

# A Smart Investment in Massachusetts' Coastal Economy



**Woods Hole Oceanographic Institution Sea Grant puts science to work for Massachusetts' coastal communities and economies** by supporting businesses, municipalities, and students. A trusted source of expertise, our program bridges research, education and community outreach to boost resilience.

In 2024, a federal investment in WHOI Sea Grant of \$1.5 million resulted in:

**\$8.6 Million**  
Economic Benefit

**494%**  
Return on Investment

Shellfish  
Propagation  
Program  
**\$6,973,612**

Discounts on  
Flood  
Insurance  
**\$602,000**

Coastal  
Resilience  
Assistance  
**\$334,452**

COAST  
Classroom  
Lessons  
**\$137,270**

**27,712**

Volunteer hours across Sea Grant-supported research projects and education programs

People engaged in Sea Grant-supported informal education programs

**5,891**

**1,597**

Acres of coastal habitat protected, enhanced or restored as a result of Sea Grant activities

Tons of plastic shrink wrap used to protect boats in the summer diverted from the waste stream

**46+**

\* Metrics reported to National Sea Grant Office in June 2025 for work completed Feb. 2024 to Jan. 2025.

## Notable Program Accomplishments



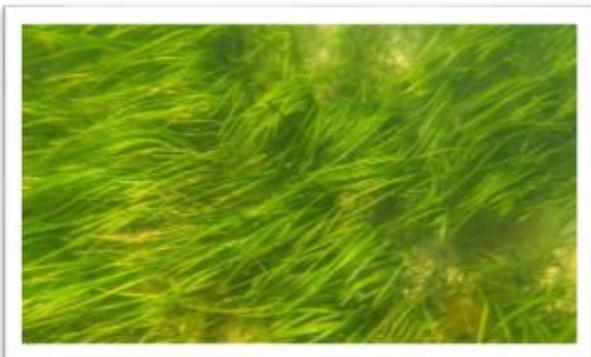
### SMARTER COASTAL LENDING DECISIONS

Our coastal processes and floodplain specialists equipped commercial mortgage lenders on Cape Cod with critical information about the flooding and erosion risks to properties in their portfolios. This new line of outreach strengthens our program's work with the real estate industry, one of the first pathways through which to inform property owners of coastal resilience opportunities.



### FROM LAB TO CLASSROOM

Our program partners with the NOAA Northeast Fisheries Science Center to design and deliver classroom lessons packed with hands-on activities, presentations, and projects based on research conducted at both organizations. The Coasts, Oceans, and Stewardship (COAST) program lessons align with the Massachusetts Science and Technology/Engineering standards, and reached nearly 2,000 K-12 students per year over the last 5 years.



### ROAD TO RECOVERY FROM EUTROPHICATION

As growth outpaces infrastructure upgrades in towns across Massachusetts, nitrogen buildup continues to challenge the health of coastal waterways. Our program funded three projects researching different sides of the eutrophication problem: a pond's road to recovery after sewerage; whether Innovative/Alternative septic systems can remove nitrogen *and* contaminants of environmental concern; and best practices to widely restore eelgrass meadows.



### SHELLFISH FARMING BOOTCAMP

Farmed shellfish alone are valued at \$34.2 million. To support the industry's growth, our program offers Fundamentals of Shellfish Farming, a comprehensive 10-week course covering the basics of shellfish aquaculture through lectures, dissections, field trips, and meeting industry professionals, plus permitting and business basics. The affordably-priced course has reached over 400 participants since 2008.

**WHOI Sea Grant Director**

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RESEARCH

EXTENSION

EDUCATION