Our mission is to PRODUCE, INTEGRATE and COMMUNICATE high-quality information that helps ensure safety, economic and environmental resilience, and sustainable use of the coastal ocean.
Dear Members, Partners, and Friends:

First off, let me thank you for your continued support and collaboration, without which we would not be where we are. The past year was an exciting time for NERACOOS. After the celebration of our fifth anniversary and the continued growth of the organization, we decided to take a step back in 2014 to re-evaluate the organization’s strategic priorities and values to ensure a solid foundation moving forward. We are very excited to announce the new NERACOOS mission statement, which encompasses who we are:

Our mission is to produce, integrate and communicate high quality information that helps ensure safety, economic and environmental resilience, and sustainable use of the coastal ocean.

In this report, we share a few accomplishments from 2014 that highlight our efforts towards achieving this mission. I look forward to further increasing our impact in 2015, in part through two new awards — one to enhance coastal preparedness and response to storms and the other to develop the largest coastal nutrient observatory in North America. We will share quarterly updates on these projects throughout the year in our newsletter. Be sure to sign up if you have not done so already.

As always, please do not hesitate to contact me with any suggestions.

Sincerely,

J. Ru Morrison, Ph.D.
Executive Director, NERACOOS
NEW TECHNOLOGY FOR DETECTING AND PREDICTING RED TIDE EVENTS

An array of buoys with high-tech sensors for detecting harmful algal blooms — commonly called red tide — are being deployed along the New England coast from May through July 2014. The buoys, developed and deployed by the Woods Hole Oceanographic Institution (WHOI), carried robotic instruments that detected and measured the organisms that cause red tide. The near real-time data delivered from these buoys provided key information about the location and extent of red tide and allowed early warning for coastal managers. The information will be combined with ocean measurements from NERACOOS buoys to improve predictive models of red tide in the Gulf of Maine.

DELIVERING INFORMATION TO SUPPORT THE COASTAL GUARD

U.S. Coast Guard personnel rely on NERACOOS data to improve the safety and efficiency of their operations. • Ocean forecasts: Narrowing of search and rescue areas. • Remote observations: Heavy weather training and vessel selection. • Wind predictions: Inspections of aid to navigation. • Air temperature: Prediction of icing on roads.

STUDENTS CONNECT WITH THE OCEAN THROUGH DRIFTER BUILDING PROJECT

NERACOOS provides the opportunity for hundreds of students to learn about ocean currents through building and deploying their own oceanographiic drifters. In May, NERACOOS co-sponsored a workshop with the Northeast Fisheries Science Center Drifter Program where more than a dozen teachers learned how to build and track the drifters. These drifters are essential to improving research and rescue, understanding red tides, and studying other oceanographic phenomena.

2014 FINANCIALS

NERACOOS is funded primarily by NOAA through the U.S. IOOS Program. In 2014 NERACOOS successfully brought in additional funding from NOAA, ONR through the National Fish and Wildlife Foundation, and the IOOS Ocean Transfer Program.

IMPROVING SCIENCE, MONITORING AND PUBLIC UNDERSTANDING OF OCEAN ACIDIFICATION

Ocean acidification (OA) is a serious threat to shellfish, and New England’s $1.2 billion fishery. In 2014, NERACOOS took a lead in establishing the Northeast Coast Ocean Acidification Network (NECAN). NECAN has synthesized the latest OA science in the region and is in the process of communicating this critical information to stakeholders who can implement adaptive response to OA. NERACOOS was also instrumental in helping to expand monitoring of OA in Casco Bay and Long Island Sound.

OCEAN INFORMATION FOR SAFETY, RESILIENCE, STEWARDSHIP
STUDENTS CONNECT WITH THE OCEAN THROUGH DRIFTER BUILDING PROJECT

NERACOOS provides the opportunity for hundreds of students to learn about ocean currents through building and deploying their own ocean-going drifters. In May, NERACOOS co-sponsored a workshop with the Northeast Fisheries Science Center Drifter Program where more than a dozen teachers learned how to build and track the drifters. These drifters are essential to improving search and rescue operations, understanding red tides, and studying other oceanographic phenomena.

Left: On the NERACOOS website, students tracked drifters that they had built and launched, enabling them to study ocean surface currents. Right: Wells High School in Maine was among the dozen schools participating in the drifter project.

DELIVERING INFORMATION TO SUPPORT THE COAST GUARD

U.S. Coast Guard personnel regularly rely on NERACOOS data to improve the safety and effectiveness of their operations.

- **Ocean forecasts:** Narrowing of search and rescue areas
- **Wave observations:** Heavy weather training and vessel selection
- **Wind observations:** Inspection of aids to navigation
- **Air temperature:** Prediction of icing on vessels

“Not a day goes by where we don’t use NERACOOS data. Without it we’d be sending our Coast Guard crews out uninformed and at greater risk.”

CAPT Brian Gilda, Sector Commander
U.S. Coast Guard Sector Northern New England
2014 FINANCIALS

NERACOOS is funded primarily by NOAA through the U.S. IOOS Program. In 2014 NERACOOS successfully brought in additional funding from NOAA, DOI through the National Fish and Wildlife Foundation, and the IOOS Ocean Technology Transfer Program.

REVENUES: $3,312,993

- National Fish and Wildlife Foundation: 7.8%
- IOOS Ocean Tech Transfer: 18.1%
- Northeast Regional Ocean Council: 0.8%
- Sandy Supplemental: 7.8%
- NOAA Ocean Acidification Program: 3.3%

expenses: $3,312,993

- Managing and Building NERACOOS: 19%
- Data Management and Communications: 12%
- Models and Forecasts: 9%
- Observations: 60%

The financial information above represents funding allocated in 2014 and how these funds were budgeted to be spent. The NERACOOS financial year ends September 30th and audited financials are available at www.guideStar.org.

NERACOOS is the Northeastern entity of the Integrated Ocean Observing System (U.S. IOOS), which is a federally authorized program and works with regional and federal partners to ensure compatible and consistent ocean and coastal data collection, management, and information products across the nation.

The IOOS Association is a non-profit organization formed by the Regional Associations (RAs) for Coastal and Ocean Observing in support of the U.S. IOOS. It works with the 11 RAs, the U.S. IOOS Program Office in NOAA, and other partners to address the nation’s need for coastal observing and information.
“Working to observe and preserve the ocean is a great responsibility. NERACOOS and its community-involvement efforts offer productive ways to engage in a dialogue about these issues.”

U.S. Senator Jeanne Shaheen (NH)

SELECTED 2014 HIGHS AND LOWS

68.8 MPH

80.6°F

31.8 FEET
Highest significant wave height. Buoy N (Northeast Channel). November 2.

87.3°F

31.5°F
Coldest water temperature. Buoy F (Penobscot Bay) at a depth of 3.3 feet. January 23.

820 FEET
Deepest sensor. Buoy M (Jordan Basin) temperature and salinity sensor.

0.3°F

BECOME A MEMBER

Membership in NERACOOS is an important way to support your regional ocean observing system. Our members are a diverse mix of individuals and organizations interested in obtaining, using, and sustaining the best ocean and weather information in the Northeast.

Membership in NERACOOS can include the following benefits:

- Subscription to NERACOOS Observer
- Complimentary registration for Annual Meeting
- Consultations with NERACOOS staff
- Participation in the Sustaining Members Forum
- Opportunities to beta test new NERACOOS products

For more information and an application form, please visit: WWW.NERACOOS.ORG/MEMBERSHIP

Sustaining members attended a trip aboard the R/V Gulf Challenger with the Board of Directors and congressional delegation staff to learn about NERACOOS’s ocean acidification initiative.