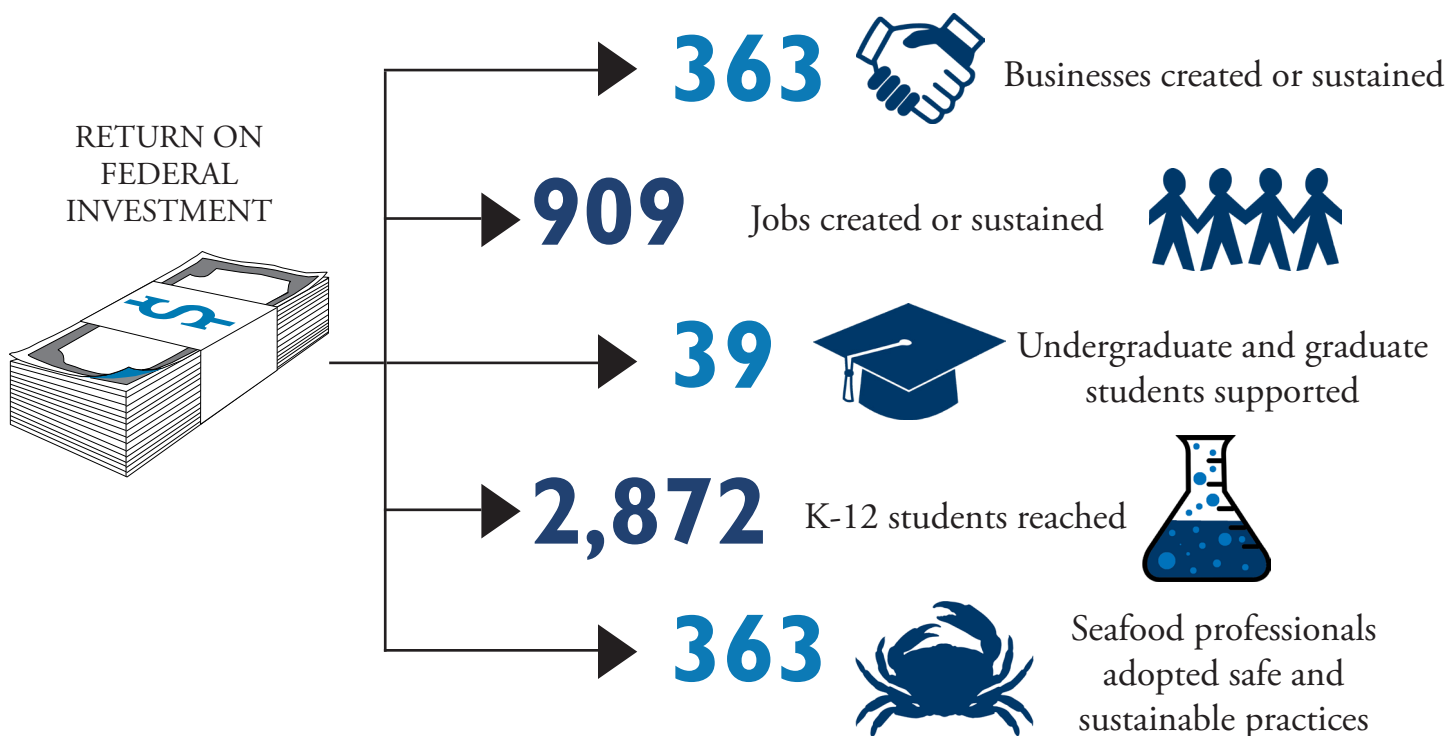


WOODS HOLE SEA GRANT

\$80.4M
economic impact in 2015

*Metrics reported to National Office in June 2016
for work completed Feb 2015 to Jan 2016.*



Sea Grant helps coastal residents reduce flood risk; potential savings of \$2M annually in flood insurance

“The assistance provided by Woods Hole Sea Grant and Cape Cod Cooperative Extension was essential in gaining acceptance to the CRS program. Having an experienced point person to guide and coordinate us through the enrollment process made a big difference in our decision to join the program.”

- Paul Lagg,
Town Planner for Eastham, MA

Coastal towns in Massachusetts are susceptible to frequent flooding, which often raises flood insurance costs. Woods Hole Sea Grant created the first regional [Community Rating System \(CRS\) coordinator position](#) to help residents of Barnstable County improve their flood safety, which later received a national Award for Excellence in Floodplain Management. Participating in the CRS offers discounts on flood insurance for residents within a community that takes action to reduce flood risk. Woods Hole Sea Grant aims to help all 15 towns in the county participate in the CRS which would save over 10,000 policy holders more than \$2 million annually.



Extension agent collects shellfish samples in Barnstable Harbor. Credit: Diane Murphy

“When it comes to helping municipalities reach their nitrogen reduction goals, shellfish have a big appeal because they’re a cheaper alternative than wastewater treatment systems or any type of sewerage, and results can be seen faster.”

- Joshua Reitsma,
Woods Hole Sea Grant

Sea Grant research finds added benefit of shellfish aquaculture; nitrogen removal in local waters

Towns along Cape Cod are looking to shellfish not only as tasty culinary treats, but also for help cleaning up waters degraded by excess nitrogen in the region. While nitrogen is essential for all plants and animals, too much nitrogen in ponds and waterways—often caused by fertilizer runoff and septic tank runoff—can fuel algae growth, and cause low oxygen levels.

A study funded by Woods Hole Sea Grant documented the first comprehensive measurement of [nitrogen removed by shellfish](#) harvested from waters off Cape Cod. The town of Mashpee, MA has already used data from this study in the development of their Comprehensive Watershed Nitrogen Management Plan which includes several approaches to nitrogen reduction in addition to shellfish aquaculture. The combination of reduced fertilizer use and shellfish aquaculture could potentially reduce wastewater treatment costs.

Sea Grant educates seafood consumers to minimize risk and expand a growing industry

The Massachusetts shellfish aquaculture industry has grown rapidly over the last decade and now grosses over \$27 million in net value. A major barrier to industry expansion has been growing concern over foodborne illness related to shellfish harvest and consumption.

Woods Hole Sea Grant worked with state and local partners to develop and distribute educational brochures geared towards safe shellfish harvesting, preparation and storage guidance, and nutritional benefits. [These brochures are available online](#), as well as distributed to municipal offices in 55 coastal towns and over 58 seafood retail locations in 28 towns. The goal of these brochures is to better educate consumers about proper handling of shellfish to minimize risk, in addition to promoting the nutritional benefits to help expand shellfish aquaculture in the state.



Contact information

Matthew Charette, PhD. Director, Woods Hole Sea Grant,
mcharette@whoi.edu, Office: (508) 289-3205