



Oyster Bay/Huntington Bay Watershed (0203020102)

Water Index Number

(MW5.1a) LIS (portion 3c)
 (MW5.1b) LIS-42,43
 (MW5.1c) LIS-OBH
 (MW5.1c) LIS-OBH-47-P156
 (MW5.1c) LIS-OBH-MNC
 (MW5.1c) LIS-OBH-MNC-44 thru 48
 (MW5.1c) LIS-OBH-MNC-45-P150a
 (MW5.1c) LIS-OBH-MNC-45-P152,P153
 (MW5.1d) LIS-CSH
 (MW5.1d) LIS-CSH-49 thru 52
 (MW5.2a) LIS-HB
 (MW5.2a) LIS-HB..55 thru 57
 (MW5.2a) LIS-HB-HH
 (MW5.2a) LIS-HB-LH
 (MW5.2a) LIS-HB-NB
 (MW5.2a) LIS-HB-NB-CH
 (MW5.2a) LIS-HB-NB-CH-P240
 (MW5.2a) LIS-HB-NB-DIH
 (MW5.2a) LIS-HB-NB-NH
 (MW5.2b) LIS- 58-P269

Waterbody Segment

Long Island Sound, Nassau/Suffolk (1702-0270)
 Minor Tribs to Long Island Sound (1702-0150)
 Oyster Bay Harbor (1702-0016)
 Mill Pond (1702-0155)
 Mill Neck Creek and tidal tribs (1702-0151)
 Tribs (fresh) to Oyster Bay/Mill Neck Cr (1702-0153)
 Beaver Lake (1702-0152)
 Lower/Upper Francis Ponds (1702-0154)
 Cold Spring Harbor, and tidal tribs (1702-0018)
 Tribs (fresh) to Cold Spring Harbor (1702-0156)
 Huntington Bay (1702-0014)
 Tribs (fresh) to Huntington Bay (1702-0231)
 Huntington Harbor (1702-0228)
 Lloyd Harbor (1702-0227)
 Northport Bay (1702-0256)
 Centerport Harbor (1702-0229)
 Mill Pond (1702-0261)
 Duck Island Harbor (1702-0262)
 Northport Harbor (1702-0230)
 Eatons Neck Pond (1702-0271)

Category

Impaired
 Minor Impacts
 Impaired
 Minor Impacts
 Impaired
 No Known Impacts
 Impaired
 Unassessed
 Impaired
 Minor Impacts
 Minor Impacts
 Unassessed
 Impaired
 Impaired
 Minor Impacts
 Impaired
 Unassessed
 Minor Impacts
 Impaired
 No Known Impacts

Long Island Sound, Nassau/Suffolk (1702-0270)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.1a) LIS (portion 3c) **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SA Long Island Sound
Water Type/Size: Estuary Waters 27950.6 Acres **Reg/County:** 1/Nassau (30)
Description: Sound fr Matinecock Point to Eatons Neck Point

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Stressed	Known
Public Bathing	Stressed	Known
Recreation	Stressed	Known
Aquatic Life	Impaired	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Good	
Aesthetics	Good	

Type of Pollutant(s)

Known: NUTRIENTS (nitrogen), LOW D.O./OXYGEN DEMAND, Pathogens
Suspected: Priority Organics (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: MUNICIPAL DISCHARGES, CSOs, URBAN/STORM RUNOFF
Suspected: Other Source (migratory species)
Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

This portion of Long Island Sound is assessed as impaired due to aquatic life that is know to be impaired by nutrients and resulting low dissolved oxygen. Shellfishing and public bathing and recreational uses are also thought to be stressed by pathogens. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

This portion of Long Island Sound is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be supported, but stressed in these waters. Much of this waterbody (included within Shellfish Growing Area #34) has been certified as safe for the taking of shellfish for use as food. A

small area of waters on the western edge of this segment is designated as uncertified. Because this area represents less than 5% of the total area, the waterbody is considered to be supporting of shellfishing use. These shellfishing designations are based on results of water quality monitoring and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria. Certified/uncertified shellfish area designations are revised regularly; for detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2010)

Recreational use including public bathing is considered to experience minor impacts based on monitoring and occasional beach closures at beaches in the segment. Beach monitoring revealed elevated bacteriological levels that occurred in generally less than ten percent of the samples collected at these beaches; these results resulted in occasional but infrequent (less than 10 days) beach closures at some beaches in most years. Occasional beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches within this reach include Prybil Beach, Lattington Beach, Piping Rock Beach, Stehli Beach, Ransom Beach, Soundside Beach, Centre Island Sound Beach. (NYSDOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Aquatic life in the waterbody is considered to be impaired due to periodic low dissolved oxygen (hypoxia), the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. Atmospheric deposition is also contributes nitrogen to the Sound. The resulting low dissolved oxygen conditions have caused crustacean kills and limits the fishery in this passageway for diadromous fish. (DEC/DOW and FWMR, Region 1, August 2010)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Municipal wastewater discharges, urban storm runoff and other nonpoint sources including atmospheric deposition, and tidal exchange with western Long Island Sound and Connecticut waters are sources of the nutrients. Urban and storm runoff are the primary sources of pathogens, although inadequate onsite wastewater treatment and various other sources such as boat discharges, waterfowl may also contribute. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called

for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

This portion of Long Island Sound is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although it is assessed as an impaired water, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Long Island Nitrogen TMDL. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes all the waters of Long Island Sound within eastern Nassau and western Suffolk Counties, east of a line due north of Matinecock Point and west of a line due north of Eatons Neck Point, and excluding Cold Spring Harbor, Osyter Bay Harbor and Huntington Bay which are listed separately.

Minor Tribs to Long Island Sound (1702-0150)

Minor Impacts

Waterbody Location Information

Revised: 02/13/2016

Water Index No: (MW4.3b) LIS-42,43 **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SC Long Island Sound
Water Type/Size: Estuary Waters 19.2 Acres **Reg/County:** 1/Nassau (30)
Description: total area of selected tidal tribs to sound

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Suspected
Aquatic Life	Fully Supported	Unconfirmed
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: On-Site/Septic Syst, Other Source (boat pollution)
Unconfirmed: - - -

Management Information

Management Status: Verification of Sources Needed
Lead Agency/Office: DOW/Reg1
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

This Long Island Tribs waterbody is assessed as having minor impacts due to recreational uses that are thought to be stressed by pathogens. Some of these waters are designated as uncertified for shellfishing due to pathogens, although this waterbody is not designated for support of shellfishing use. The shellfishing restrictions suggest that recreational uses could be impacted but the pathogen criteria for shellfishing use are more stringent than for recreation and additional monitoring to evaluate recreational use support is recommended.

Use Assessment

This Long Island Tribs waterbody is a Class SC waterbody, suitable for general recreation use, and support of aquatic life, but not for shellfishing or for public bathing.

Recreational use including public bathing is thought to be stressed based on shellfishing certification monitoring. There are no regularly monitored beaches in this waterbody, but bacteriological sampling conducted through the shellfishing monitoring program indicate elevated pathogen levels. However criteria for shellfishing are lower than those for recreation and additional bacteriological sampling is needed to more fully evaluate recreational use. Restrictions on shellfishing represent an impact to recreational use. (DEC/DFWMR, July 2014)

Based on other available indicators for other related uses, this waterbody is expected to support an adequate marine water fishery. Low dissolved oxygen in the embayments of Long Island Sound are a concern, although no specific fishery or biological reports are included in this assessment.

A portion of this waterbody, Frost Creek (-42), (included within Shellfish Growing Area #35) has been designated as uncertified for the taking of shellfish for use as food. Although these portions of this waterbody are monitored through the shellfish program and designated as uncertified, its Class SC designation does not include shellfishing as an appropriate use and this assessment does not include an evaluation for the support of shellfishing use. (DEC/DFWMR, Region 1, July 2015)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban and storm runoff are the primary sources of pathogens, although inadequate onsite wastewater treatment and various other sources such as boat discharges, waterfowl may also contribute. Municipal wastewater discharges, urban storm runoff and other nonpoint sources including atmospheric deposition, and tidal exchange with western Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

No specific management actions have been identified for the waterbody.

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

This Long Island Tribs waterbody is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL

Waters. There appear to be no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes Frost Creek (-42) and East Over Creek (-43). These tribs are designated class SC.

Oyster Bay Harbor (1702-0016)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW4.4a) LIS-OBH **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SA Long Island Sound
Water Type/Size: Estuary Waters 2449.1 Acres **Reg/County:** 1/Nassau (30)
Description: entire bay

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Impaired	Known
Recreation	Impaired	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
Suspected: Priority Organics (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: MUNICIPAL DISCHARGES (Oyster Bay SD), URBAN/STORM RUNOFF
Suspected: Other Source (migratory species), ONSITE/SEPTIC SYSTEMS
Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Oyster Bay Harbor is assessed as impaired due to shellfishing, public bathing and recreational uses that are known to be impaired by pathogens, and aquatic life that is known to be stressed by nutrients and resulting low dissolved oxygen. Shellfishing, public bathing and recreational uses are restricted by periodic beach advisories/closures. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Oyster Bay Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. Much of this waterbody (included within Shellfish Growing Area #47) has been designated uncertified or only seasonally certified for the taking of shellfish for use as food. About 18% of the Bay is closed year-round and an additional 20% is subject to seasonal or holiday closures. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2015)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is considered to be stressed based on monitoring and advisories/closures of beaches in the Harbor. Beach monitoring revealed elevated bacteriological levels that occur in more than ten percent of the samples collected at these beaches, and result in beach advisories/closures for more than 10 days in some years. Other beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches that have been affected include Theodore Roosevelt Beach, West Harbor Beach and Center Island Beach. (NYSDOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff, municipal wastewater discharges and residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following and initial

freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Friends of the Bay is a non-profit environmental organization formed in 1987 to preserve, protect and restore the ecological integrity and productivity of the Oyster Bay/Cold Spring Harbor Estuary and the surrounding watershed. The organizations efforts include water quality protection, watershed wetlands conservation, land use planning, research, education, community action and advocacy. (Friends of the Bay, 2010)

A vessel waste No Discharge Zone was established for the waters of the Oyster Bay/Cold Spring Harbor Complex in 2008.

Section 303(d) Listing

Oyster Bay Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although the Harbor is assessed as impaired due to pathogens, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Oyster Bay/Mill Neck Creek TMDL for pathogens in 2003. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes tidal waters west of line from Plum Point to Cove Point and east of Bayville Bridge, which excludes Mill Neck Creek which is listed separately.

Mill Pond (1702-0155)

Minor Impacts

Waterbody Location Information

Revised: 4/8/2011

Water Index No:	(MW4.4a) LIS-OBH-47-P156	Drain Basin:	Atlantic-Long Island Sound
Unit Code:	0203020102	Class:	C(T)
Water Type/Size:	Lake/Reservoir		7.3 Acres
Description:	entire lake		Reg/County: 1/Nassau (30)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Suspected
Aquatic Life	Fully Supported	Suspected
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Fair	
Aesthetics	Fair	

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
 Suspected: SILT/SEDIMENT, Algal/Plant Growth
 Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
 Suspected: URBAN/STORM RUNOFF
 Unconfirmed: - - -

Management Information

Management Status: Restoration/Protection Strategy Needed
Lead Agency/Office: ext/WQCC
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Mill Pond is assessed as having minor impacts due to recreational uses that thought to be stressed by nutrients and silt/sedimentation from urban/storm runoff and other nonpoint sources.

Use Assessment

Mill Pond is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing. The waterbody is also designated as a cold water (trout) fishery.

Recreational uses and public bathing are considered to be supported but stressed due to elevated nutrients (phosphorus), excessive algae, poor water clarity. The pond has been used as a stormwater retention basin and now suffers from

siltation.

This waterbody is reported to support a suitable cold water fishery, although no specific fishery or biological reports are included in this assessment. Trout (brown and rainbow) are stocked in the spring and the fall, and the lake also supports a healthy population of small sized largemouth bass in the lake. A few carp are present, and bullhead grow to about 15 inches. A fisheries survey was conducted in 1993. (DEC/DOW, BWAM/LMAS and DEC/FWMR, Region 1 Fisheries, March 2011)

Water Quality Information

Water quality sampling of Mill Pond was conducted through the NYSDEC Lake Classification and Inventory (LCI) Program in 2004. Results of this sampling indicate the lake is best characterized as eutrophic, or highly productive. However chlorophyll/algal levels occasionally exceed criteria corresponding to impacted recreational uses, while phosphorus concentrations are typically quite high. Lake clarity measurements indicate water transparency does not typically meet the recommended minimum criteria for swimming beaches. These data indicate that the lake may be susceptible to algal blooms, although both water clarity and algae levels may be limited by turbidity from suspended sediment, as commonly occurs in shallow ponds. The depth profile is typical of shallow lakes, with fully oxygenated conditions to the lake bottom (depth < 2 meters). The lake has hard water and alkaline conditions. Readings of pH typically fall within the range established in state water quality standards for protection of aquatic life. (DEC/DOW, BWAM/LMAS, May 2011)

Source Assessment

Based on surrounding land use and other knowledge of the waterbody, urban/storm runoff and other nonpoint sources are the most likely sources of impacts to the waterbody. The pond is located on a United States Fish and Wildlife Preserve, and is one of the few public freshwater fishing spots on the north shore of Nassau County.

Management Actions

No specific management actions have been identified for the waterbody. The pond is located on a United States Fish and Wildlife Preserve. Trout are stocked in the lake during the spring and fall. (DEC/DOW, BWAM/LMAS and DEC/FWMR, Region 1 Fisheries, March 2011)

Section 303(d) Listing

Mill Pond is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There appear to be no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes the total area of the entire pond.

Mill Neck Creek and tidal tribs (1702-0151)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No:	(MW4.4a) LIS-OBH-MNC	Drain Basin:	Atlantic-Long Island Sound	
Unit Code:	0203020102	Class:	SA	
Water Type/Size:	Estuary Waters		292.6 Acres	
Description:	entire tidal reach and tribs		Reg/County:	1/Nassau (30)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Impaired	Known
Recreation	Impaired	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
 Suspected: Priority Organics (PCBs)
 Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, ONSITE/SEPTIC SYSTEMS
 Suspected: Other Source (migratory species), Municipal Discharges
 Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Mill Neck Creek is assessed as impaired due to shellfishing, public bathing and recreational uses that are known to be impaired by pathogens, and aquatic life that is known to be stressed by nutrients and resulting low dissolved oxygen. Shellfishing, public bathing and recreational uses are restricted by shellfishing restrictions and periodic beach advisories/closures. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Mill Neck Creek is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support

of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. Much of this waterbody (included within Shellfish Growing Area #47) has been designated uncertified or only seasonally certified for the taking of shellfish for use as food. About 93% of the creek is closed year-round, while the other 7% is subject to a seasonal closure. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2015)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is considered to be stressed based on monitoring and advisories/closures of beaches in the Harbor. Beach monitoring revealed elevated bacteriological levels that occur in more than ten percent of the samples collected at these beaches, and result in beach advisories/closures for more than 10 days in some years. Other beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches in this waterbody include West Harbor Beach and Center Island Beach, which lie just outside this segment in Oyster Bay Harbor. (NYS DOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff, municipal wastewater discharges and residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Friends of the Bay is a non-profit environmental organization formed in 1987 to preserve, protect and restore the ecological integrity and productivity of the Oyster Bay/Cold Spring Harbor Estuary and the surrounding watershed. The organization's efforts include water quality protection, watershed wetlands conservation, land use planning, research, education, community action and advocacy. (Friends of the Bay, 2010)

The Birches treatment facility, a small county owned wastewater treatment facility that had discharged to the creek, received Clean Water/Clean Air Bond Act grant to install a collection system/pump station to convey its wastewater flow to the Glen Cove Wastewater Treatment. As a result the facility no longer discharges wastewater into Mill Neck Creek. (DEC/DOW, Region 1, February 2016).

A vessel waste No Discharge Zone was established for the waters of the Oyster Bay/Cold Spring Harbor Complex in 2008.

Section 303(d) Listing

Mill Neck Creek is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although the Harbor is assessed as impaired due to pathogens, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Oyster Bay/Mill Neck Creek TMDL for pathogens in 2003. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes tidal waters west of the Bayville Bridge, including Oak Neck Creek.

Tribs (fresh) to Oyster Bay/Mill Neck Cr (1702-0153) No Known Impacts

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW4.4a) LIS-OBH-MNC-44 thru 48 **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** C **Reg/County:** Long Island Sound
Water Type/Size: River/Stream 1.6 Miles **Reg/County:** 1/Nassau (30)
Description: total length of selected (freshwater) tribs

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Fully Supported	Suspected
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Management Information

Management Status: Reassessment Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

The Oyster Bay/Mill Neck Creek Tribs segment is assessed as having no known impacts; all evaluated uses are considered to be fully supported.

Use Assessment

This waterbody segment is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is considered to be fully supported based on biological sampling that shows non-impacted conditions. This sampling can also be used to infer that there are no significant impacts to recreational (fishing) uses, although more

specific sampling is necessary to confirm this is the case. (DEC/DOW, BWAM/SBU, December 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of Beaver Brook in Mill Neck (at Frost Mill Road) was conducted as part of the RIBS monitoring effort in 2013 and 2014. The most recent of these sampling results indicated non-impacted conditions and very good water quality. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. The 2013 sampling results, as well as 2008, 2009 results, also reflected good water quality but with conditions in the upper slightly impacted range, approaching non-impacted conditions. Additional sampling to confirm conditions is recommended, but nonetheless the aquatic life community is considered to be fully supported. (DEC/DOW, BWAM/SBU, January 2015)

Previous sampling at this site in 2003 revealed moderately impacted conditions, but this samples was considered to be influenced by poor sampling habitat . Sampling at the site in 1998 found non-impacted water quality conditions. The stream bottom was composed entirely of sand silt, with tree roots and macrophytes providing habitat for invertebrates. Several brown trout were also seen at this site.

A biological assessment of Oyster Bay Creek in Oyster Bay was also conducted in 1998. Sampling results at this site indicated moderately impacted water quality, with the fauna was heavily dominated by worms. However, the stream bottom was composed primarily of sand and gravel, and this likely contributed to the limited fauna. Trout were present at this site, and may actually provide a better indicator of water quality. (DEC/DOW, BWAR/SBU, January 2000)

Source Assessment

There are no apparent sources of pollutants to the waterbody.

Management Action

No specific management actions have been identified or are deemed necessary for the waterbody. Additional sampling to more specifically verify the level of impact in this waterbody segment is recommended, but is not a priority.

Section 303(d) Listing

The Oyster Bay/Mill Neck Creek Tribs segment is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes the total length of all freshwater tribs to Oyster Bay Harbor and Mill Neck Creek, including Beaver Brook (-45), Spring Lake Outlet (-46), Mill River (-47), Tiffany Creek (-48). These tribs are designated class C.

Beaver Lake (1702-0152)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW4.4a) LIS-OBH-MNC-45-P150a **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** C **Reg/County:** Long Island Sound
Water Type/Size: Lake/Reservoir 63.6 Acres **Reg/County:** 1/Nassau (30)
Description: entire lake

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Impaired	Known
Aquatic Life	Stressed	Suspected
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Fair	

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), ALGAL/PLANT GROWTH (native)
Suspected: Low D.O./Oxygen Demand
Unconfirmed: Pathogens

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: On-Site/Septic Syst, Other Source (waterfowl)
Unconfirmed: - - -

Management Information

Management Status: Verification of Sources Needed
Lead Agency/Office: DOW/Reg1
IR/305(b) Code: Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview

Beaver Lake is assessed as an impaired waterbody due to recreational uses that are known to be impaired by nutrients and the resulting algal/weed growth and possible low dissolved oxygen. No specific sources have been identified, but urban stormwater runoff and other nonpoint sources are the primary contributing source of pollutants.

Use Assessment

Beaver Lake is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Recreational uses considered to be impaired due elevated nutrients (phosphorus), excessive algae and plant growth.

Additional bacteriological sampling is needed to more fully evaluate the impact of pathogen levels on recreational use. (DEC/DOW, BWAM/LMAS, July 2013)

Aquatic life may be stressed based on suspected low dissolved oxygen related to the eutrophic condition of the lake. Additional fishery assessment is needed to more fully evaluate aquatic life and fishing use. (DEC/DOW, BWAM, January 2016)

Fish Consumption use is considered to be unassessed. There are no health advisories limiting the consumption of fish from this waterbody (beyond the general advice for all waters). However due to the presence of impacts/contaminants in the stream and the uncertainty as to whether the lack of a waterbody-specific health advisory is based on actual sampling, fish consumption use is noted as unassessed, rather than fully supported but unconfirmed. (NYS DOH Health Advisories and DEC/DOW, BWAM, December 2014)

Water Quality Information

Water quality sampling of Beaver Lake has been conducted through the NYSDEC Lake Classification and Inventory (LCI) Program in 2014. Results of this sampling indicate the lake is best characterized as eutrophic, or highly productive. Chlorophyll/algal levels are well above criteria corresponding to impaired recreational uses, while phosphorus concentrations are typically very high. Lake clarity observations indicate water transparency is typically poor. Readings of pH occasionally exceed the range established in state water quality standards for protection of aquatic life though impacts to the fishery are not known. The elevated pH could be a response to algae levels. This evaluation is consistent with results from previous sampling at the site conducted in 2009. (DEC/DOW, BWAM/LMAS, May 2006)

Source Assessment

Based on surrounding land use and other knowledge of the waterbody, urban/storm runoff and other nonpoint sources are the most likely sources of impacts to the waterbody. Significant population of waterfowl and shoreline residential development are also possible sources.

Management Action

Beaver Lake is included on the Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below). No other specific management actions have been identified for the waterbody.

Section 303(d) Listing:

Beaver Lake is included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 1 of the List as an impaired waterbody requiring development of a TMDL for phosphorus and resulting low dissolved oxygen. This waterbody was first listed on the 2012 List. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes the total area of the entire pond. The waterbody is Class C.

Lower/Upper Francis Ponds (1702-0154)

Unassessed

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW4.4a) LIS-OBH-MNC-45-P152,P153
Basin: Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** C
Water Type/Size: Lake/Reservoir 12.5 Acres **Reg/County:** Long Island Sound
Description: total area of both lakes 1/Nassau (30)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

This waterbody segment is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this waterbody segment is needed.

Section 303(d) Listing

Lower/Upper Francis Lakes is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM, January 2015)

Segment Description

This segment includes the total area of both Lower Francis (P152) and Upper Francis (P153) Lakes. Both lakes are designated Class C.

Cold Spring Harbor, and tidal tribs (1702-0018)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW4.4b) LIS-CSH **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SA Long Island Sound
Water Type/Size: Estuary Waters 2333.4 Acres **Reg/County:** 1/Nassau (30)
Description: entire bay

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Impaired	Known
Recreation	Impaired	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
Suspected: Priority Organics (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
Suspected: Other Source (migratory species), ONSITE/SEPTIC SYSTEMS
Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Cold Spring Harbor is assessed as impaired due to shellfishing, public bathing and recreational uses that are known to be impaired by pathogens, and aquatic life that is known to be stressed by nutrients and resulting low dissolved oxygen. Shellfishing, public bathing and recreational uses are restricted by periodic beach advisories/closures. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Cold Spring Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. Portions of this waterbody (included within Shellfish Growing Area #48) has been designated uncertified or only seasonally certified for the taking of shellfish for use as food. The southern head of the harbor is closed year-round (this area was recently expanded in 2015), while a small portion around the mouth of Eel Creek on the western shore is only seasonal certified. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, December 2015)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is considered to be impaired based on monitoring and advisories/closures of beaches in the Harbor. Beach monitoring revealed elevated bacteriological levels that occur in more than ten percent of the samples collected at these beaches, and result in beach advisories/closures for more than 10 days in some years. Other beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches within this waterbody include Menschutt Beach, Eagle Dock Community Beach, Cold Spring Harbor Beach Club, Laurel Hollow Village Beach, Lloyd Harbor Village Park, Lloyd Neck Bath Club and West Neck Beach. (NYSDOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff and possibly residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, municipal wastewater discharges and waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved

oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Friends of the Bay is a non-profit environmental organization formed in 1987 to preserve, protect and restore the ecological integrity and productivity of the Oyster Bay/Cold Spring Harbor Estuary and the surrounding watershed. The organization's efforts include water quality protection, watershed wetlands conservation, land use planning, research, education, community action and advocacy. (Friends of the Bay, 2010)

A vessel waste No Discharge Zone was established for the waters of the Oyster Bay/Cold Spring Harbor Complex in 2008.

Section 303(d) Listing

Cold Spring Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although the Harbor is assessed as impaired due to pathogens, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Long Island Sound Pathogens (Shellfishing) TMDL in 2007. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes tidal waters south of a line from Cove Point to Whitewood Point.

Tribs (fresh) to Cold Spring Harbor (1702-0156)

Minor Impacts

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW4.4b) LIS-CSH-49 thru 50 **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** C Long Island Sound
Water Type/Size: River/Stream 2.2 Miles **Reg/County:** 1/Nassau (30)
Description: total length of selected (freshwater) tribs

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Known
Aquatic Life	Stressed	Suspected
Fish Consumption	Fully Supported	Unconfirmed

Conditions Evaluated

Habitat/Hydrology	Fair
Aesthetics	Unknown

Type of Pollutant(s)

Known: - - -
Suspected: UNKNOWN POLLUTANTS (biological impacts)
Unconfirmed: Nutrients (phosphorus)

Source(s) of Pollutant(s)

Known: - - -
Suspected: UNKNOWN SOURCE, Urban/Storm Runoff
Unconfirmed: Onsite/Septic Systems

Management Information

Management Status: Verification of Pollutants/Causes Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Cold Spring Harbor Tribs is assessed as having minor impacts due to aquatic life that is known to be stressed. No specific pollutant or sources have been identified, but land use suggests urban/storm runoff and other nonpoint sources contribute to the impacts.

Use Assessment

Cold Spring Harbor Tribs is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is evaluated as supported but stressed based on biological sampling that shows slight impacts. This

sampling can also be used to infer that there may be minor impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. Additional (bacteriological) sampling is needed to more fully evaluate other recreational uses.] (DEC/ DOW, BWAM, July 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of unnamed trib (-50) to Cold Spring Harbor in Cold Spring Harbor (at Harbor Road) was conducted as part of the RIBS biological screening effort in 2013. Sampling results reflect fair water quality, with the macroinvertebrate community altered from what is expected under natural conditions. Some expected sensitive species are not present and overall macroinvertebrate species richness is lower than expected. Some changes in community composition have occurred due to replacement of sensitive ubiquitous taxa by more tolerant taxa, but overall there is still balanced distribution of all expected taxa. In spite of these minor impacts, aquatic life is considered to be supported. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

Specific sources of pollutants to the waterbody have not been identified. Identification of sources based on biological community composition was inconclusive. But based on surrounding land use and other knowledge of the waterbody, urban stormwater runoff and other nonpoint source are the most likely sources of impacts to the waterbody. Residential onsite/septic systems may also be a contributing source.

Management Actions

No specific management actions have been identified or are deemed necessary for the waterbody. Additional sampling to verify specific pollutants and sources of impact to this waterbody segment is needed.

Section 303(d) Listing

Cold Spring Harbor Tribs is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There appear to be no impacts/impairments that would justify the listing of this waterbody at this time. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes the total length of all freshwater tribs to Cold Spring Harbor. The waters of these tribs are Class C, C(T). Tribs to this reach/segment, including unnamed tribs (-48- 49, -50).

Huntington Bay (1702-0014)

Minor Impacts

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.2a) LIS-HB
Unit Code: 0203020102 **Class:** SA
Water Type/Size: Estuary Waters 1398 Acres
Description: entire bay, as described below

Drain Basin: Atlantic-Long Island Sound
Reg/County: Long Island Sound
1/Suffolk (52)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Fully Supported	Known
Public Bathing	Fully Supported	Known
Recreation	Fully Supported	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected

Conditions Evaluated

Habitat/Hydrology	Unknown
Aesthetics	Unknown

Type of Pollutant(s)

Known: NUTRIENTS (Nitrogen), LOW D.O./OXYGEN DEMAND
Suspected: PRIORITY ORGANICS (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
Suspected: Other Source (migratory species), Onsite/Septic Systems
Unconfirmed: - - -

Management Information

Management Status: No Action Needed
Lead Agency/Office: ext/PEP
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Huntington Bay is assessed as having minor impacts due to aquatic life that is thought to be stressed by nutrients and resulting low dissolved oxygen, and PCBs. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody. All other evaluated uses are considered to be fully supported.

Use Assessment

Huntington Bay is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be fully supported in these waters. Virtually all of this waterbody (included within Shellfish Growing Area #40) has been certified as safe for the taking of shellfish for use as food. The only restrictions in this segment are for a small area around the mouth of Huntington Harbor. Because this area represents less than 5% of the total area, the waterbody is considered to be fully supporting of shellfishing use. These shellfishing designations are based on results of water quality monitoring and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria. Certified/uncertified shellfish area designations are revised regularly; for detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2010)

Recreational use including public bathing is considered supported based on monitoring at beaches in the waterbody. Beach monitoring revealed no elevated bacteriological levels at beaches and no beach closures. Beaches within this waterbody include Baycrest Association Beach, Nathan Hale Beach Club and Head of the Bay Club Beach. Additionally bacteriological sampling conducted through the shellfishing monitoring program suggest public bathing is supported. (NYSDOH BEACH Act monitoring results, 2010 and DEC/DFWMR, July 2014)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control

of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Huntington Bay is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes bay waters east of line south from East Beach and west of line south from West Beach. Huntington Harbor, Northport Bay, Northport Harbor, Centerport Harbor (includes Mill Pond), Duck Island Harbor, and Lloyd Harbor are listed separately.

Tribs (fresh) to Huntington Bay (1702-0231)

Unassessed

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.2a) LIS-HB..55 thru 57 **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** C Long Island Sound
Water Type/Size: River/Stream 0.4 Miles **Reg/County:** 1/Suffolk (52)
Description: total length of selected (fresh) tribs to bay

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

This waterbody segment is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this waterbody segment is needed.

Section 303(d) Listing

This trib segment is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM, January 2015)

Segment Description

This segment includes the total length of all freshwater tribs to Huntington Bay.

Huntington Harbor (1702-0228)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.2a) LIS-HB-HH **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SA Long Island Sound
Water Type/Size: Estuary Waters 346.5 Acres **Reg/County:** 1/Suffolk (52)
Description: entire harbor

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Impaired	Known
Recreation	Impaired	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
Suspected: Priority Organics (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
Suspected: Other Source (migratory species), ONSITE/SEPTIC SYSTEMS
Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Huntington Harbor is assessed as impaired due to shellfishing, public bathing and recreational uses that are known to be impaired by pathogens, and aquatic life that is known to be stressed by nutrients and resulting low dissolved oxygen. Shellfishing, public bathing and recreational uses are restricted by periodic beach advisories/closures. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Huntington Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. All of this waterbody (included within Shellfish Growing Area #46) has been designated uncertified for the taking of shellfish for use as food. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, December 2015)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is considered to be impaired based on monitoring and advisories/closures of beaches in the Harbor. Beach monitoring revealed elevated bacteriological levels that occur in more than ten percent of the samples collected at these beaches, and result in beach advisories/closures for more than 10 days in some years. Other beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches within this waterbody include Gold Star Battalion Beach and Wincoma Beach. (NYSDOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff and possibly residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, municipal wastewater discharges and waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in

1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Huntington Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although the Harbor is assessed as impaired due to pathogens, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Long Island Sound Pathogens (Shellfishing) TMDL in 2007. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes the entire harbor south of a line from Wendover Road to Elbertsons Point.

Lloyd Harbor (1702-0227)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No:	(MW5.2a) LIS-HB-LH	Drain Basin:	Atlantic-Long Island Sound
Unit Code:	0203020102	Class:	SA
Water Type/Size:	Estuary Waters		698.1 Acres
Description:	entire harbor		Reg/County: 1/Suffolk (52)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Stressed	Suspected
Recreation	Stressed	Suspected
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
 Suspected: Priority Organics (PCBs)
 Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
 Suspected: Other Source (migratory species), ONSITE/SEPTIC SYSTEMS
 Unconfirmed: - - -

Management Information

Management Status: Restoration/Protection Strategy Needed
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Lloyd Harbor is assessed as impaired due to shellfishing that is known to be impaired by pathogens. Aquatic life is also known to be stressed by nutrients and resulting low dissolved oxygen. Public bathing and recreational uses may be stressed by pathogens, though evaluation of these uses need to be verified. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Huntington Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. Much of this waterbody (included within Shellfish Growing Area #45) has been designated uncertified or only seasonally certified for the taking of shellfish for use as food. The western (head) half of the harbor is only seasonally certified and a small portion of the harbor waters near the mouth of Huntington Harbor is uncertified. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, December 2015)

Aquatic life in the waterbody is also considered to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is thought to be stressed based on shellfishing certification monitoring. Bacteriological sampling conducted through the shellfishing monitoring program indicate elevated pathogen levels. However criteria for shellfishing are lower than those for public bathing and additional bacteriological sampling is needed to more fully evaluate swimming use. There are no regularly monitored beaches in this waterbody, although Wincoma Beach lies just outside the mouth of the Harbor. Restrictions on shellfishing represent an impact to recreational use. (DEC/DFWMR, July 2014)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff and possibly residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, municipal wastewater discharges and waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following and initial

freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Lloyd Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. However this updated assessment suggests it is appropriate to include this waterbody on the next List. It is recommended that this waterbody be added to Part 2c of the List as a shellfishing impaired waterbody requiring development of a TMDL for pathogens. (DEC/DOW, BWAM/WQAS, January 2015) (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes the entire harbor west of a line extending south from East Beach.

Northport Bay (1702-0256)

Minor Impacts

Waterbody Location Information

Revised: 02/19/2016

Water Index No:	(MW5.2a) LIS-HB-NB	Drain Basin:	Atlantic-Long Island Sound
Unit Code:	0203020102	Class:	SA
Water Type/Size:	Estuary Waters		1891.3 Acres
Description:	entire bay, as described below		

Drain Basin:	Atlantic-Long Island Sound
Reg/County:	1/Suffolk (52)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Stressed	Known
Public Bathing	Fully Supported	Known
Recreation	Fully Supported	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, NUTRIENTS (nitrogen), LOW D.O./OXYGEN DEMAND
 Suspected: PRIORITY ORGANICS (PCBs)
 Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
 Suspected: Other Source (migratory species), Onsite/Septic Systems
 Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Northport Bay is assessed as having minor impacts due to shellfishing and aquatic life that are considered to be stressed by pathogens, nutrients resulting low dissolved oxygen, and PCBs. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody. All other evaluated uses are considered to be fully supported.

Use Assessment

Northport Bay is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be stressed in these waters. Most of this waterbody (included within Shellfish Growing Area #40) has been certified as safe for the taking of shellfish for use as food. The areas affected by restrictions include the area at the entrance to Northport Harbor which is closed year-round, and the northern portion of Price Bend (seasonally closed). Because this area represents less than 10% of the total area, the waterbody is considered to be supporting of shellfishing use. These shellfishing designations are based on results of water quality monitoring and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria. Certified/uncertified shellfish area designations are revised regularly; for detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2010)

Recreational use including public bathing is considered supported based on monitoring at beaches in the waterbody. Beach monitoring revealed no elevated bacteriological levels at beaches and no beach closures. Beaches within this waterbody include Bay Hills POA Beach, Crescent Beach, Steers Beach, Asharoken Beach and Prices Bend Beach. (NYSDOH BEACH Act monitoring results, 2010 and DEC/DFWMR, July 2014)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff and possibly residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, municipal wastewater discharges and waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development

of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Northport Bay is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes bay waters east of line south from West Beach, excluding Centerport, Northport and Duck Island Harbors which are listed separately.

Centerport Harbor (1702-0229)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.2a) LIS-HB-NB-CH **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SA Long Island Sound
Water Type/Size: Estuary Waters 366.7 Acres **Reg/County:** 1/Suffolk (52)
Description: entire harbor

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Impaired	Known
Recreation	Impaired	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
Suspected: Priority Organics (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
Suspected: Other Source (migratory species), ONSITE/SEPTIC SYSTEMS
Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Centerport Harbor is assessed as impaired due to shellfishing, public bathing and recreational uses that are known to be impaired by pathogens, and aquatic life that is known to be stressed by nutrients and resulting low dissolved oxygen. Shellfishing, public bathing and recreational uses are restricted by periodic beach advisories/closures. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Centerport Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. Much of this waterbody (included within Shellfish Growing Area #43) has been designated uncertified or only seasonally certified for the taking of shellfish for use as food. About 36% of the harbor is closed to shellfishing year-round, while an additional 22% is subject to seasonal closures. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, December 2015)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is considered to be impaired based on monitoring and advisories/closures of beaches in the Harbor. Beach monitoring revealed elevated bacteriological levels that occur in more than ten percent of the samples collected at these beaches, and result in beach advisories/closures for more than 10 days in some years. Other beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches within this waterbody include Centerport Beach, Knollwood Beach, Huntington Beach Community Association Beach, Camp Alveria (closed for season in 2011-2012) and Fleets Cove Beach. (NYSDOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff and possibly residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, municipal wastewater discharges and waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was

developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Centerport Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although the Harbor is assessed as impaired due to pathogens, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Long Island Sound Pathogens (Shellfishing) TMDL in 2007. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes the entire harbor south of a line from Little Neck Point to the northernmost point on the western shoreline.

Mill Pond (1702-0261)

Unassessed

Waterbody Location Information

Revised: 02/19/2016

Water Index No:	(MW5.2a) LIS-HB-NB-CH-P240	Drain Basin:	Atlantic-Long Island Sound
Unit Code:	0203020102	Class:	C
Water Type/Size:	Lake/Reservoir		34 Acres
Description:	entire pond		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: ---
 Suspected: ---
 Unconfirmed: ---

Source(s) of Pollutant(s)

Known: ---
 Suspected: ---
 Unconfirmed: ---

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

This waterbody segment is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this waterbody segment is needed.

Section 303(d) Listing

Mill Pond is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM, January 2015)

Segment Description

This segment includes the total area of the entire pond.

Duck Island Harbor (1702-0262)

Minor Impacts

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.2a) LIS-HB-NB-DIH **Drain Basin:** Atlantic-Long Island Sound
Unit Code: 0203020102 **Class:** SA Long Island Sound
Water Type/Size: Estuary Waters 272.8 Acres **Reg/County:** 1/Suffolk (52)
Description: entire harbor

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Fully Supported	Known
Public Bathing	Fully Supported	Known
Recreation	Fully Supported	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: NUTRIENTS (Nitrogen), LOW D.O./OXYGEN DEMAND
Suspected: PRIORITY ORGANICS (PCBs)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
Suspected: Other Source (migratory species), Onsite/Septic Systems
Unconfirmed: - - -

Management Information

Management Status: No Action Needed
Lead Agency/Office: ext/PEP
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Duck Island Harbor is assessed as having minor impacts due to aquatic life that is thought to be stressed by nutrients and resulting low dissolved oxygen, and PCBs. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody. All other evaluated uses are considered to be fully supported.

Use Assessment

Duck Island Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be fully supported in these waters. All of this waterbody (included within Shellfish Growing Area #44) has been certified as safe for the taking of shellfish for use as food. These shellfishing designations are based on results of water quality monitoring and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria. Certified/uncertified shellfish area designations are revised regularly; for detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2010)

Recreational use including public bathing is considered fully supported based on shellfishing certification monitoring. There are no regularly monitored beaches in this waterbody, but bacteriological sampling conducted through the shellfishing monitoring program suggest public bathing is supported. (NYSDOH BEACH Act monitoring results, 2010 and DEC/DFWMR, July 2014)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following and initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in 1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Duck Island Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes the entire harbor north of a line from Winkle Point to Duck Island Bluff.

Northport Harbor (1702-0230)

Impaired

Waterbody Location Information

Revised: 02/19/2016

Water Index No:	(MW5.2a) LIS-HB-NB-NH	Drain Basin:	Atlantic-Long Island Sound
Unit Code:	0203020102	Class:	SA
Water Type/Size:	Estuary Waters		445.2 Acres
Description:	entire harbor		Reg/County: 1/Suffolk (52)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Impaired	Known
Public Bathing	Impaired	Known
Recreation	Impaired	Known
Aquatic Life	Stressed	Known
Fish Consumption	Stressed	Suspected
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s)

Known: PATHOGENS, Nutrients (Nitrogen), Low D.O./Oxygen Demand
 Suspected: Priority Organics (PCBs)
 Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Municipal Discharges
 Suspected: Other Source (migratory species), ONSITE/SEPTIC SYSTEMS
 Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: DEC/Reg1
IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Northport Harbor is assessed as impaired due to shellfishing, public bathing and recreational uses that are known to be impaired by pathogens, and aquatic life that is known to be stressed by nutrients and resulting low dissolved oxygen. Shellfishing, public bathing and recreational uses are restricted by periodic beach advisories/closures. Fish consumption is also thought to be stressed by PCBs, however these fish consumption advisories are the result of the migratory range of these fish species, and not related to any known contamination in this specific waterbody.

Use Assessment

Northport Harbor is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be impaired in these waters. Virtual all of this waterbody (included within Shellfish Growing Area #42) has been designated uncertified for the taking of shellfish for use as food. Shellfish that grow in contaminated waters can accumulate disease-causing microorganisms (bacteria, viruses) that can be eaten with the shellfish. These shellfishing designations are based on results of water quality sampling and evaluation of data against New York State and National Shellfish Sanitation Program monitoring criteria and/or shoreline surveys of actual or potential sources of contamination. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, December 2015)

Aquatic life in the waterbody is also thought to be stressed by occasional low dissolved oxygen, the result of elevated nitrogen loadings. The Long Island Sound Study (see below) found that nitrogen from area WWTPs and to a lesser extent CSOs promote algal growth, die-off, settlement to the sediment, and create an oxygen demand which results in low dissolved oxygen and hypoxia in the bottom waters of the Sound. The tidal exchange of waters with the Sound suggests related impacts in the waters of the Bay. (DEC/DOW and FWMR, Region 1, August 2010)

Recreational use including public bathing is considered to be impaired based on monitoring and advisories/closures of beaches in the Harbor. Beach monitoring revealed elevated bacteriological levels that occur in more than ten percent of the samples collected at these beaches, and result in beach advisories/closures for more than 10 days in some years. Other beach closures in the segment are largely pre-emptive closures during heavier rainstorms that are known to wash pollutants into the harbor. Beaches within this waterbody include Centerport Yacht Club Beach and Vanderbilt Beach (closed in 2012-13). (NYSDOH BEACH Act monitoring results, 2013 and DEC/DFWMR, July 2015)

Fish consumption is considered to be stressed due to NYSDOH precautionary health advisories recommending limiting consumption of larger weakfish (over 25 inches) and other species from these marine waters due to possible elevated levels of PCBs. These advisories are largely precautionary and are related to the specific habits and characteristics of these species, specifically the wide migratory range, predatory nature and high lipid/fat content that make them more likely to accumulate contaminants. In addition, for some species the advisories recommend limiting consumption to no more than one meal per week which is no more stringent than the general statewide advisory for all New York waters and does not result in significant impact to uses. Because possible contamination is more a result of the migratory range and other factors rather than any known sources of PCBs in this waterbody, fish consumption use in this segment is considered to be stressed rather than impaired. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYSDOH and DEC/DFWMR, 2014)

Source Assessment

Urban stormwater runoff and possibly residential onsite wastewater/septic systems are considered to be the primary sources of pathogens, although various other sources such as boat discharges, municipal wastewater discharges and waterfowl may also contribute. Municipal sources, urban storm runoff, onsite septic systems and other nonpoint sources including atmospheric deposition, and tidal exchange with Long Island Sound and Connecticut waters are sources of the nutrients. Impacts to fish consumption are the result of elevated PCBs in fish species with a wide migratory range; there are no known PCB sources within the waterbody of significance.

Management Action

Both New York State and Connecticut have identified Long Island Sound as water quality limiting due to low dissolved oxygen/hypoxia caused by nitrogen loadings. A Total Maximum Daily Load (TMDL) plan to address the problem was developed and approved in 2001. This plan outlines a phased approach to nitrogen reduction. Following an initial freeze on nitrogen loadings and the realization that further efforts were needed, New York and Connecticut agreed in

1998 to significant nitrogen reduction targets (58.5%) and a commitment to enforce the targets through the development of a TMDL. Significant upgrades to municipal wastewater treatment plants that discharge to Long Island Sound called for in the TMDL are currently underway; anticipated completion in 2017. Additional future actions to address the control of nitrogen (and carbon) from up-watershed of the immediate LISS area and atmospheric sources are currently under discussion. (DEC/DOW, BWAM/WQMS, August 2010)

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Northport Harbor is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. Although the Harbor is assessed as impaired due to pathogens, it is categorized as an IR Category 4a water that is not listed due to the completion and implementation of the Long Island Sound Pathogens (Shellfishing) TMDL in 2007. (DEC/DOW, BWRM, January 2015)

Segment Description

This segment includes the entire harbor south of a line from Bluff Point to Little Neck Point.

Eatons Neck Pond (1701-0271)

No Known Impacts

Waterbody Location Information

Revised: 02/19/2016

Water Index No: (MW5.2b) LIS- 58-P269
Unit Code: 0203020202 **Class:** SA
Water Type/Size: Estuary Waters 85.1 Acres
Description: total area of pond and tidal tribs

Drain Basin: Atlantic-Long Island Sound
Reg/County: Atlantic Ocean
1/Suffolk (52)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Pollutants/Sources)

Uses Evaluated	Severity	Confidence
Shellfishing	Fully Supported	Known
Public Bathing	Fully Supported	Suspected
Recreation	Fully Supported	Suspected
Aquatic Life	Fully Supported	Suspected
Fish Consumption	Fully Supported	Unconfirmed

Conditions Evaluated

Habitat/Hydrology	Good
Aesthetics	Good

Type of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Management Information

Management Status: No Action Needed
Lead Agency/Office: DEC/FWMR
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Eatons Neck Pond is assessed as having no known impacts; all evaluated uses are considered to be fully supported.

Use Assessment

Eatons Neck Pond is a Class SA waterbody, suitable for shellfishing, public bathing and general recreation use, and support of aquatic life.

Shellfish harvesting for consumption is considered to be fully supported in these waters. All of this waterbody (included within Shellfish Growing Area #34) has been certified as safe for the taking of shellfish for use as food. These shellfishing designations are based on results of water quality monitoring and evaluation of data against New York State

and National Shellfish Sanitation Program monitoring criteria. Certified/uncertified shellfish area designations are revised regularly; for the most up to date and detailed descriptions of current designations, go to www.dec.ny.gov/regs/4014.html. (DEC/DFWMR, Region 1, July 2010)

Recreational use including public bathing is considered fully supported based on shellfishing certification monitoring. There are no regularly monitored beaches in this waterbody, but bacteriological sampling conducted through the shellfishing monitoring program suggest public bathing is supported. (NYS DOH BEACH Act monitoring results, 2010 and DEC/DFWMR, July 2014)

Based on other available indicators for other related uses, this waterbody is reported to support a healthy marine water fishery, although no specific fishery or biological reports are included in this assessment.

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

Assessments of recreational uses and aquatic life in marine waters are based primarily on information from NYS and local health departments and the NYSDEC Division of Fish Wildlife and Marine Resources. This information is compiled and updated in regularly issued advisories and certifications regarding bathing beaches, shellfishing harvest and sportfish consumption. (NYS DOH and DEC/DFWMR, 2014)

Source Assessment

There are no apparent sources of pollutants to the waterbody.

Management Action

This waterbody is included in the Long Island Sound Study (LISS), a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to fully restoring and protecting the waters of the Sound. The LISS was formed by EPA, New York and Connecticut in 1985 to focus on the overall ecosystem. In 2015, the LISS revised its Comprehensive Conservation and Management Plan (CCMP) to address new environmental challenges (such as climate change, long-term sustainability, environmental justice, and ecosystem-based management), incorporate scientific and technological advances, and respond to changing community needs. The new CCMP is organized around four themes: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Sound Science and Inclusive Management. The LISS partners have made significant strides to restore and protect Long Island Sound, giving priority to hypoxia, habitat restoration, public involvement and education and water quality monitoring. (DEC/DOW, BWQM/WQMS, July 2015)

Section 303(d) Listing

Eatons Neck Pond is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description

This segment includes Eatons Neck Pond (-P269) and its outlet to Long Island Sound (-58). Eatons Neck Pond is designated Class SA.