

# Shellfish Beds



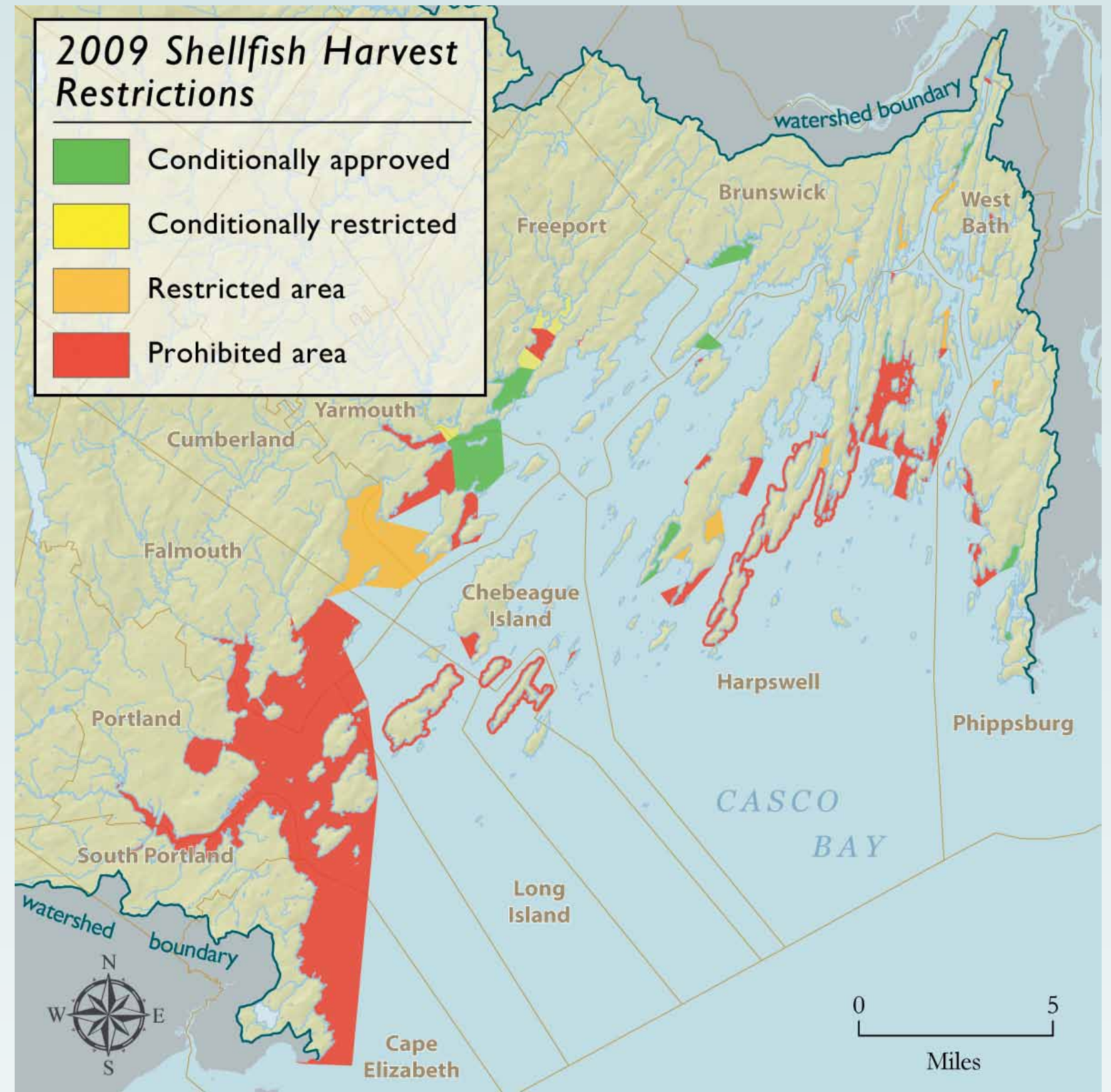
For many residents and commercial diggers around Casco Bay, shellfish harvesting is an important tradition and livelihood. In most parts of the Bay, determination of whether shellfish areas are open to harvest depends on fecal pollution.

Under the National Shellfish Sanitation Program, the Maine Department of Marine Resources classifies shellfish areas as prohibited, restricted, conditionally restricted, conditionally approved, or approved based on an assessment of the risks of illness. Each management area's status is determined by several criteria such as proximity to private or municipal wastewater treatment facilities; recent heavy rains (which can wash pathogens and other pollutants into the Bay); presence of high levels of fecal bacteria; dangerous red tide levels; toxic substances in sediments; or a combination.

In Casco Bay, most shellfish bed closures occur due to anthropogenic sources of fecal bacteria carried in stormwater runoff, and fecal bacteria associated with human waste from malfunctioning septic systems, release of treated and untreated sewage from boats, combined sewer overflows, and overboard discharges.

Local, state, and federal agencies have taken important steps to reduce fecal pollution inputs to Casco Bay by removing overboard discharges, eliminating combined sewer overflows, and designating Casco Bay as a No Discharge Zone.

Nonetheless, fecal bacteria counts persist at elevated levels in many areas, resulting in widespread restrictions on harvesting shellfish. Nonpoint source pollution adjacent to shellfish harvesting areas is a topic of growing concern among state and local shellfish managers.



## Change in Casco Bay Softshell Clam Bed Status 1994–2009 (Acres)



Status of Softshell Clam Beds	1994	2002	2003	2004	2005	2006	2007	2008	2009
Prohibited	3,233	1,376	1,749	1,774	2,033	2,301	2,107	1,897	2,040
Restricted	105	49	49	49	103	218	480	581	442
Conditionally Restricted	704	1,450	1,368	1,382	965	1,005	298	392	364
Approved or Conditionally Approved	3,644	4,832	4,542	4,504	4,607	4,186	4,805	4,819	4,843

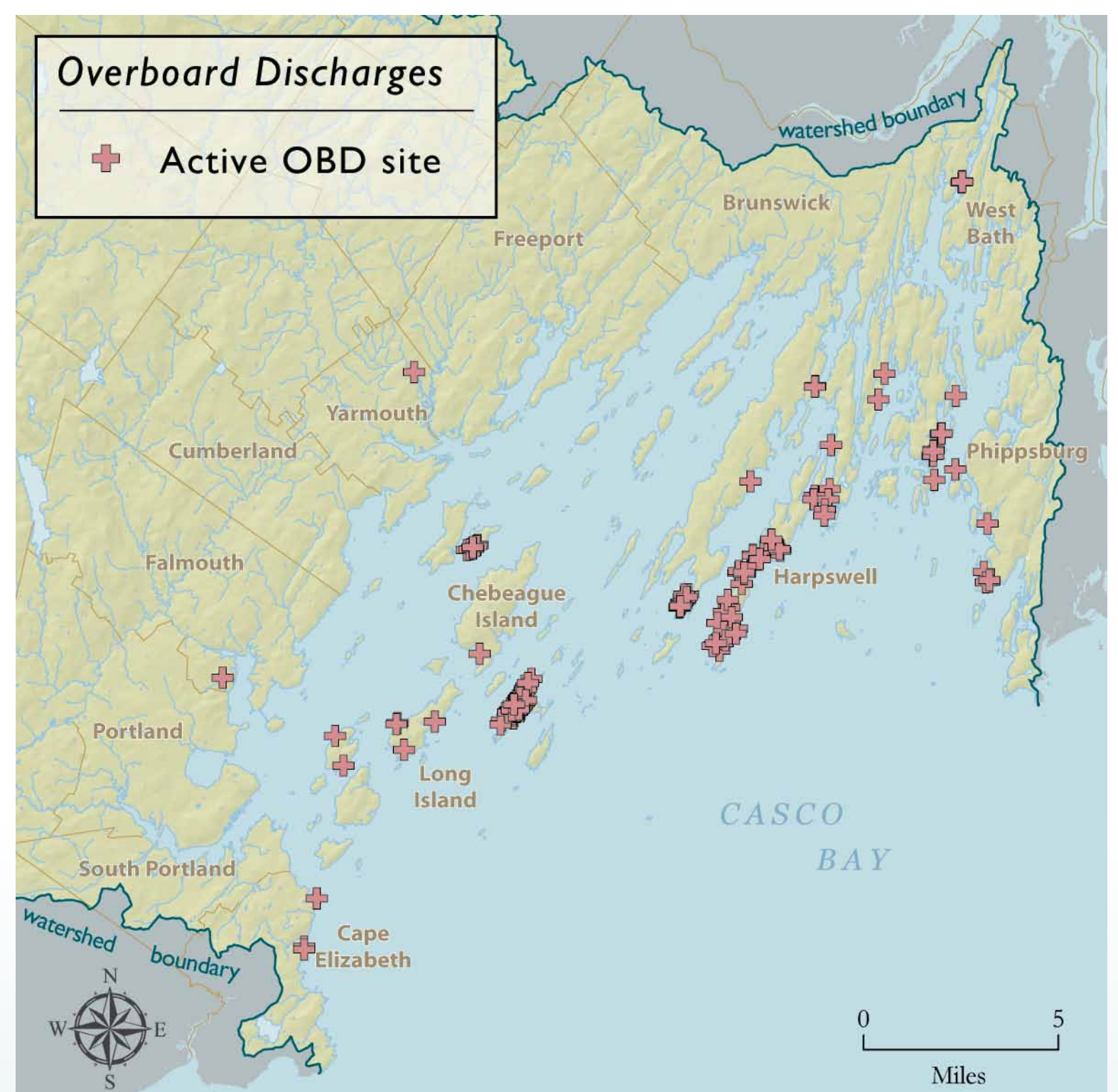
Data: Maine DMR

## Elimination of Overboard Discharge Systems

- Between 1974 and 1987, Maine DEP regulations allowed treated, chlorinated overboard discharge systems (OBDs) to be built as a replacement for "straight pipes" or as an alternative to conventional inground septic systems.
- By 1987, nearly 400 OBDs had been installed in towns surrounding Casco Bay.
- OBDs constitute a major cause of Casco Bay's shellfish management area closures.
- To address that ongoing cause of shellfish closures, towns are working closely with state agencies and continue to seek ways to remove and replace OBDs.
- As a result, the number of permitted OBDs has declined by about half since 1995.



## Number of Permitted Overboard Discharges in Casco Bay



Data for map and graph: Maine DEP