Quissett Harbor Subwatershed Falmouth, Cape Cod, Massachusetts

The Quissett Harbor Subwatershed is located in Falmouth. It is a small subwatershed with an area of 520 acres.

Quissett Harbor is one of the deepest embayments in Buzzards Bay. It has high tidal flushing, no freshwater inputs, and a healthy eelgrass population. The harbor supports beds of scallops, oysters, quahogs, and soft-shell clams. The southern half of the harbor is approved for shellfishing and the inner harbor, which is more heavily used, is conditionally closed to shellfishing on a seasonal basis. The harbor receives a high volume of recreational boat use. A year-round pump out facility is located at the Quissett Harbor Boatyard in the inner harbor

In January 1999 the town approved a management plan for Quissett Harbor. There is a high demand for moorings, but no room to accommodate more parking or a septic system for a bathhouse. The harbor exceeds the number of commercial moorings recommended, but several moorings have been moved from the inner to the outer harbor to accommodate the number of private moorings needed in the inner harbor.

There is a low to moderate level of residential development and a moderate level of development potential in the subwatershed. The subwatershed is among the least forested for the Buzzards Bay area.

According to The Coalition for Buzzards Bay, Quissett Harbor has some of the highest water quality of the Buzzards Bay embayments. This is attributed to a good rate of flushing with the waters of Buzzards Bay, the lack of a river flowing into the harbor, and only modest residential development in the watershed. Depleted oxygen levels in 1994 and 1995 and high dissolved organic nitrogen in 1994 may indicate that the inner harbor has the potential for nutrient impacted water quality, but thus far a trend has not been established.

The Coalition for Buzzards Bay identified the greatest threats to the currently excellent water quality as leaching from residential septic systems and fertilizer applications on the Woods Hole Golf Course.

Approximately five percent of Falmouth is publicly sewered. The sewered areas are Main Street in Falmouth and nearly all of Woods Hole. Ninety to ninety-five percent of the town is on municipal water. There is one treatment plant in Falmouth, currently processing 550,000 gallons per day (gpd) with a capacity of 810,000 gpd and discharging to groundwater. A \$14 million upgrade has been approved to bring the capacity up to one million gpd in the next few years.

Stewards:

- The Coalition for Buzzards Bay (www.savebuzzardsbay.org)
- Buzzards Bay Project
- Falmouth Associations Concerned with Estuaries and Saltponds (FACES)
- Ouissett Harbor Management Committee

Studies conducted in the watershed:

- Baywatchers II. Nutrient related water quality of Buzzards Bay embayments: a synthesis of Baywatchers monitoring 1992-1998. The Coalition for Buzzards Bay. December 1999.
- DMF Sanitary Surveys, 1999.

- Atlas of Tidally Restricted Salt Marshes Buzzards Bay Watershed, Massachusetts. 2002. Buzzards Bay Project National Estuary Program.
- Atlas of Stormwater Discharges in the Buzzards Bay Watershed, Final Draft. June 2002. Buzzards Bay Project National Estuary Program.

Who is collecting water quality data and where:

- The Coalition for Buzzards Bay samples for temperature, water clarity, salinity, dissolved oxygen, chlorophyll a, nitrogen, and phosphorus at one site each in the inner and outer basins
- Sanitary Survey conducted by Division of Marine Fisheries in 1999, the next triennial survey will be in 2003, the next Sanitary Survey in 2006.

Management actions taken:

• In January 1999, the town approved a management plan for Quissett Harbor.

Subwatershed facts: (For data sources see Appendix)

- 21 E sites: none
- Solid waste sites: none
- No Interim Wellhead Protection Areas (IWPAs) or Zone IIs.
- Approximately 30% of the undeveloped land is currently protected, but this includes recreational land such as golf courses as protected and undeveloped.
- Acres of existing wetlands: 5.3
- Certified vernal pools: 2 (one is on the Woods Hole Golf Course)
- Named freshwater ponds: none
- Named rivers or creeks: none
- Shellfish growing areas: Northern portion of harbor is conditionally approved, the rest is approved.

Priorities:

- Address nitrogen coming from Woods Hole Golf Course.
- Parcels considered a priority for acquisition for water supply protection and development: Falmouth Tracts 4, 6, 11, 12, 19, 26, 33, and 35 were ranked as having medium or high water supply development potential in the Cape Cod Commission's *Priority Land Acquisition Assessment Project* (April 1999). These tracts are located throughout the Town of Falmouth.
- Implement those salt marsh restoration projects identified in the *Atlas of Tidally Restricted Salt Marshes Buzzards Bay Watershed* that have been evaluated and prioritized by the town.

Recreation:

Golf courses:

• Woods Hole Golf Club

Pathways and trails:

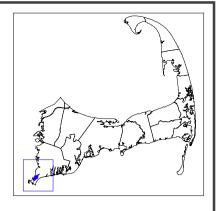
- www.capecodcommission.org/pathways/trailguide.htm Public access:
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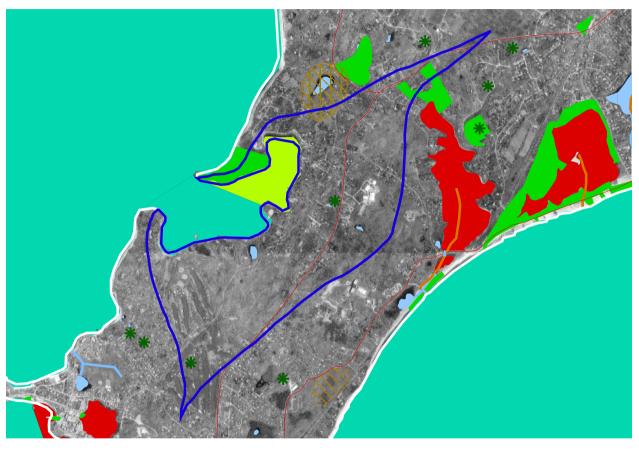
Public beaches, landings, marinas:

- Quissett Harbor Boat Yard
- 240 moorings
- Landing on northeast shore of harbor

Quissett Harbor

Falmouth, MA





Watershed Resources



0 0.2 0.4 0.6 Miles

Natural Heritage and Endangered Species Program Data

Certified Vernal Pool
Priority Habitats of
Rare Species

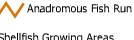
Estimated Habitats of Rare Species

Groundwater Protection Areas

Interim Wellhead
Protection Area
Zone II

Solid Waste Facility

Watershed Boundary



Shellfish Growing Areas

APPROVED

CONDITIONALLY APPROVED

MANAGEMENT CLOSURE
PROHIBITED

RESTRICTED

Open Space

Streams

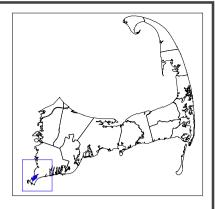
Ponds
Roads

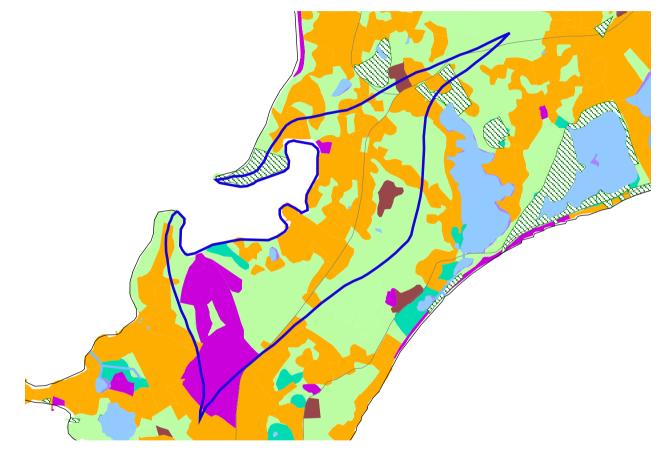




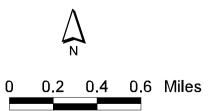
Quissett Harbor

Falmouth, MA









Land Use





Watershed Boundary



Protected Open Space



