

THE INTEGRATED SENTINEL MONITORING NETWORK

The Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS-Northeast IOOS) and the Northeast Regional Ocean Council (NROC) announce the initiation of the Integrated Sentinel Monitoring Network (ISMN).

The ISMN convenes the Northeast region's marine and estuarine monitoring projects together under one clearinghouse in order to accomplish three key tasks:

- find & fill gaps in present ecosystem observing activities
- facilitate integration and communication among monitoring efforts
- make findings more impactful through data sharing



WHY WE NEED THE ISMN



A multitude of programs and projects supported by federal and state agencies, universities, research institutions, non-profit organizations and citizen science groups independently monitor attributes of the estuarine, coastal and shelf marine ecosystems in the U.S. Northeast region.

In its role as a clearinghouse, the ISMN fits together the puzzle pieces of [these](#) monitoring efforts and shares the progression of ecosystem changes with stakeholders via a new regional data hub. The ISMN was also selected as the Northeastern branch of the national Marine Biological Observation Network (MBON).

THE ISMN'S ACTIVITIES

- The ISMN facilitates tracking responses of key species and ecosystem properties—collectively called *sentinel indicators*—to the Northeast's rapidly shifting marine environment. Sentinel indicators are the proverbial canary in the coal mine, and by facilitating the observation, synthesis and communication of the changes observed by monitoring activities, the ISMN provides decisionmakers with relevant analysis that can inform their actions.
- The ISMN is working to serve as a centralized hub for the area's diverse monitoring efforts, including collaborating with NROC's Ocean Data Portal to integrate data mapping projects, in order to increase the visibility and accessibility of data.
- The ISMN, through its Center for Analysis, Prediction and Evaluation (CAPE), convenes regional experts to synthesize data from multiple observing programs to provide focused analysis of ecosystem status and change for specific stakeholder needs.
- Results from the CAPE inform ISMN's communication of syntheses and predictions of ecosystem status, changes, vulnerabilities, and uncertainties to researchers, decisionmakers, and the concerned public, with the goal of informing future action.



ANALYZE



COMMUNICATE

