NERACOOS

NORTHEASTERN REGIONAL ASSOCIATION OF COASTAL OCEAN OBSERVING SYSTEMS

ocean data for decisions
PEOPLE USE NERACOOS’ OCEAN INFORMATION TO SAVE LIVES,

IMPROVING MARINERS’ SAFETY & PREVENTING OIL SPILLS

WHAT New wave rider buoy & current meter

IMPACT A billion gallons of petroleum products move through the Cape Cod Canal every year. Commercial ship captains told us they needed more information on conditions near the Cape Cod Canal to aid navigation decisions and help prevent oil spills. The new buoy and current meter are connecting NERACOOS stakeholders with information crucial for their safety and preventing oil spills.

WHERE Cape Cod Bay (buoy) & MA Maritime Academy in Buzzards Bay (current meter), MA

WHO NERACOOS; MA Department of Environmental Protection; Woods Hole Group; MA Maritime Academy; NOAA PORTS

SUPERCHARGING LONG-TERM OCEAN MONITORING

WHAT More research partnerships & improved access to valuable data

IMPACT The Integrated Sentinel Monitoring Network (ISMN) was created to track and respond to changes in the marine environment. As a new regional node of the Marine Biological Observing Network (MBON), ISMN has expanded its monitoring at two key Gulf of Maine stations to aid in predicting essential habitat for the critically endangered North Atlantic right whale. ISMN’s induction into the MBON program is accelerating our understanding of shifting ecosystem conditions, and improving our adaptation efforts.

WHERE Study sites throughout the Gulf of Maine

WHO NERACOOS; Northeast Regional Ocean Council; University of Maine; University of New Hampshire (UNH); Gulf of Maine Research Institute; Bigelow Laboratory for Ocean Science; New England Aquarium; St. Joseph’s College; Woods Hole Oceanographic Institution (WHOI)

HELPING COMMUNITIES TAKE ON ACIDIFICATION MONITORING

WHAT A one-day, region-wide coastal acidification monitoring blitz

IMPACT Hundreds of citizen scientists throughout New England spent a day gathering information and more than 500 water samples from their slice of coastline. The success of Shell Day proves that engaged communities working hand-in-hand with scientists add real value and can capture important data that deepens our understanding of coastal acidification.

WHERE 100 sampling sites from Maine to Long Island Sound, CT & NY

WHO NERACOOS; Sea Grant of Maine, MIT, & WHOI; Northeast Coastal Acidification Network (NECAN); UMaine; UNH; CT DEEP; EPA Region 1; 60 local monitoring organizations; 8 laboratories

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STRENGTHEN ECONOMIES, & SUSTAIN THE MARINE ECOSYSTEM

NOT ENOUGH OBSERVING DATA? THERE'S A GAP FOR THAT

**WHAT** Closing the gaps with new high-frequency radar (HFR) stations & underwater gliders

**IMPACT** Funding support provided by the Closing the Gaps initiative has significantly improved our delivery of real-time information through the installation of two additional HFR stations and deployment of underwater gliders throughout the Gulf of Maine. The data generated by HFR and gliders help us paint a more complete picture of our ocean and coastal ecosystem; decision-makers of all kinds can depend on these new observing assets to inform important choices that affect human and environmental health alike.

**HFR**
- HFR, which maps surface currents, is a key component of marine navigation, search-and-rescue operations, oil spill response, and harmful algal bloom (a.k.a. "red tide") tracking. The new stations in Massachusetts and New Hampshire will aid resource managers in responding effectively to harmful algal blooms, and will also provide additional coverage of real-time ocean conditions surrounding some of the region’s busiest ports.

**WHERE**
- Northern MA (projected installation 2020); New Hampshire (projected installation 2021)

**WHO** NERACOOS; WHOI

**GLIDERS**
- The gliders being deployed throughout the Gulf of Maine are increasing our understanding of the marine environment and aiding in the detection of baleen whales, including the critically endangered North Atlantic right whale. The near real-time data from gliders helps prevent ship strikes, a major cause of right whale population decline, and also advises the decisions of mariners and resource managers.

**WHERE** Throughout the Gulf of Maine

**WHO** NERACOOS; University of Maine; WHOI

NERACOOS Buoys Buoy Our Blue Economy

When it comes to demonstrating the value of NERACOOS, a number can be worth a thousand words. These 2019 stats hint at our information’s reach and the importance of our observing assets to so many.

- **221,421** 2019 visits to NERACOOS data pages
- **600,510** # of ocean observations made by the 11 NERACOOS buoys in 2019
- **45.9K** Visits to Buoy E, NERACOOS’ #1 real-time data source
- **24.6K** Visits to B
- **20.3K** Visits to F
- **20.1K** Visits to I

"MARITIME SAFETY"
- Top reason reported by users to access NERACOOS data

Though we continue to partner on new and innovative projects, NERACOOS’ core mission remains unchanged: we provide high-quality, real-time information on ocean conditions through our network of buoys. The people who depend on NERACOOS ocean observing data are the backbone of the Blue Economy; maintaining and upgrading our system of buoys is vital to ensuring the economic health of our region and its sustainable growth.
OUR SYSTEM OPERATORS
These organizations are some of the many that operate NERACOOS-funded assets.

75% of NERACOOS funds go directly to our partners to produce & integrate ocean information.

FINANCIALS: 2019 REVENUE & EXPENSES + ANNUAL GROWTH TRENDS

NERACOOS is funded primarily by NOAA through the U.S. IOOS Regional Program. In 2019, NERACOOS received additional funding from the IOOS Ocean Technology Transition Program, IOOS Coastal and Ocean Modeling Testbed Program, NOAA's Ocean Acidification Program, NOAA's National Centers for Coastal Ocean Science, NOAA's Office for Coastal Management, the Bureau of Ocean Energy Management, the University of New Hampshire, Woods Hole Oceanographic Institution, the University of Maryland's Center for Environmental Science, the University of Maine, Northeast Regional Ocean Council, and others.

2019 EXPENSES - $3,311,341

- Observations 63%
- Managing & Building NERACOOS 23%
- Models & Forecasts 7%
- Data Management 5%
- Stakeholder Engagement 3%

2019 REVENUE - $3,414,623

- Integrated Ocean Observing 81.4%
- Ocean Technology 9.1%
- Ocean Modeling 5%
- Non-federal 1.8%
- Regional Resiliency 1.7%
- OA Engagement 1%

ANNUAL GROWTH IN REVENUES, 2010 - 2019

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<th>Year</th>
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*2010 figure does not include revenue used for asset operations.

The amounts presented here are derived from NERACOOS' unaudited financial statements for the year ending September 30, 2019. Audited financial statements will be available Spring 2020. Copies of the previous years' audited financial statements are available at www.neracoos.org.