7
158-12.5	S. Sherwood Island Park	4/30/2008	1	wet		
158-12.5	S. Sherwood Island Park	8/5/2008	1	dry		
158-12.5	S. Sherwood Island Park	9/10/2008	5	wet		
158-12.5	S. Sherwood Island Park	12/16/2008	50	wet		
158-12.5	S. Sherwood Island Park	12/23/2008	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.5	S. Sherwood Island Park	4/2/2009	1	dry	3	NA
158-12.5	S. Sherwood Island Park	4/22/2009	3	wet		
158-12.5	S. Sherwood Island Park	6/10/2009	81	wet		
158-12.5	S. Sherwood Island Park	6/23/2009	1	wet		
158-12.5	S. Sherwood Island Park	6/29/2009	2	dry		
158-12.5	S. Sherwood Island Park	7/27/2009	1	dry		
158-12.5	S. Sherwood Island Park	8/3/2009	2	wet		
158-12.5	S. Sherwood Island Park	8/26/2009	1	dry		
158-12.5	S. Sherwood Island Park	8/31/2009	1	wet		
158-12.5	S. Sherwood Island Park	10/29/2009	11	wet		
158-12.5	S. Sherwood Island Park	3/2/2010	1	wet	3	NA
158-12.5	S. Sherwood Island Park	3/17/2010	1	wet		
158-12.5	S. Sherwood Island Park	3/25/2010	1[†]	wet		
158-12.5	S. Sherwood Island Park	5/4/2010	6	wet		
158-12.5	S. Sherwood Island Park	5/19/2010	16	wet		
158-12.5	S. Sherwood Island Park	6/23/2010	27	wet		
158-12.5	S. Sherwood Island Park	8/17/2010	1	wet		
158-12.5	S. Sherwood Island Park	8/26/2010	67	dry		
158-12.5	S. Sherwood Island Park	9/16/2010	1	wet		
158-12.5	S. Sherwood Island Park	10/16/2010	1	wet		
158-12.6	S. Burial Hill Beach	4/2/2001	11	wet	5	7
158-12.6	S. Burial Hill Beach	5/30/2001	2	dry		
158-12.6	S. Burial Hill Beach	6/18/2001	51	wet		
158-12.6	S. Burial Hill Beach	8/13/2001	4	wet		
158-12.6	S. Burial Hill Beach	8/16/2001	2	dry		
158-12.6	S. Burial Hill Beach	9/24/2001	2	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.6	S. Burial Hill Beach	5/22/2002	2	dry	3	4
158-12.6	S. Burial Hill Beach	6/11/2002	2	wet		
158-12.6	S. Burial Hill Beach	6/17/2002	4	dry		
158-12.6	S. Burial Hill Beach	7/1/2002	4	dry		
158-12.6	S. Burial Hill Beach	9/4/2002	51	wet		
158-12.6	S. Burial Hill Beach	9/30/2002	2	dry		
158-12.6	S. Burial Hill Beach	10/28/2002	2	wet		
158-12.6	S. Burial Hill Beach	4/29/2003	2	dry	3	NA
158-12.6	S. Burial Hill Beach	8/6/2003	4	wet		
158-12.6	S. Burial Hill Beach	8/19/2003	4	wet		
158-12.6	S. Burial Hill Beach	10/2/2003	4	dry		
158-12.6	S. Burial Hill Beach	4/27/2004	2	wet	3	NA
158-12.6	S. Burial Hill Beach	7/15/2004	2	wet		
158-12.6	S. Burial Hill Beach	8/9/2004	2	dry		
158-12.6	S. Burial Hill Beach	9/21/2004	28	wet		
158-12.6	S. Burial Hill Beach	8/15/2005	81	wet	NA	90
158-12.6	S. Burial Hill Beach	7/17/2006	1	dry	2	NA
158-12.6	S. Burial Hill Beach	9/5/2006	1	wet		
158-12.6	S. Burial Hill Beach	9/6/2006	1	dry		
158-12.6	S. Burial Hill Beach	10/16/2006	1	dry		
158-12.6	S. Burial Hill Beach	10/31/2006	1	wet		
158-12.6	S. Burial Hill Beach	11/27/2006	13	dry		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.6	S. Burial Hill Beach	5/1/2007	1	wet	2	NA
158-12.6	S. Burial Hill Beach	6/5/2007	81	wet		
158-12.6	S. Burial Hill Beach	6/7/2007	3	wet		
158-12.6	S. Burial Hill Beach	6/18/2007	10	wet		
158-12.6	S. Burial Hill Beach	6/20/2007	1	dry		
158-12.6	S. Burial Hill Beach	7/24/2007	9	wet		
158-12.6	S. Burial Hill Beach	8/8/2007	1	wet		
158-12.6	S. Burial Hill Beach	9/13/2007	1	wet		
158-12.6	S. Burial Hill Beach	10/15/2007	1	wet		
158-12.6	S. Burial Hill Beach	10/22/2007	1	wet		
158-12.6	S. Burial Hill Beach	10/30/2007	1	dry		
158-12.6	S. Burial Hill Beach	12/5/2007	1	wet		
158-12.6	S. Burial Hill Beach	4/30/2008	3	wet	2	NA
158-12.6	S. Burial Hill Beach	8/5/2008	1	dry		
158-12.6	S. Burial Hill Beach	9/10/2008	4	wet		
158-12.6	S. Burial Hill Beach	12/16/2008	4	wet		
158-12.6	S. Burial Hill Beach	12/23/2008	1	wet		
158-12.6	S. Burial Hill Beach	4/2/2009	1	dry	2	NA
158-12.6	S. Burial Hill Beach	4/22/2009	1	wet		
158-12.6	S. Burial Hill Beach	6/10/2009	81	wet		
158-12.6	S. Burial Hill Beach	6/23/2009	3	wet		
158-12.6	S. Burial Hill Beach	6/29/2009	2	dry		
158-12.6	S. Burial Hill Beach	7/27/2009	1	dry		
158-12.6	S. Burial Hill Beach	8/3/2009	2	wet		
158-12.6	S. Burial Hill Beach	8/26/2009	1	dry		
158-12.6	S. Burial Hill Beach	8/31/2009	1	wet		
158-12.6	S. Burial Hill Beach	10/29/2009	3	wet		

Single sample fecal coliform data (colonies/100 mL) from all monitoring stations on Segment 9: LIS WB Midshore – Sherwood Point (CT-W3_006) with annual geometric means and reduction goals for samples

Station Name	Station Location	Date	Result	Wet/Dry	Geo Mean	Reduction of Exceeding Samples
158-12.6	S. Burial Hill Beach	3/2/2010	1	wet	3	NA
158-12.6	S. Burial Hill Beach	3/17/2010	1	wet		
158-12.6	S. Burial Hill Beach	3/25/2010	1	wet		
158-12.6	S. Burial Hill Beach	5/4/2010	27	wet		
158-12.6	S. Burial Hill Beach	5/19/2010	5	wet		
158-12.6	S. Burial Hill Beach	6/23/2010	17	wet		
158-12.6	S. Burial Hill Beach	8/17/2010	1	wet		
158-12.6	S. Burial Hill Beach	8/26/2010	6	dry		
158-12.6	S. Burial Hill Beach	9/16/2010	1	wet		
158-12.6	S. Burial Hill Beach	10/16/2010	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 9: LIS WB Midshore – Sherwood Point (CT-W3_006)

Station	Station Location	Years Sampled	Number of	Geometric

Name			Samples		Mean		
			Wet	Dry	All	Wet	Dry
158-02.3	S. Cockenoe Island N"2"	2000-2011	50	31	3	3	2
158-07.0	between Cedar Pt. and NE Cockenoe Island	2000-2004, 2006-2011	41	21	4	5	2
158-07.1	between NE Cockenoe Island and Sherwood Pt.	2000-2011	53	30	4	5	3
158-08.1	G"5"	2007-2011	26	9	6	8	3
158-10.1	S. Compo Mill Cove	2000-2004, 2006-2011	40	22	3	3	3
158-11.0	Compo Mill Cove	2000-2004, 2006-2011	44	28	5	7	3
158-12.0	Sherwood Pt.	2000-2011	54	27	3	4	2
158-12.2	S. Burial Hill Creek	2000-2011	46	26	4	5	3
158-12.4	S. Burial Hill Beach	2000-2004, 2006-2011	46	24	4	5	3
158-12.5	S. Sherwood Island Park	2001-2004, 2006-2010	45	21	3	3	2
158-12.6	S. Burial Hill Beach	2001-2010	44	21	3	3	2
Shaded cells indicate an exceedance of water quality criteria							

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