

NATIONAL OCEAN ECONOMICS PROGRAM

Turning Economic Data Into Blue Economy Intelligence

The ocean is a major engine of the global economy — but understanding where the blue economy is growing, what it depends on, and how it is changing requires better information.

The **National Ocean Economics Program (NOEP)** provides the data to help answer those questions. For more than 25 years, it has provided consistent, accessible information on ocean and coastal economies — including employment, wages, GDP, and industry trends — for researchers, businesses, NGOs, communities, public officials, and other decision-makers.

Today, Bigelow Laboratory for Ocean Sciences is leading NOEP into its next chapter: connecting economic information with environmental and oceanographic data **to better understand the blue economy and where it's headed.** Using new AI tools, the team is looking beyond GDP to reveal emerging trends, forecast changes, and better understand how decisions affect marine ecosystems and coastal communities.



Photo: Thew Suskiewicz

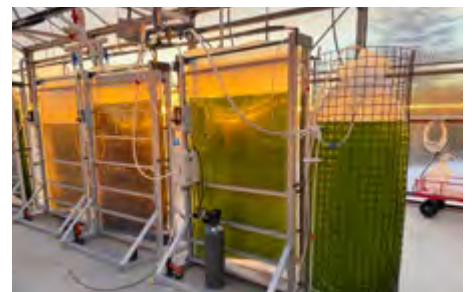


Photo: Lydia Pinard



Photo: David Fields



NOEP + Bigelow Laboratory: What's Next?

MOVING FROM MEASUREMENT TO FORECASTING

NOEP has historically helped measure the worth of the blue economy by tracking employment, wages, GDP, and economic activity across ocean-dependent industries and geographies. It has also used consistent time-series data to identify trends across sectors, regions, and coastal communities.

Now, Bigelow Laboratory is working to answer more powerful questions:

What are the full impacts of economic and investment decisions?

Connecting traditional economic indicators with environmental and alternative socioeconomic data, the full scope of impacts on marine environments and coastal communities can be accounted for and incorporated into decision-making around the blue economy.

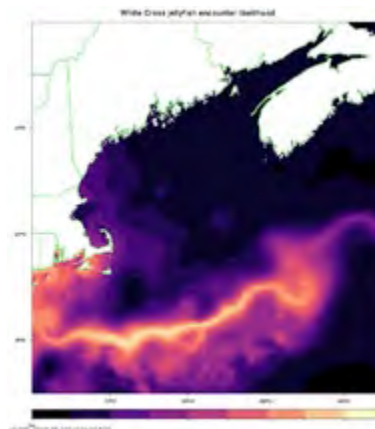
What happens next?

By bringing together economic, environmental, and oceanographic information — and applying new computational and forecasting capabilities — the next evolution of NOEP will help reveal how changes in the ocean affect industries, communities, and economic opportunities.

BETTER INFORMATION. BETTER DECISIONS.

Integrated blue economic intelligence can help:

- **Financial institutions and investors** identify emerging sectors, understand environmental dependencies and risks, and guide investment and financing decisions.
- **Governments and public finance institutions** evaluate economic trends and environmental context, target investments, anticipate vulnerabilities, and understand the potential impacts of policy and infrastructure decisions.
- **Industry and coastal communities** understand changing markets and environmental conditions and identify opportunities for economic growth and resilience.
- **Scientists and research institutions** translate scientific knowledge into decision-relevant information, develop new partnerships with financial actors, and create pathways for research and innovation to achieve greater impact.



EVOLVING OCEAN ACCOUNTS FOR A CHANGING WORLD

NOEP began as a pioneering U.S. effort. Its approach has since helped inform the development of ocean economic accounting around the world.

Bigelow Laboratory now sees an opportunity to build on NOEP's economic foundation through a broader ocean accounts approach — bringing economic, environmental, and social data together to show how the ocean, industries, and communities are connected.

Photo: NASA

CONNECTING THE ECONOMY TO THE OCEAN IT DEPENDS ON

Traditional economic statistics tell us what happened. Environmental observations tell us how the ocean is changing. Bringing these datasets together can help us understand the relationship between the two.

Bigelow Laboratory is working to expand NOEP and advance a broader ocean accounts platform that can integrate:

- **Economic Data:** Employment / wages / GDP and output / industry and sector trends
- **Ocean and Environmental Data:** Ocean conditions / ecosystem indicators / natural resources / environmental change
- **Social and Community Data:** Coastal communities / workforce / economic dependence / distribution of impacts and benefits

Together, these data create a richer, more connected picture of ocean economies across geographies — moving beyond individual national datasets toward a more integrated, global understanding.

Over time, that foundation will also support predictive tools that help users understand how environmental, economic, and technological changes could affect industries and communities.



Photo: Atlantic Sea Farms and New England Ocean Cluster



Photo: Reyn Yoshioka

WHY BIGELOW LABORATORY?

Bigelow Laboratory brings together ocean research, data science, forecasting, and blue economy innovation — capabilities that span both sides of the science-finance relationship.

While NOEP can provide the intelligence to help capital make better decisions, initiatives such as the Marine Algal Research and Infrastructure Accelerator and the Maine Blue Biotech Studio help move scientific discoveries and emerging technologies toward commercialization and scale.

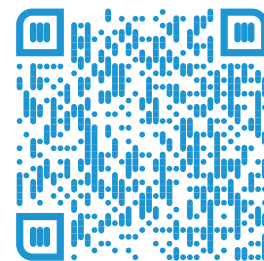
Together, these capabilities enable Bigelow Laboratory to provide investors and other decision-makers with a deeper understanding of the ocean economy and a connection to promising innovations emerging from marine science.



Photo: Yasmine Dechraoui Bottein



Photo: Matt LeRay STRI



Learn more and collaborate with us

National Ocean Economics Program Bigelow Laboratory for Ocean Sciences

John Bohorquez, founder,
Blue Economy Solutions Lab
jbohorquez@bigelow.org

Nick Record, senior research scientist and director,
Tandy Center for Ocean Forecasting
nrecord@bigelow.org
(207) 315-2567 x316

