



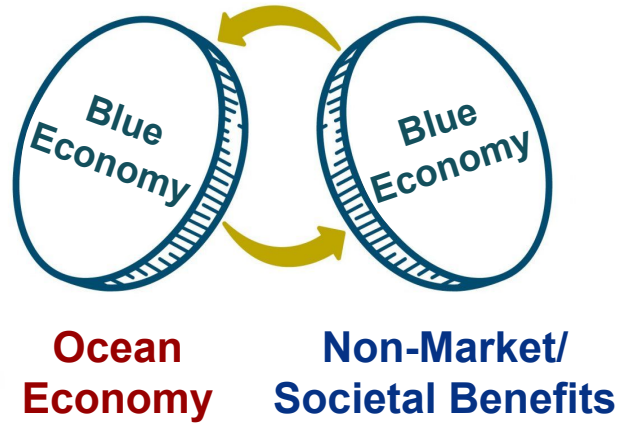
Fostering and Building a New Blue Economy

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DMAC Annual Meeting 2022



The Blue Economy



What's "New" About the New Blue Economy?

Ocean Economy



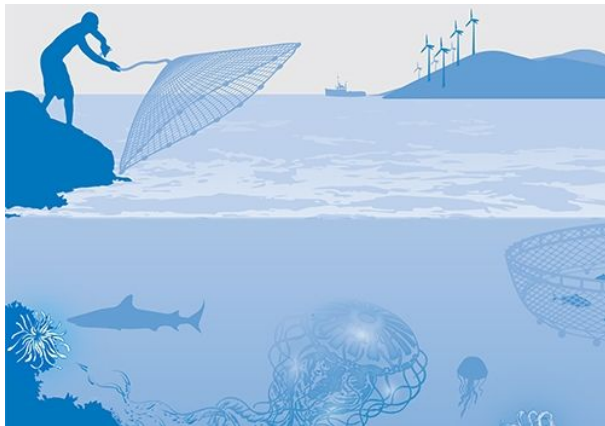
Blue Economy



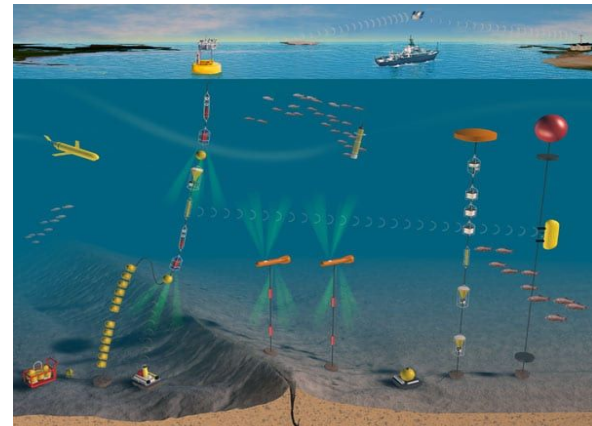
New Blue Economy



All economic activities related to the oceans, seas, and coastal regions.



Couples the promotion of economic growth, social inclusion, and the improvements of lives and livelihoods, while ensuring environmental sustainability of the ocean and coastal areas.



Uses **technology, data and information** to catalyze public and private sector innovation and inform smart decision making across all Blue Economy sectors.

The New Blue Economy



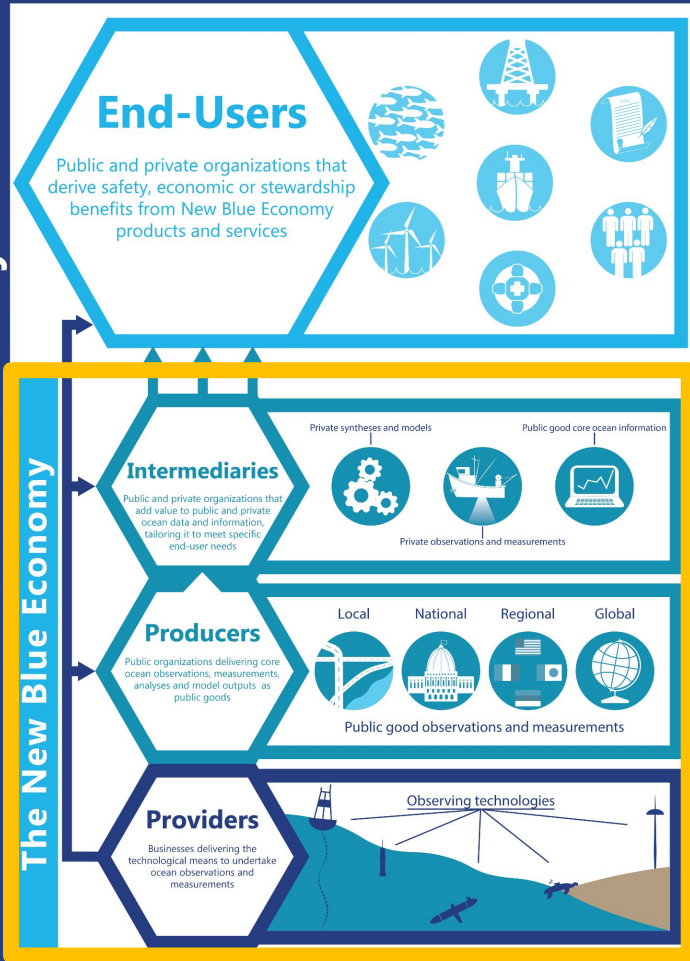
“The New Blue Economy is a knowledge-based economy, looking to the sea not just for extraction of material goods, but for data and information to **address societal challenges and to inspire their solutions.**”

- Dr. Rick Spinrad



The New Blue Economy

The Blue Economy



- The Blue Economy is expected to **double** from 2010 to 2030.
- This will drive **growth** in scale and complexity of **New Blue Economy products** and services that need to be **delivered by public and private** organizations.
- NOAA will need to **effectively partner** with academia and industry to deliver this future New Blue Economy.
- Increased need to **coordinate and operationalize the value chain** linking providers, producers, and intermediaries of data for society = IOOS every DAY!

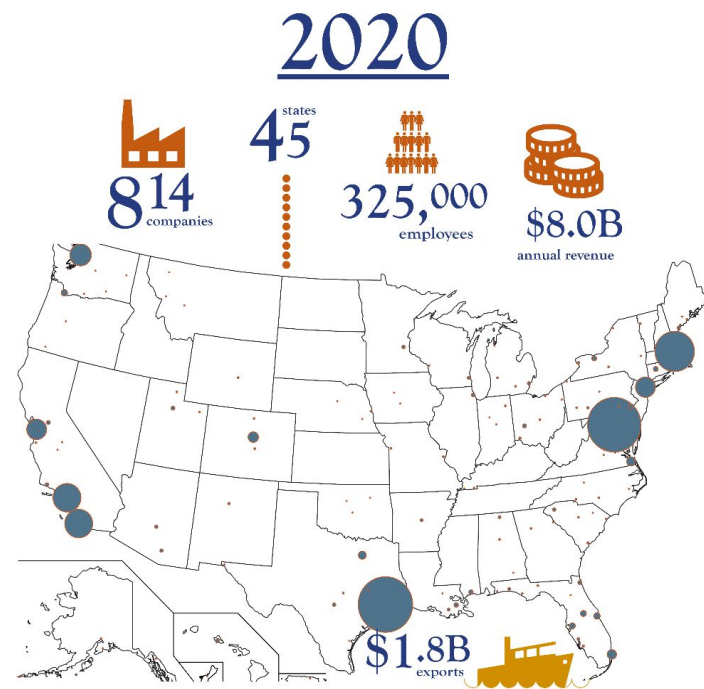
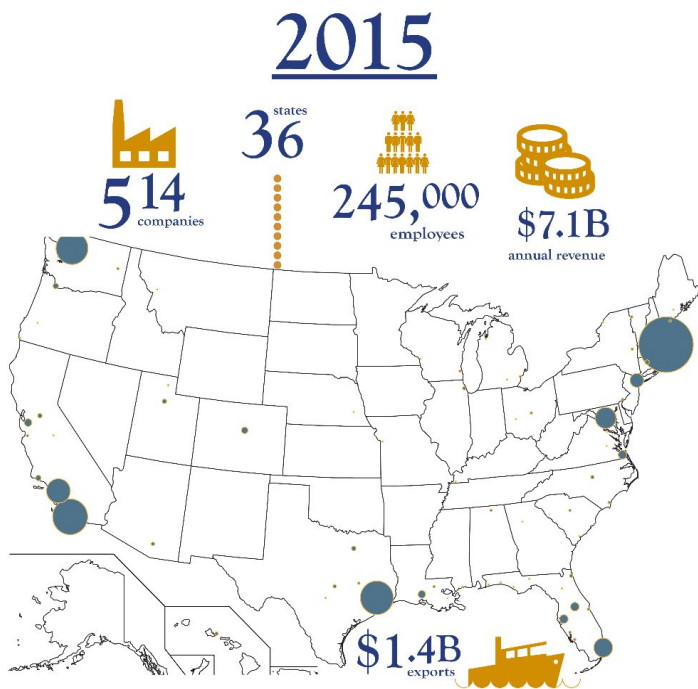
The Ocean Enterprise Study 2015-2020

The Ocean Enterprise Study
2015 – 2020

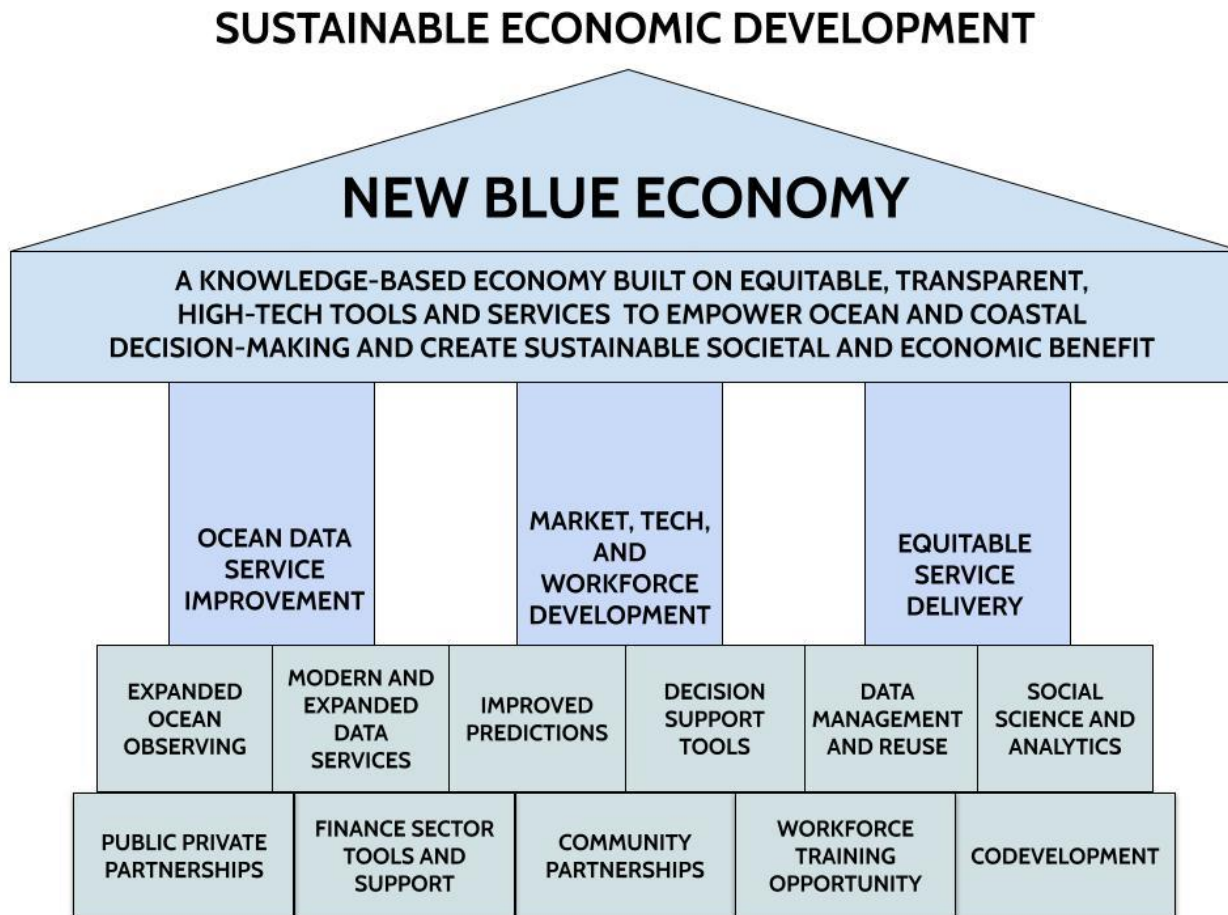
A study of U.S. New Blue
Economy business activity



Objective: Understand the scale and scope of US New Blue Economy business activity and how this has changed since 2015.



Draft Foundation for NOAA to accelerate New Blue Economy growth



NOAA Roles in the New Blue Economy



- Promoting and fostering innovation and opportunities for data-driven, value-added services by:
 - Conducting more ocean and coastal observations
 - Providing accessible, reliable, consistent and accurate data
 - Continuously engaging
 - Developing “principles” and clarifying roles and responsibilities
- Conducting and supporting research, development, acquisition and application of new technologies
- Promoting and developing a diverse and ready New Blue Economy workforce
- Optimizing the application of science, technology and data to fulfill NOAA missions, including providing services for an informed and Climate Ready Nation

Strategic Plan Updates



- NOAA and NOS are drafting updates to their Strategic Plans with specific New Blue Economy sections
- Both seek to:
 - Define the New Blue Economy
 - Explain how the New Blue Economy will utilize the Service Delivery Framework
 - Prioritize social inclusion and equity

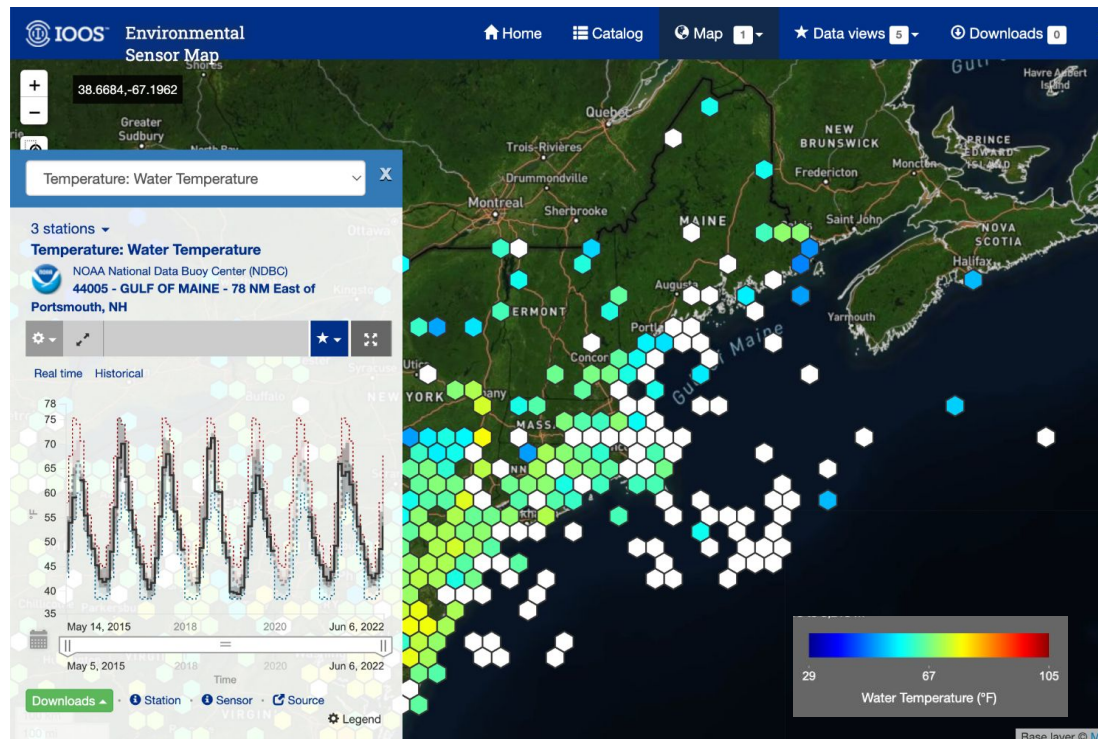
Axiom Environmental Sensor Map

Our coastal environment is changing rapidly.

The Challenge: Environmental data is being collected separately at tens of thousands of stations across the United States

The Solution: Create a centralized database that integrates regional, national, and global real-time data across the IOOS Enterprise

Result: Disparate data can be used together for analysis and decision-making



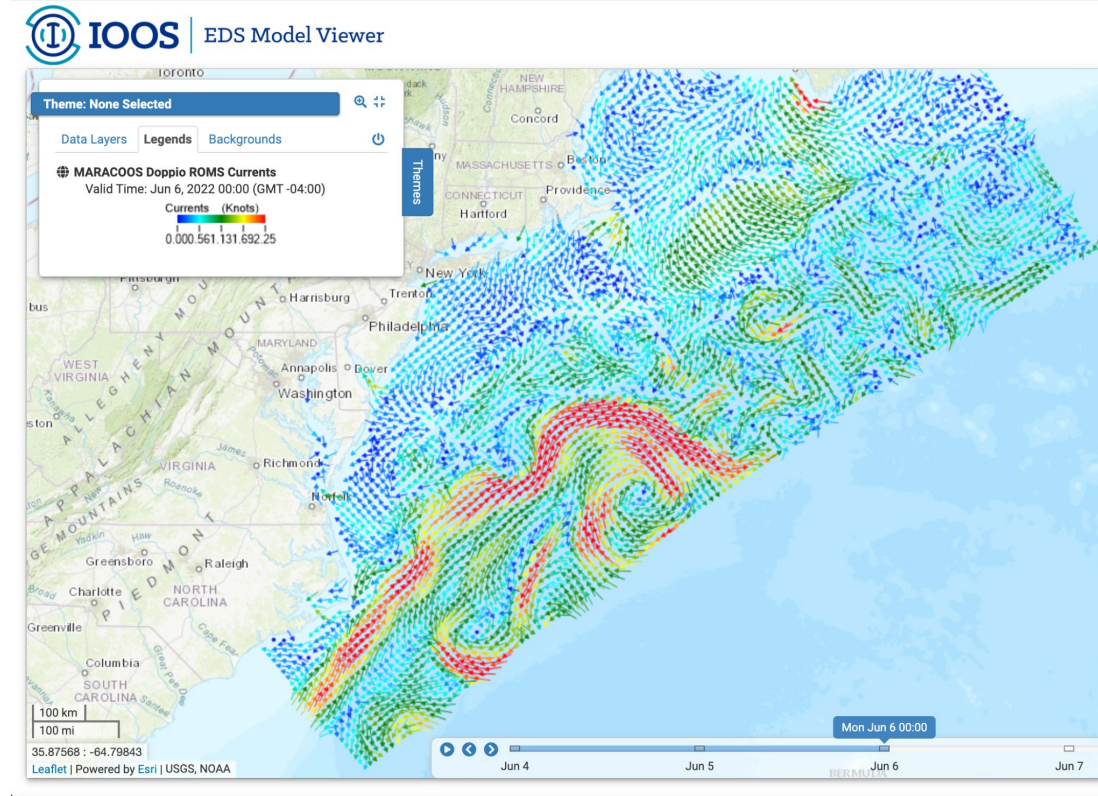
RPS Environmental Data Server/IOOS Model Viewer

Marine forecasting is critical to growing Blue Economy sectors.

The Challenge: No centralized way to view ocean model output created by NOAA and others

The Solution: The IOOS Model Viewer enables users to integrate modeled variables together in a map-based environment

Result: This interface enables ocean intelligence from models to be used to inform decisions with societal value



Sea Level Rise Technical Report

Global and Regional Sea Level Rise Scenarios for the United States

Four Key Takeaways:

- **The Next 30 Years of Sea Level Rise:** On average, the U.S. will see as much sea level rise by 2050 as seen in the last century
- **More Damaging Flooding Projected:** Sea level rise leads to increased coastal flooding even in the absence of rain or storms
- **Emissions Matter:** At least two feet of sea level rise is likely by 2100 and reducing emissions now can lower future risk.
- **Continual Tracking:** Earth-monitoring systems are vital for tracking future sea level rise



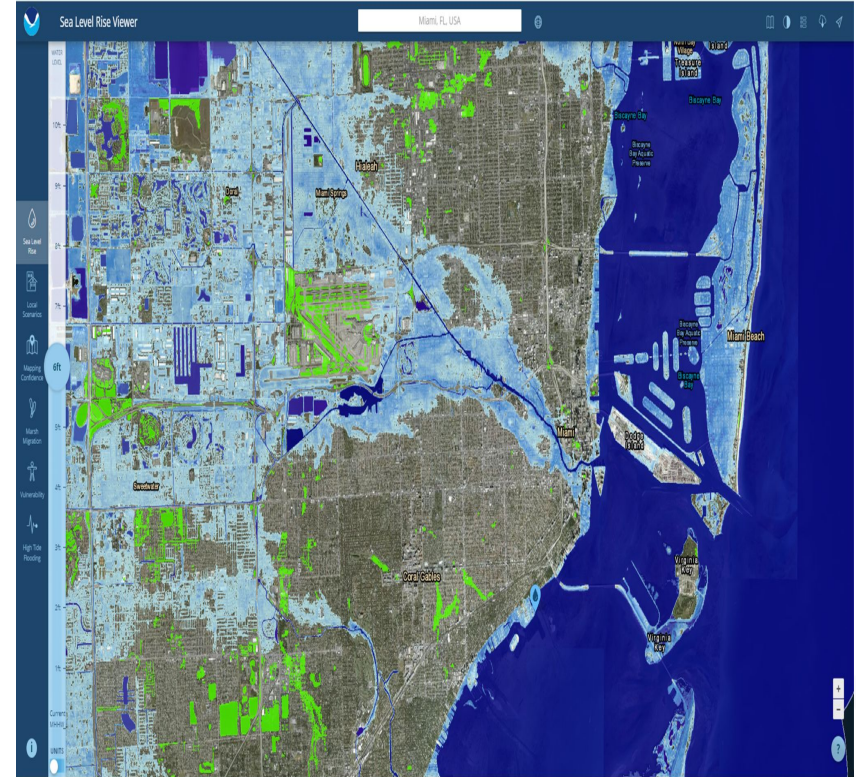
NOAA's Sea Level Rise Viewer

Sea Level Rise is expected to rise about one foot for much of the coast by 2050

The Challenge: Getting this information to communities in a way that is easy to access and meaningful

The Solution: Create a tool based on the latest sea level rise projections that allows all communities to visualize the impacts of sea level rise

Result: Communities across the country can better plan for and adapt to sea level rise



Sea Level Rise Viewer - Miami with 6 ft. of sea level rise

Next steps for IOOS Enterprise

Durability

- Position IOOS as key for growing a durable New Blue Economy

Strategic Role

- Fortify, expand and integrate our ocean and coastal data collection and service delivery to meet national and regional needs
- Equitable service delivery framework and DEIA goals must be part of all NBE work

Collaboration

- Collaboration across public and private sectors to achieve an integrated operational capability
- Capture successes in months ahead!



Conclusion



- The New Blue Economy is a knowledge-based, data-driven economy
- Knowledge and data have value, including economic value
- The New Blue Economy is grounded in a commitment to basic principles of sustainability, conservation and equity
- The New Blue Economy provides the foundation for sustainable economic use of the ocean and its resources, while protecting ocean health and ensuring social equity

Thank you!



IOOS | EYES ON THE OCEAN™

