

NERACOOS Strategic Priorities, 2015

NERACOOS is part of the Integrated Ocean Observing System (US IOOS), which works with regional partners to ensure compatible and consistent ocean and coastal data collection, management, and information products across the nation. The following strategic priorities for NERACOOS activities are framed around its mission statement: to produce, integrate and communicate high quality information that helps ensure safety, economic and environmental resilience, and sustainable use of the coastal ocean. This mission is carried out on behalf of ocean users from Long Island Sound to the Canadian Maritime Provinces of New Brunswick and Nova Scotia, including mariners (both commercial and recreational), state and federal agencies, industry, and educational. These priorities address the NERACOOS and IOOS theme areas: Marine Operations; Coastal Hazards; Climate Variability and Change; and Ecosystems, Fisheries, and Water Quality.

Background

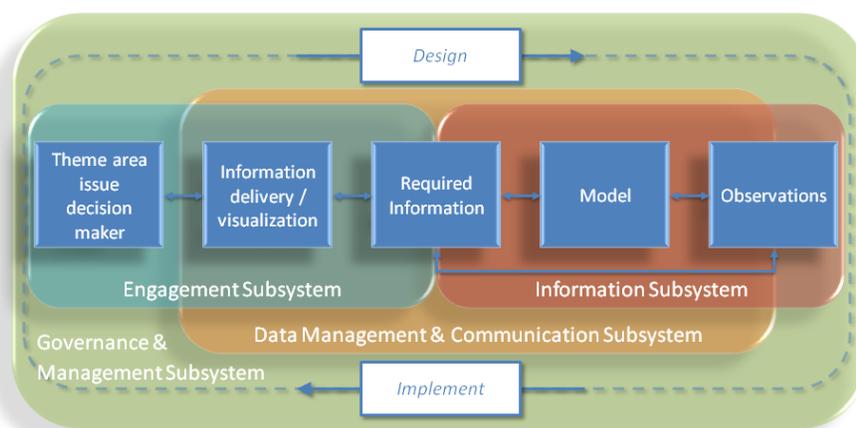
The NERACOOS strategic priorities were initially created in 2010 after the New England-Canadian Maritime Collaboration and Planning Initiative of 2011-2016. They are updated here to reflect changes in ocean observing both regionally and nationally since that time. These include the NERACOOS Regional Build-out Plan (2011), IOOS Summit (2012), and input from the Strategic Planning and Implementation (SPI) Team. Additionally, the interim results from regional planning efforts that are ongoing, namely the Integrated Sentinel Monitoring Network (ISMN) for climate and ecosystem change, and the Northeast Coastal Acidification Network (NECAN) implementation, have also been considered.

This document provides guidance to the community regarding which priorities NERACOOS will be focusing on in the next five years. However, the exact paths toward implementation of these priorities will be determined by the SPI Team in response to funding opportunities as they occur.

NERACOOS' overarching goal is to design and implement an end-user driven and science-based integrated observing system that addresses many societal issues.

The system design schematic (right) adopted at the IOOS Summit in 2012 provides a complementary framework to achieve this: to **produce** real-

time observations and model forecasts (Information Subsystem), to **integrate** (Data Management and Communications Subsystem), and **communicate** (Engagement Subsystem). The schematic also recognizes the importance of coupling models with observations into a single Information Subsystem. One system, multiple uses.



Priorities

NERACOOS will achieve its mission through the following strategic priorities which address key issues described by theme area in part one of the Regional Build-out Plan (2011).

I. Produce

- P1. Maintain and enhance our capacity to observe surface ocean and meteorological conditions.
- P2. Maintain and enhance our capacity to observe subsurface conditions within the coastal ocean.
- P3. Increase monitoring capacity in estuarine and nearshore environments including the number of sea level observations.
- P4. Operate and advance regional modeling capacity for coastal ocean hydrographic, wave, and storm inundation forecasting and hindcasting.
- P5. Pursue increased monitoring efforts of biogeochemical and biological parameters.
- P6. Promote the development and improvement of forecast models that address biogeochemical and biological processes.
- P7. Maintain and advance our ability to observe and model climate variability and change.

II. Integrate

- I1. Maintain and enhance a robust, standards-based regional Data Management System that integrates quality controlled funded and non-funded partner data.
- I2. Expand the integration of new datasets from existing sources, such as remote sensing and local water quality groups.
- I3. Develop regional capacity to integrate citizen science programs.
- I4. Develop and manage systems to integrate data from regional initiatives such as the Integrated Sentinel Monitoring Network (ISMN) and the Northeast Coastal Acidification Network (NECAN).

III. Communicate

- C1. Maintain and enhance delivery of high value and high quality observations and model output to ocean users.
- C2. Develop and expand decision support tools, including data and forecast visualizations.
- C3. Provide training for the next generation of ocean stewards and professionals.