



The State of Sea Grant

2022 INTERIM REPORT TO CONGRESS




Sea Grant

Letter from the Chair



Deborah Stirling
National Sea Grant Advisory
Board Chair



Dear Members of the United States Congress:

On behalf of the National Sea Grant Advisory Board (Board), I am pleased to share with you The State of Sea Grant 2022 Interim Report to Congress, developed by the Board as directed by the 2008 Sea Grant Act (PL 110-394). In the 2020 Congressional reauthorization of the National Sea Grant College Program Act, the requirement for the National Sea Grant Advisory Board to report to Congress on a biennial basis was modified to read, "The Board shall report to Congress at least once every four years on the state of the National Sea Grant College Program and shall notify Congress of any significant changes to the state of the program not later than two years after the submission of such a report." The attached report responds to the new legislation and represents the Board's first interim report on "significant changes to the state of the program" since the most recent full report submitted in 2020.

In this report, the Board highlights notable new and/or evolving activities in three categories, Management Excellence, New and Evolving Initiatives and Sea Grant's role in the Blue Economy. The report is purposely brief but hyperlinks are provided throughout to point the reader to more thorough information on topics of relevance.

It is noted that the National Sea Grant College Program is making considerable progress on the four recommendations provided in the Board's 2020 report to Congress, which include, (1) support implementation of its Network Visioning; (2) amplify efforts to incorporate social and environmental justice, equity, diversity, and inclusion in its structure and programming; (3) seek opportunities and collaborations to leverage Sea Grant's unique strengths in building coastal community resilience; and (4) make improvements based on the findings and recommendations of the Independent Review Panel and Board Evaluation Committee. The Board acknowledges that Sea Grant funding has increased over the past two years and is grateful that Congress has entrusted Sea Grant to address the nation's urgent coastal needs. As Sea Grant funding expands, it will be critical that investments in Sea Grant's core infrastructure at the state and local levels keep pace and are balanced with the funding of new initiatives. It is because of Sea Grant's core infrastructure that such achievements as shown in this interim report are made possible.

On behalf of the Board, I am pleased to provide this interim report to Congress on the state of Sea Grant, which describes the significant changes to Sea Grant over the past two years.

Sincerely,

Deborah Stirling
Chair, National Sea Grant Advisory Board

Management Excellence

Guam Program Status Change

After a rigorous review by the National Sea Grant Advisory Board (Board), it was recommended and approved by the National Sea Grant College Program, that the University of Guam Sea Grant program be granted Sea Grant Institutional Status. The review team found that Guam Sea Grant met the legislative requirements necessary for Institutional Status based on their outstanding leadership, organization, relevance, partnerships, support, productivity, and continuity of high performance. The Sea Grant Institutional Status will enhance their marine research, extension, and education leadership for Guam and the U.S. territories in the Western Pacific.

Partnerships & Liaison Program

Sea Grant has expanded its highly successful partnership program to multiple new agencies and NOAA programs thus providing them new place-based research and outreach capabilities. For example, Sea Grant extension liaisons have been co-funded by the Departments of Defense and Energy to help these agencies connect with state and local stakeholders to advance the nation's community resiliency and wind energy needs. Additionally, Sea Grant and the U.S. Coastal Research Program announced a new ~\$4,000,000 funding opportunity to integrate research, its application, and community engagement in thematic areas of long-term coastal evolution, extreme storms, and human and ecosystem health.

Sea Grant Transitions its Collection to NOAA

For 50 years, the National Sea Grant Library (NSGL) based at the University of Rhode Island (URI) organized, made accessible, and preserved all documents created that have been funded by Sea Grant and comprised 80,000 print and digital documents including more than 57,000 unique records, adding an average of 1,500 annually. Rapid technological advancements have created the need and opportunity to merge the NSGL with the NOAA Library, which employs a model that transcends geography and institutional affiliation, to improve access to Sea Grant resources and stay current both technologically and with federal rule changes. [Informed by a review](#) of information services needs conducted by the Board, in 2021 the National Sea Grant Office began a two-year effort to transition the national Sea Grant Library's collection from URI to the NOAA Library and [Institutional Repository](#). The shift is making the entire [Sea Grant collection](#) fully digitized and more easily accessible and searchable.

First Review of the National Program

Sea Grant conducted its [first independent review](#) of the program at the national level which included evaluating the effectiveness of the National Sea Grant Office (NSGO). The review concluded that Sea Grant punches well above its weight in terms of accomplishments and impacts. The review also found consistent evidence that shows that dollars invested in Sea Grant yield a strong return on investment that is highly impactful. The NSGO has effectively administered, innovated, and grown the ability of the entire program to conduct its mission.

New and Evolving Initiatives

Deepening Engagement in Resilience

Sea Grant works closely with coastal communities across coastal and Great Lakes states and U.S. territories, including Tribal, Indigenous, and historically marginalized communities to [improve resilience to coastal hazards](#). This work connects research and engagement experts, bringing communities and decision-makers together, and co-develops information and actions, as well as identifies potential funding to improve community preparedness and adaptation. Much is accomplished through partnerships (over 2,700) across NOAA and beyond. In 2021, Sea Grant's work in resilience resulted in: 1335 training workshops to improve resilience, 285 communities took action to improve hazard resilience, 584 communities adopted sustainable development practices, and 25 Sea Grant Programs are Weather Ready Ambassadors.

Marine Debris

Building on Sea Grant's projects funded by Sea Grant and the [Marine Debris Program](#) in 2020 and 2021 to address local marine debris challenges, Sea Grant was directed by Congress to invest \$50M over five years to prevent and/or remove marine debris in U.S. coastal and Great Lakes ecosystems under the Infrastructure Investment and Jobs Act (IIJA). The initial investment through this initiative will commit approximately \$16M to support innovative, transformational research-to-application projects to address the prevention and/or removal of marine debris and approximately \$3M for the development of approximately 10-15 Marine Debris Community Action Coalitions to support partnerships among communities, groups, and localities, especially those that have been traditionally underserved, to address marine debris prevention and removal. Future investments through the IIJA will build on the successes of these initial investments.



Contaminants

In recognition of Sea Grant's capabilities and the increasing risk of contaminants of emerging concern (CECs) to the Nation's drinking waters and aquatic life, Congress directed Sea Grant to support a research initiative to address this issue. In response, [Sea Grant launched an \\$850,000 program](#) which has two components; 1) developing an overarching framework and implementation strategies to address CECs by the Sea Grant Network and 2) a competitive research program to conduct research studies and monitor CECs in partnership with state agencies, academic institutions, and other relevant entities. Connecticut Sea Grant with support from New Hampshire and North Carolina Sea Grant was selected to organize the overall framework and initiate the competitive research program.

New and Evolving Initiatives

Aquaculture

Sea Grant has responded to the need to reduce our national seafood trade deficit and improve U.S. food security by supporting [sustainable development of aquaculture](#). Recent initiatives have included: 1) the establishment of [Aquaculture Hubs](#) to increase collaborative efforts to enhance shellfish, striped, and seaweed to recirculating salmon production; 2) address critical gaps in social and economic/marketing information and needs; and 3) enhance hatchery seedstock production of marine finfish.



Reef Fish

Based on prior Congressional support, Sea Grant funded three large research projects over the past five years to determine the [abundance of red snapper and amberjack](#) in the Gulf of Mexico and the South Atlantic. To further the impact of this research, Sea Grant established a \$2.4 million regional collaborative of Sea Grant fisheries extension specialists, university scientists and fisheries managers to develop and implement extension and outreach programming related to the data and information originating from these projects. The new collaborative will connect end-users with the latest science related to reef fish stocks, which will enhance the management of these highly prized species.

Lobster

In response to Congressional direction, Sea Grant established a [\\$2 million American Lobster Initiative](#) to address scientific and stakeholder needs associated with this important fishery. The funded research will address critical gaps in knowledge about how American lobster is being impacted by environmental change in the Gulf of Maine, Georges Bank and southern New England.

Sea Grant and the Blue Economy

Offshore Renewable Energy

[DOE's Wind Energy Technologies Office and Sea Grant](#) have created the first Sea Grant National Offshore Wind Energy Liaison position to contribute and respond to the nation's rapidly evolving offshore wind energy development opportunities, to identify community information needs, and disseminate objective resources to stakeholders. The goal is informed and empowered participants in offshore wind energy development and decision-making and to expand working waterfronts to include offshore wind energy. DOE and Sea Grant created a shared Fellow for the John A. Knauss Marine Policy Fellowship Program to identify and pursue shared interests and advance coastal and ocean socio-economic, environmental, and energy efforts. With DOE's Wind Energy Technologies Office and Water Power Technologies Office and NOAA's Northeast Fisheries Science Center, the Northeast Sea Grant Consortium has a federal partnership to support research on the effects of ocean renewable energy on coastal communities and local economies including the fishing industry, and to optimize ocean co-use including wind and hydrokinetic wave, current, and tidal energy in the U.S. Northeast, from New York Bight to the Gulf of Maine. In 2021, selected two-year projects were [collectively awarded over \\$1,100,000 in federal funds](#).



Workforce Development

Sea Grant has a long history of working to develop the diverse workforce needed to support and advance coastal economies. From 2020 to 2021, for example, Sea Grant reached 191,455 K-12 students and helped to prepare 569 graduates in their degree fields. In 2020, the Young Fishermen's Development Act was passed by Congress, which named Sea Grant as the entity to implement a national training program for early career fishermen. In 2021, Sea Grant funded 11 regional needs assessment projects to inform longer term investments in this effort. Early in FY 23, Sea Grant released the FY22-23 Young Fishermen's and Aquaculturist's Career Development Projects to support the development of new professionals in these important coastal industries.

Sea Grant and the Blue Economy

Sea Grant's Response to COVID

Sea Grant responded to the unprecedented social and economic shocks triggered by the [COVID-19 pandemic](#) through its extensive on-the-ground presence in coastal communities. [Rapid Response efforts](#) focused on providing marketing resources to connect consumers, fishermen, and aquaculture producers; connecting stakeholders with relief and assistance programs; and conducting needs assessments for communication to decision makers.



Diversity, Equity, Inclusion, Justice, and Accessibility

Sea Grant's commitment to strengthen the resilient communities it serves can only be accomplished when diversity, equity, inclusion, justice, and accessibility (DEIJA) are its cornerstones. Sea Grant's Community Engaged Internship program, co-developed by Sea Grant's DEIJA and Traditional and Local Knowledge communities-of-practice is a recent success, as is strengthening of DEIJA principles in Sea Grant-led federal funding opportunities and the biennial request for proposals led by Sea Grant programs. DEIJA are defined as core values and cross-cutting principles in Sea Grant, with justice and accessibility recently added after careful consideration. Sea Grant's active and growing DEIJA community of practice focuses on workforce training as well as on evaluation of DEIJA efforts. The National Sea Grant Office is an active member of the NOAA Equity Team, leading one of three equity assessments for the agency in response to a 2021 executive order on the topic. The Board sees the enhanced priority of social justice playing an instrumental role in promoting the Blue Economy.