

The Value of Rhode Island's Blue Economy

Executive Summary

March 2020

Rhode Island's blue economy: the industries with a connection to our coasts and ocean, higher education and research institutions, marine-focused advocacy and civic groups, and government agencies that contribute to building a workforce, invest in sustainable growth and innovation, while planning for the protection of our coasts and oceans.

Rhode Island makes significant contributions to the blue economy here, nationally, and globally. In fact, about 6-9% of Rhode Islanders work within the state's ocean economy, a sector with a direct impact of more than \$5 billion.

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The COVID Context for Rhode Island's Blue Economy— A Note from the Author

Here at the University of Rhode Island, we celebrated the release of the full report “*The Value of Rhode Island’s Blue Economy*,” at the start of March 2020—only days before COVID-19 turned everything upside down. As we recently prepared this executive summary to serve as a “quick start” tool to the larger document, we recognized that the state’s blue economy has been impacted in ways we never could have envisioned only weeks before. However, we are seeing signs of resilience and innovation, with oyster growers and commercial fishermen now pursuing direct sales to the public through new apps, firms like General Dynamics Electric Boat moving some of their employees to remote work, and the Navy even continuing to hire additional staff.

Rhode Island’s economy certainly faces an uphill challenge in rebuilding post-COVID, but the information in this executive summary and the full report, though collected before COVID, is absolutely germane and valuable. This is because Rhode Island has always rebounded after major events—wars, weather catastrophes, and national and global recessions—that have threatened its economy and quality of life. Rhode Islanders, right back to the Native Americans, Roger Williams, and Samuel Slater, have always been innovators. We have always had an ability to turn to each other as collaborators and overcome economic downturn. Take it from Wendy Mackie, chief executive officer of the Rhode Island Marine Trades Association and Composites Alliance, who shares in the full report that when the Recession of 2007 hit, “people definitely saw that they were going to have to do something different if they were going to stay in business.” And they did.

Now it’s time to lean into that skill once again. It’s a different world now, but Rhode Island’s blue economy, as you’ll see here, and even more fully in the complete report, certainly represents a way forward for us all.

Please give us your feedback, be well and stay safe.



Jennifer McCann,

*Director, U.S. Coastal Programs, URI Graduate School of Oceanography Coastal Resources Center
Director of Extension, Rhode Island Sea Grant*

Defense

Value: \$3.16 billion

Jobs: 16,011



The highest paying industry sector in Rhode Island and a total economic output of \$4.3 billion, Defense has been instrumental in providing global military solutions and strategies as well as investment in applied research and innovation for other sectors of the community.

With its emphasis on boosting innovation and diversifying clients, products, and financial resources, the defense sector distinguishes itself as a major leader and growth sector for the state's blue economy.

*"Rhode Island is the Silicon Valley for undersea ocean technology."
- Stephanie Murphy & Amanda Costa (NAVATEK)*

Marine Trades forms the backbone of the state's blue economy. With a total economic effect of \$4.61 billion, this sector also recognizes the need to protect the state's natural resources.

With support from the state and Rhode Island Sea Grant, the marine trades sector is turning recycled fiberglass boats into building materials and keeping them out of landfills and revitalizing a streamlined Clean Marina Program to support efforts to enhance the marine environment.

Marine Trades

Value: \$1.45 billion

Jobs: 13,337



"The goal is to continue the innovation, especially within composites, while solving additional issues for marine trades; for example, we need to continue to talk about resiliency and protecting these businesses. It's also very important to maintain a working waterfront and public access— we need to consider what we want our waterfronts to be for the future."

– Wendy Mackie, RI Marine Trades Association

Ports and Shipping

Value: \$727 million

Jobs: 2,000



More than 9 million tons of waterborne cargo passed through Rhode Island ports in 2017. Today, port businesses are serving as staging, storage, manufacturing, and transport sites for offshore renewable energy components like wind turbine blades. Ports and shipping leaders are increasingly engaged in understanding and protecting the ocean and coastal environments upon which they depend, participating in efforts that examine the roles that shipping industries can play in issues such as marine mammal conservation, air and water quality, and coastal resiliency building.

“But perhaps most exciting is to think about the future and how we can trade in the goods and services of the new emerging advanced blue economy, all the while innovatively building the smart and green ports of the future.”

– Jason Kelly, Moran Shipping Agencies, Inc. and SeaAhead

More than nine million Rhode

Islanders and tourists per year enjoy Rhode Island’s coastal resources. Although it draws impressive numbers of visitors, the tourism and recreation sector faces a balancing act to serve as large a customer base as possible, while protecting the sensitive environmental resources on which the industry depends. A healthy and well-balanced tourism and recreation economy not only builds a robust industry for the state, it also contributes to a healthy and sustainable quality of place for all.

Tourism and Recreation

Value: \$4.3 billion*

Jobs: 83,913



“Destination marketing is very important to [Block] island—it’s a reason why so many of us can live here year-round. At the same time, it’s so critical that we don’t overwhelm our resources here and compromise our ability to maintain a sense of place.”

– Jessica Willi, Block Island Tourism Council

Fisheries

Value: \$151.5 million

Jobs: 2,965



An integral part of Rhode Island’s economic and cultural tapestry, the commercial fisheries industry includes the harvesting and processing of fish and shellfish as well as support businesses and organizations, contributing \$419.33 million (total effect) to our state’s economy and over 4,300 jobs.

This sector has been hit hard by fish catch quotas and restrictions, impacts of climate change (ocean acidification, temperature changes causing species to move elsewhere), micro-plastics, and offshore wind farm development which collectively make it difficult for businesses to plan for the future. Rebounds and recoveries however are often solid, if not strong, and Rhode Island has plenty of opportunities to think creatively about these issues, including current efforts to develop local fish markets and promote the consumption of local seafood by civic organizations and the industry itself. Research is also underway to identify cost effective techniques to process more seafood in Rhode Island.

“ I got into my work and it just became so clear to me how devoted fishermen are to their efforts, to their industry, and to the ocean. They’re sort of the last cowboys, and I just have so much admiration for what they do—it’s noble and dangerous and wild. So, I’m working to help solve some of the problems they’re up against, ocean issues that are really everyone’s issues.”

**– Jason McNamee,
Rhode Island Department of Environmental Management**



Aquaculture is one of the state's fastest growing

sectors (4.7% farm gate increase in 2018), with 76 farms and 319.3 acres in 2018 and increased interest in lease opportunities.

This low-impact green industry farms oysters, mussels, and seaweed that clean the water column (one oyster filters 50 gallons of water/day). As an economic growth area, the state is investing in job training to ensure qualified workers for local farms, and is investigating the potential for farming in the open waters of Narragansett Bay.

Aquaculture

Value: \$5.77 million

Jobs: 194



“Kelp growing is the easy part, the hurdle is selling it.”

– Catherine Puckett (Oyster Wench)

Offshore Wind

Value: TBD

Jobs: 300+



Public-private partnerships, including significant investments in job creation, research, planning, and infrastructure, have established Rhode Island as a national leader in Offshore Wind Energy, with the first-in-the-nation Block Island Wind Farm and the commitment to the Revolution Wind Farm, which is projected to generate enough clean energy to support 25% of the total electricity used by Rhode Islanders annually. Building on this momentum, the state is implementing strategies to increase its workforce and strengthen its offshore renewable energy supply chain, while considering, primarily through coastal management administration, the potential impacts of industry development on existing coastal and ocean uses, resources and wildlife.

“We have a window of time to solidify Rhode Island as a leader in offshore wind energy technology and development—we’re working to support the existing supply chain and attract new companies to the state. We’re committed to supporting the growth of this exciting new clean energy source.”

– Hilary Fagan, Rhode Island Commerce Corporation

Strengthening Rhode Island's Blue Economy: RECOMMENDED STRATEGIES 2020-2025

1. Intensify and expand collaborative leadership.

Establish systems jointly led by government, industry, and academia to engender a sense of shared responsibility and encourage cross-sector creative and marketable solutions that respond to both local and global blue economy issues.

2. Design policies and implement initiatives for Rhode Island's coasts and oceans that meet economic and social needs while doing no harm to the natural ecosystem.

Continue implementing plans and actions that consider the sustainable use and wise management of economic and recreational activities that result in a healthy coastal and ocean natural ecosystem. Prudent regulatory oversight to maintain the state's balance between economic growth and conservation, and private development and public good—particularly in a time of increased sea level rise and storms—must remain a priority.

3. Utilize pressing issues facing Rhode Island and Southern New England as opportunities to leverage the region's technical and governance innovation capacity and approaches.

Rhode Island's public and private sectors should strategically invest in encouraging innovation, acceleration, and application of creative solutions to respond to natural and human-made issues, such as increased sea level rise, severe storms and related flooding, ocean and coastal pollution, resource user conflicts, and food security. Industry clusters should be enhanced and prioritized for financial and technological opportunities that serve as effective strategies to bolster the economy.

4. Prepare and integrate a diverse and increasingly capable cross-sector workforce to foster a growing and integrated blue economy.

Rhode Island should expand its existing workforce development model to respond to industry needs. The blue economy workforce requires additional options, like certificate and increased paid internship programs, professional master's degrees, and continued learning opportunities to develop the required skills and talent to meet growing industry demand, and to enhance the diversity and agility of the state's blue economy. Increased coordination between all workforce and education skill building programs is needed to minimize redundancy and allow this in-demand workforce to respond to multiple sector needs at once. At the same time, workforce wages and benefits are necessary to provide an adequate quality of life.

5. Continually engage and inform a broad constituency for stewarding our ocean resources and meeting the blue economy's education, training, and infrastructure needs.

Ensure Rhode Islanders have increased pride, ownership, understanding, and participation in the sustainable management and health of the state's blue economy. Offer opportunities for Rhode Islanders to "experience" and tour different infrastructure within the sectors so they have better understanding of the value and the interconnectedness.

Moving Forward



Economic growth is vital to our communities, be they global, national, regional, and local. Going forward, the most viable forms of economic success will be those that respect natural resources, including coastal and ocean resources, as the foundation upon which prosperity is built, alongside our rich intermix of social, cultural, and historical resources. A blue economy framework is one way toward achieving such balance, for its industries are already deeply tied to the marine landscape and its many natural resources. Rhode Island has always, since its beginning, put itself forward as an entrepreneurial maritime economy; moving forward, we have an opportunity with our blue economy to recommit to our collaborative spirit and inventiveness and use them, in good and troubled times, to guide us toward new successes – ones that honor our shared dependence on the Ocean State’s coastal and marine-based resources.

*“By investing in Rhode Island’s blue economy,
we are promoting the sustainable growth of our state.”*

Jennifer McCann

*Director, U.S. Coastal Programs, URI Graduate School of Oceanography
Coastal Resources Center & Director of Extension, Rhode Island Sea Grant*



For more information and full report, please visit our web site at:

<https://web.uri.edu/gso/research/blue-economy/>