

A Smart Investment in Massachusetts' Coastal Economy



WHOI Sea Grant is one of 34 Sea Grant college programs and is based at the Woods Hole Oceanographic Institution. Highlights from WHOI Sea Grant's work in 2021* are detailed below.

In 2021, a federal investment in WHOI Sea Grant of \$1.1 million resulted in:

\$3.3 Million

Economic Benefit

200%

Return on Investment

Coastal Erosion & Flooding
Site Assessments
\$266,700

Discounts on
Flood Insurance
\$387,497

Shellfish Propagation Program
\$1,412,625

Teacher Training Workshops
\$1,113,400

1,729

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

People engaged in Sea Grant-supported informal P-12 education programs

19,626

17,000 +

Recreational harvesters who benefit from the shellfish propagation program

* Metrics reported to National Sea Grant Office in June 2022 for work completed Feb. 2021 to Jan. 2022.

NOTABLE PROGRAM ACCOMPLISHMENTS



Investigating the Effects of Coastal Acidification on Shellfish

Acidification of coastal waters poses a threat to shellfish in the Northeast. Our program is working with the Town of Barnstable and the Center for Coastal Studies to [track shellfish growth and survival](#) under varying water quality conditions. Results will be shared with coastal managers and shellfish farmers to help them optimize their propagation and growing operations.



Storm Tide Pathways Maps Help Emergency Managers with Flood Planning and Response

The [Storm Tide Pathways](#) mapping project provides emergency managers with real-time information on the routes that flood waters are likely to take in low-lying coastal areas during storm events. Developed by Center for Coastal Studies with assistance from our program, the maps are also used communities to plan for future coastal flooding with advanced accuracy.



Research to Catalyze Coexistence of Offshore Energy with Northeast Fishing and Coastal Communities

As part of the Northeast Sea Grant Consortium, our program partnered with the DOE and NOAA to award \$1.1 million for social science and technology research on offshore renewable energy in the Northeast. The [projects](#) will catalyze research into the coexistence of marine energy—wind, current, tidal, and wave energies—with Northeast fishing and coastal communities.



Summer Program Trains the Next Generation of Women Scientists

Our program partnered with Earthwatch Institute to design and deliver a week-long “[Girls in Science](#)” program for 20 Massachusetts-based, high school young women, including many from underrepresented groups. Participants worked on marine mammal bioacoustics research, learned from strong female role models, and investigated a range of STEM careers.