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.
79% of NERACOOS funds go toward ocean observations, modeling, and data management.

19 organizations receive funding from NERACOOS.

1.8 MILLION web page views were recorded for NERACOOS.org and NERACOOS-funded buoys on NDBC.NOAA.gov.

48,597 people used the NERACOOS website in 2016.

160+ organizations distribute NERACOOS data on their websites.

NERACOOS had a 28% increase in likes on Facebook.

245 Ocean and atmospheric sensors transmit environmental data 24/7 with support from NERACOOS.

IOOS | Integrated Ocean Observing System
How do you measure success?

ANNUAL GROWTH IN REVENUES

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Value</td>
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<td>500</td>
<td>1000</td>
<td>1500</td>
<td>2000</td>
<td>2500</td>
<td>3000</td>
<td>3500</td>
</tr>
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</table>

“I am just one representative of the industry, everybody I know uses these [NERACOOS] buoys and they have them on their phones, so it’s extremely important to us.”

- Jim Dow, Lobsterman, Maine Lobstermen's Association
‘We use the buoy to help us manage the risk of navigating the oil barges through the canal.’
- Ed LeBlanc, US Coast Guard
CDIP Wave Buoy - Cape Cod Bay, MA
Lat: 41.83 Lon: -70.32
Latest Observation: 03/12 1:33 PM EDT

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Wave height</td>
<td>1.3 ft (0.4 m)</td>
</tr>
<tr>
<td>Wave period</td>
<td>4.3 sec</td>
</tr>
<tr>
<td>Wave direction</td>
<td>N (1°)</td>
</tr>
<tr>
<td>Water temp</td>
<td>40 °F (4.4 °C)</td>
</tr>
</tbody>
</table>

Owned/Operated by:

NERACOOS
79% of NERACOOS funds go directly to our partners to produce and integrate ocean information.
The Northeast Coastal Acidification Network - NECAN

**Review and assess**
- Webinars 2013 - 2014

**Communicate**
- State of the Science Workshop Apr 2014

**Respond**
- Summary Article June 2015

**Set priorities**
- Stakeholder Engagement Workshops 2014 - 2016
- Implementation Plan 2017

**Implementation Plan** 2017

**NECAN APPROACH**

2013 - 2017
Regional Partner Meetings
Generate Information

- Design
- Engagement Subsystem
  - Theme area issue decision maker
  - Information delivery / visualization
- Information Subsystem
  - Required Information
  - Model
  - Observations
- Data Management & Communication Subsystem
- Governance & Management Subsystem
- Implement

Produce | Integrate | Communicate
Reprocessed data
Oct. 9, 2016 to Feb. 14, 2017

Nitrate at 1m and 20m greater than at 50m, capping off low N layer beneath
Hurricane Maria
Max Sustained Winds: 140 mph
Min Central Pressure: 930 mb
About 25 mi West of San Juan
Moving NW at 12 mph
Expanding Surface Current measurements
SeaTrac Development Platform

Two pilot projects selected for 2018
Northeast Coastal Ocean Forecast System (NECOFS)

Mass-Coastal FVCOM
(10 m-5 km)

GOM-FVCOM (0.3-15 km)

Global-FVCOM
(2-50 km)

Scituate, MA (up to 10 m)

Boston Harbor, MA (up to 10 m)

Hampton, NH (up to 10 m)

Saco Bay (up to 10 m)
Manage the data

Sequence:
1. Design
2. Implement
3. Manage Engagement Subsystem
4. Information Subsystem
5. Data Management & Communication Subsystem
6. Governance & Management Subsystem

Steps:
- Theme area issue decision maker
- Information delivery / visualization
- Required Information
- Model
- Observations

Keywords:
- Produce
- Integrate
- Communicate
I WANT DATA

KEEP CALM AND DO BOOT CAMP
Deliver the Information - Products

Engagement Subsystem
- Theme area issue decision maker
- Information delivery / visualization
- Required Information
- Model
- Observations

Data Management & Communication Subsystem

Governance & Management Subsystem

Implement
Hourly Buoy Data

NERACOOS Gulf of Maine
B - Western Maine Shelf
Lat: 43.18  Lon: -70.42
Latest Observation: 12/06 7:00 AM EST

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
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<tbody>
<tr>
<td>Wind speed</td>
<td>14 knots (16 mph, 26 kph)</td>
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<tr>
<td>Wind direction</td>
<td>WSW (259°) True</td>
</tr>
<tr>
<td>Wind gust</td>
<td>18 knots (20 mph, 33 kph)</td>
</tr>
<tr>
<td>Wave height</td>
<td>8.6 ft (2.6 m)</td>
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<tr>
<td>Wave period</td>
<td>8.0 sec</td>
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<tr>
<td>Air temp</td>
<td>51 °F (10.3 °C)</td>
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<tr>
<td>Visibility</td>
<td>NA</td>
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<tr>
<td>Air pressure</td>
<td>1008.37 mb</td>
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<tr>
<td>Water temp</td>
<td>47 °F (8.2 °C)</td>
</tr>
<tr>
<td>Salinity</td>
<td>32.12 psu</td>
</tr>
</tbody>
</table>

Owned/Operated by:
Dr. Neal Pettigrew University of Maine
The wave runup forecast will help us improve predictions of coastal storm impacts and I love the fact that different users can control how the wave runup output is displayed.” John Cannon, NWS
Thank you

Ru.Morrison@neracoos.org