



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 been completed for the Pocasset Harbor watershed.

- **MEP TECHNICAL REPORT STATUS:** Not Being Studied
- **TMDL STATUS:** Not Being Studied
- **TOTAL WASTEWATER FLOW:** 81 MGY (Million Gal/Year)
 - Treated WW Flow: 2 MGY
 - Septic Flow: 79 MGY
- **UNATTENUATED SEPTIC NITROGEN LOAD:** 8,326 kg/Y (kilograms per year)
- **ATTENUATED NITROGEN LOAD:** Not assessed; Pocasset Harbor offers limited opportunities for natural attenuation in a small number of freshwater ponds.

CONTRIBUTING TOWNS

- **BOURNE**
- **SANDWICH (JBCC)**
- **DISCUSSION:** The land area in Sandwich, and a portion of the land area in Bourne, 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.

POCASSET HARBOR ESTUARY

- **EMBAYMENT AREA:** 1,381 acres
- **EMBAYMENT VOLUME:** Unknown
- **2012 INTEGRATED LIST STATUS:** Category 5 for fecal coliform
 - Category 5: water body requiring a TMDL
 - www.mass.gov/eea/docs/dep/water/resources/07v5/12list2.pdf

POCASSET HARBOR WATERSHED

- **ACRES:** 4,718
- **PARCELS:** 2,060
- **% DEVELOPED RESIDENTIAL PARCELS:** 74%
- **PARCEL DENSITY:** 2.3 acres per parcel (approx.)
- **WASTEWATER TREATMENT FACILITIES:** 0

The shoreline of Pocasset Harbor, also called Red Brook Harbor, is located entirely in the Town of Bourne. The entrance to the harbor is bordered on the north by Wings Neck and on the south by Scraggy Neck. Bassetts Island is located centrally within Pocasset Harbor. Pocasset Harbor has heavy development along the waterfront, especially surrounding Pocasset Village. The estuary supports a variety of recreational uses including boating, swimming, shell fishing and fin fishing.

Freshwater Sources

PONDS

- IDENTIFIED SURFACE WATERS: 18
- NUMBER OF NAMED FRESHWATER PONDS: 8
- PONDS WITH PRELIMINARY TROPHIC CHARACTERIZATION: 2
(Listed In Appendix 4C, Ponds With Water Quality Data)
- 2012 INTEGRATED LIST STATUS: None listed
- DISCUSSION: The Town of Bourne has not fully engaged in the Pond and Lake Stewardship (PALS) program that has helped establish baseline water

quality Cape wide. Long Pond, originally delineated by the MEP in the Pocasset Harbor watershed, drains via a stream that discharges to Megansett Harbor. Future MEP delineation may place Long Pond in the Megansett Harbor contributing watershed.

STREAMS

- SIGNIFICANT FRESHWATER STREAM OUTLETS: Not assessed
- DISCUSSION: Pocasset Harbor receives minimal freshwater contributions from Red Brook with its headwaters at Red Brook Pond.

DRINKING WATER SOURCES

- WATER DISTRICTS: 1
 - Bourne Water District
- GRAVEL PACKED WELLS: 0
- SMALL VOLUME WELLS: 0

Degree of Impairment and Areas of Need

An MEP report is pending for the Pocasset Harbor watershed. Since there is no evidence of water quality impairment at this time, wastewater needs are determined based upon other factors, such as Title5 compliance.

LOCAL PROGRESS

BOURNE

The Town of Bourne has not engaged in wastewater planning in the Pocasset Harbor watershed beyond the

2007 Needs Assessments/Wastewater Management Study, which identified wastewater needs, including drinking and surface water quality, and Title 5 needs. Presently, Buzzards Bay is the only sewered area in the Town of Bourne. The Town does not own or operate a wastewater treatment facility. All wastewater collected in

Buzzards Bay is transferred to the Town of Wareham for treatment and disposal.

Local efforts in the Bourne are described in Chapter 6.