



## The Problem

For the purposes of the §208 Plan Update, areas of wastewater need are primarily defined by the amount of nitrogen reduction required as defined by the Total Maximum Daily Load (TMDL) and/or Massachusetts Estuaries Project (MEP) technical report. An MEP report has not yet been completed for Sandwich Harbor and Scorton Creek.

## SANDWICH HARBOR

- **MEP TECHNICAL REPORT STATUS:** Draft
- **TMDL STATUS:** In Progress
- **WASTEWATER FLOW:** 120 MGY (million gal per year)
- **UNATTENUATED SEPTIC NITROGEN LOAD:** 1,908 Kg/Y (kilograms per year)
- **ATTENUATED NITROGEN LOAD:** Not assessed

## CONTRIBUTING TOWN

- **SANDWICH**
- **DISCUSSION:** A portion of the land area is not in the control of the town as it is part of Joint Base Cape Cod (JBCC), which is served by a wastewater treatment facility and discharged outside of the watershed.

## SANDWICH HARBOR ESTUARY

- **EMBAYMENT AREA:** 74 acres
- **EMBAYMENT VOLUME:** Unknown
- **2012 INTEGRATED LIST STATUS:** Not Listed

## SANDWICH HARBOR WATERSHED

- **ACRES:** 6,770
- **PARCELS:** 1,952
- **% DEVELOPED RESIDENTIAL PARCELS:** 74%
- **PARCEL DENSITY:** 3.5 acres per parcel (approx.)
- **WASTEWATER TREATMENT FACILITIES:** 0

## SCORTON CREEK

- **MEP TECHNICAL REPORT STATUS:** Draft
- **TMDL STATUS:** In Progress
- **WASTEWATER FLOW:** 187 MGY (million gal per year)
  - Treated Wastewater Flow: 10
  - Septic Flow: 177
- **UNATTENUATED SEPTIC NITROGEN LOAD:** 18,011 Kg/Y (kilograms per year)
- **ATTENUATED NITROGEN LOAD:** Not assessed

The Sandwich Harbor and Scorton Creek systems are estuaries with shoreline located entirely in the Town of Sandwich. They receive tidal flow from Cape Cod Bay, which has an average 9-foot tidal fluctuation, are incised along the north side of the Sandwich Moraine and extend approximately 1.5 to 2 miles inland through salt marsh. The embayments support a variety of recreational uses including boating, swimming, shell fishing and fin fishing.

# WATERSHEDS: MID CAPE

# SANDWICH HARBOR AND SCORTON CREEK

## CONTRIBUTING TOWNS

- SANDWICH: 100%

## SCORTON CREEK ESTUARY

- EMBAYMENT AREA: 31 acres
- EMBAYMENT VOLUME: Unknown
- 2012 INTEGRATED LIST STATUS: Category 4A for fecal coliform
  - Category 4a: TMDL is completed
  - [www.mass.gov/eea/docs/dep/water/resources/07v5/12list2.pdf](http://www.mass.gov/eea/docs/dep/water/resources/07v5/12list2.pdf)

## SCORTON CREEK WATERSHED

- ACRES: 6,983
- PARCELS: 3,026
- % DEVELOPED RESIDENTIAL PARCELS: 80%
- PARCEL DENSITY: 2.3 acres per parcel (approx.)
- WASTEWATER TREATMENT FACILITIES: 3
  - Riverview School
  - Sandwich High School
  - Oak Ridge School

## Freshwater Sources

### PONDS

- IDENTIFIED SURFACE WATERS: 39
- NUMBER OF NAMED FRESHWATER PONDS: 0
- PONDS WITH PRELIMINARY TROPHIC CHARACTERIZATION: 3  
(Listed In Appendix 4C, Ponds With Water Quality Data)
- 2012 INTEGRATED LIST STATUS: None Listed

### STREAMS

- SIGNIFICANT FRESHWATER STREAM OUTLETS: 6
  - Sandwich Harbor:
    - Mill Creek
    - Dock Creek
    - Springhill Creek
    - Old Harbor Creek
  - Scorton Creek:
    - Scorton Creek
    - Long Creek

## DRINKING WATER SOURCES

- WATER DISTRICTS: 1
  - Sandwich Water District
- GRAVEL PACKED WELLS: 7
  - 4 have nitrate concentrations between 0 and 0.5 mg/L
  - 3 have nitrate concentrations between 1 and 2.5 mg/L
- SMALL VOLUME WELLS: 2

## Degree of Impairment

Since there is no evidence of water quality impairment at this time, wastewater needs are determined based upon other factors, such as Title5 compliance. Both embayments are currently being assessed by the MEP.

The 2012 Integrated list of Impaired Waters lists Scorton Creek as being a Category 4a impaired water body for fecal coliform.

## LOCAL PROGRESS

### SANDWICH

The Town of Sandwich has completed a Comprehensive Wastewater Management Plan (CWMP) Needs Assessment and is working on public-private partnerships for the “Golden Triangle” development area. This would

require treatment and subsequent disposal outside of a Zone II area. The proposed disposal area in the Scorton Creek watershed is adjacent but outside of a Zone II.

Local efforts in Sandwich are described in Chapter 6.



# WATERSHEDS: MID CAPE

# SANDWICH HARBOR AND SCORTON CREEK



# WATERSHEDS: MID CAPE

# SANDWICH HARBOR AND SCORTON CREEK

