

# Maine Sea Grant Strategic Plan 2024–2027



  
Sea Grant  
Maine

at the University of Maine

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# Introduction

The diverse coastal and marine ecosystems of the Gulf of Maine have supported vibrant communities, economies, and cultures for thousands of years, beginning with indigenous people. They provide inspiration for expressions and celebrations of art, culture, and heritage, and support millions of residents and visitors' quality of life and prosperity, including commercial and recreational fisheries and aquaculture, and other marine and coastal industries. Maine Sea Grant envisions diverse thriving coastal communities and ecosystems supported by an engaged, knowledgeable public and informed decision-makers. Our mission is **to support the responsible use and conservation of coastal resources to sustain diverse, thriving coastal communities and ecosystems.**

With such a broad mission comes broad responsibility to help identify and address both challenges and opportunities for our communities and ecosystems. Our efforts require diverse partnerships and sources of knowledge to navigate the impacts of ecological, economic, and social changes at all scales. We recognize that climate change is a defining challenge of our time and must be addressed in all aspects of our work. Advancing our mission must ultimately help increase resilience to change of all kinds, including climate change, and turn challenges into opportunities.

The Maine Sea Grant College Program is a state-federal partnership based at the University of Maine, sponsored by the National Oceanic and Atmospheric Administration (NOAA), the State of Maine, and many partners. The Maine Sea Grant vision, mission, core values, cross-cutting principles, and strategic goals and objectives detailed below are aligned with the 2024-2027 NOAA National Sea Grant College Program Strategic Plan, which reflects an integration of strategic planning from NOAA, the US Department of Commerce, and the Administration. As part of a network of 34 Sea Grant programs throughout the coastal and Great Lakes states and territories, Maine Sea Grant integrates scientific research, outreach, and education programs. To ensure continued relevance, responsiveness, and accountability to those we serve, all 34 Sea Grant programs review and revise their strategic plans every four years and report impacts and accomplishments annually to a set of common National Sea Grant Program performance measures and metrics.

While Maine Sea Grant's plan aligns with the national plan, it is developed through an inclusive process involving local public input. A twenty-five-member Program Advisory Committee provides guidance for strategic planning, programmatic direction, and funding decisions. Members are nominated by committee, with an effort to seek a balanced representation of the interests and expertise of Maine's geographically distinct and socially, culturally, and economically diverse coastal communities and other interested parties. Members are appointed by the University of Maine President, and serve renewable three-year terms. They work closely with Maine Sea Grant staff to evaluate opportunities and gaps in research and programming, set priorities, and provide guidance and feedback on each new strategic plan and Omnibus proposal to the National Sea Grant Office.

Maine Sea Grant's Strategic Plan for the 2024-2027 period reflects our intent to continue supporting innovative applied research, and to provide evidence-based information and extension, education, and community engagement efforts that meet our coastal communities' needs and priorities as they face economic, environmental, and cultural transitions in the 21st century. All our work fosters the development of collaborative exchange of information, wherein questions from the field can inform research and education activities, and outreach is continually adapted to the perceptions and needs of those we serve. To achieve the outcomes listed in this plan, we work with a wide range of specific audiences, depending on the topic or issue at hand. While coastal communities are the focus of our work, we also recognize the need to work at a broader, regional scale to address some issues such as water quality, workforce housing, and preparation for extreme weather events. Solutions to these challenges often arise from interdependence and collaboration among coastal and inland communities, or coordinated actions on a larger scale.

## Vision

Maine Sea Grant envisions diverse, thriving coastal communities and ecosystems supported by an engaged, environmentally literate public and informed decision-makers.

## Mission

Our mission is to support the responsible use and conservation of coastal resources to sustain diverse, thriving coastal communities and ecosystems.

## Core values

Maine Sea Grant's core values are essential and enduring tenets that guide our actions. Our core values support a culture of integrity and inclusivity, with the intent to maintain our role as a trusted source of evidence-based information among all people with whom we live and work. We begin with listening and learning from our diverse partners and other interested parties about their needs and assets. We strive to center the following values in all we do:

- **Accountability** We strive to deliver our research, extension, education, and communications services equitably, and with integrity, and develop and maintain trust through our actions. We operate with honesty and transparency and work to develop and adapt our capacity and resources to meet the needs of our constituents.
- **Collaboration** We seek and nurture partnerships that amplify our impact. We approach our partnerships with responsiveness, inclusiveness, and respect for different perspectives and types of knowledge. In our work, we begin with listening and facilitate communication among diverse interests.
- **Connectedness** We recognize and value land-sea and socio-ecological connectivity, and the complexity of relationships between terrestrial and marine/coastal ecosystems, including humans, and human dependence on healthy ecosystems. We work to address linkages between ecosystem health and human health, watersheds, climatic processes, migration, nutrient and hydrologic cycling, and social interactions.
- **Objectivity** We maintain a commitment to objective research and programming that avoids bias and advocacy in the development and delivery of information, tools, and services.
- **Service** We work with our national, state, and local partners to understand and address complex challenges and seize new opportunities using diverse sources of knowledge and expertise. We draw upon resources and expertise from NOAA, the University of Maine, and community, state, national, and tribal networks to help meet the needs of those we serve. We strive to make sense of changes and trends and address emerging challenges with innovative and inclusive approaches and collaborations.
- **Sustainability** We practice and promote efforts to enhance the health and function of marine and coastal ecosystems, both for the sake of these ecosystems and to increase resilience within the communities they support. We build capacity for applied research, responsive monitoring and management, stewardship, and planning to identify and support ecologically and economically sustainable practices.

## Cross-cutting Principles

In alignment with the National Sea Grant 2024-2027 Strategic Plan and the needs expressed by our partners and constituents, Maine Sea Grant will strive to address three specific areas that warrant attention in all facets of our work. The Maine Sea Grant Program will:

**Center and Prioritize Efforts to Address the Impacts of Climate Change** by leveraging and integrating climate-related expertise, resources, and partnerships in every aspect of our research, extension, community engagement, and education programming.

We recognize climate change as an urgent, overarching priority that affects every aspect of life, and must therefore be addressed in all of our work. Efforts to mitigate, plan for, and respond to the impacts of climate change require a continuous generation of and adaptation to new information, tools, and technology, and unprecedented coordination and collaboration across all sectors of society. We are committed to this challenge.

**Champion Diversity, Equity, Inclusion, Justice, and Accessibility (DEIJA)** by seeking and engaging diverse perspectives to enhance understanding and enable our program to pursue its vision and mission with equity and integrity.

The principles of diversity, equity, inclusion, justice, and accessibility are integrated into all of our programming and interactions. We are committed to continuous learning to address the ways historic exploitation and marginalization of communities on the land we now call Maine contributes to ongoing social injustice. We are actively identifying the ways in which western thinking has influenced our engagement, our practices, and our language. We are committed to doing the work across our Focus Areas so that we may better serve the many communities of what we now call Maine, and particularly vulnerable and historically marginalized communities.

**Enhance coastal community resilience** by fostering the ability of coastal communities to effectively respond to economic, social, and environmental change.

Resilience is a concept that often has a different definition for different individuals, communities, and organizations. Maine Sea Grant defines resilience broadly as the ability to prepare and plan for, absorb, recover from and more successfully adapt to adverse events and changing conditions (e.g., severe weather, climate change, economic disruptions, demographic shifts, and ecosystem changes). Within this broad definition, we are committed to work toward building consensus and understanding among our constituents and partners so that strategies for resilience can be co-developed by stakeholders, experts, and decision-makers in ways that are conscious of limitations and maximize opportunities. These efforts stretch across projects and activities in all of our Focus Areas.

## Terms and Use of Language

Our use of terms and language to describe our goals, objectives, and approaches are aligned with our core values and cross-cutting principles. For example, we recognize and define the term ecosystems, as inclusive of humans, and grapple with ways to refer to geopolitical boundaries, such as the State of Maine, in ways that honor the sovereignty of Wabanaki people living within and across these boundaries. Our references to coastal communities include municipalities and geographic locations throughout coastal watersheds, and groups/entities not bound by specific geopolitical boundaries, such as the lobster fishing community. See [Appendix A](#) for a glossary of terms and definitions that we refer to throughout the plan.

## How we work

**Building partnerships** Maine Sea Grant strives to leverage its capacity, expertise, and resources at every opportunity, and we rarely enter into any project or program without numerous partners. We carefully consider our own role and capacity to be effective, and define the scope of our engagement, with formal or informal partnership agreements, and deliverables in each project proposal or contract. We do not typically separate the types of individuals or organizations we work with as partners from those we serve in other ways, and the agencies, organizations, businesses, and individuals we partner with often apply for Sea Grant research funding. Our capacity to develop and support diverse and often unconventional partnerships enables us to leverage resources and expertise that would not otherwise be available, and facilitate far greater outcomes than we could accomplish on our own.

**Working across functional areas** Sea Grant programs integrate efforts across five functional areas: research, extension, education, communications, and management. These represent different ways in which we collaborate with partners and other interested parties to generate, transmit, translate, and integrate knowledge in support of our mission, creating the backbone of our work.

**Research.** Maine Sea Grant supports scientific research that is relevant to the issues and needs of coastal communities in Maine and the Gulf of Maine region. Research in our program is accomplished in three ways, which are often interconnected: 1) competitive research grants from Maine Sea Grant, the Northeast Sea Grant Consortium, and the National Sea Grant Program; 2) program development grants to investigators in the state; and 3) research activities conducted by our Marine Extension Team (MET). Maine Sea Grant staff cultivate effective working relationships with the research community by staying engaged with research and scholarship relevant



to each of our extension, education, and communications efforts. We take seriously our responsibility to work at the intersection of research institutions, resource managers, and the diverse needs and interests of our many constituents. We are a non-advocacy organization, and strive to facilitate communication and collaboration. We support and share information and resources related to our strategic goals with our many audiences in forms that serve each best.

**Extension.** In partnership with University of Maine Cooperative Extension, place-based members of the Marine

Extension Team focus on issues of concern to our coastal communities. They extend current knowledge and expertise to constituents, helping to ensure that Maine Sea Grant supports research that is relevant to their needs, and ensuring that their ideas are integrated into the research enterprise. As a fundamental feature of Maine Sea Grant, the MET makes us unique within the state. From the Piscataqua River to Passamaquoddy Bay, MET extension staff live in the communities they serve. No other coastal or marine focused organization in Maine has such reach, or such a long history in Maine's coastal communities. Our formal partnership with University of Maine Cooperative Extension has been called a model for the National Sea Grant Network.

**Education.** Our formal and nonformal education activities support the ecological and economic health, vitality, and resilience of Maine's coastal communities and marine-related resources by 1) fostering a knowledgeable public who can use scientific information to identify questions, draw evidence-based conclusions, and make decisions about issues that affect them and 2) supporting the development of a workforce skilled in





science, technology, engineering, art, mathematics, and other critical disciplines. We strive to reach diverse audiences across the age and socioeconomic spectrums, serve their needs, address their questions, and work together to identify new questions. Our place-based participatory research opportunities and community science programs link volunteers with local scientists and resource managers around locally relevant issues. Our staff engage undergraduate and graduate students through mentorship, internship, and fellowship programs, and professional development opportunities. We also provide training programs that support professionals and students seeking workforce development opportunities in marine and coastal sectors, including education, industry, resource management, and conservation-related fields.



**Communications.** A communications team with skills in science communication, graphic design, web design and programming, writing, and editing supports all elements of the program, with a long-term goal of enhancing environmental literacy among public audiences. Our communications strategies and products are developed with our research, extension, and education programs and in partnership with constituents and the research community, who help identify information needs of target audiences. In addition to communicating the results of Sea Grant-funded research and other research related to our strategic goals, the communications team produces independent projects to advance the Maine Sea Grant mission.



**Management.** A ten-member leadership team facilitates coordination and co-management across our other functional areas and cultivates a culture of collaborative leadership. The leadership team discusses programmatic initiatives, considers proposals for program development funds (twice per year), provides strategic direction, and cultivates opportunities for program growth, new partnerships, and initiatives in emerging issue areas. Five members of the leadership team have direct staff supervisory responsibilities. They work closely with their respective supervisees, one another and the program’s fiscal officer, as needed, to manage and support the team, provide staff development opportunities, and fulfill associated planning and fiscal responsibilities.

**Northeast Regional Collaboration.** Maine Sea Grant is one of seven Northeast Sea Grant programs that together form the Northeast Sea Grant Consortium, which extends from Maine to New York. This partnership fosters collaborative efforts around issues and problems that are best addressed at a regional scale, funding research projects and extension activities that address issues of regional importance. In recent years, the Consortium has invited regional research proposals related to ocean renewable energy, ocean acidification, and coastal resilience, and semi-annual Northeast Regional Sea Grant meetings provide a venue for funded research and extension projects to share their results and further develop multi-state collaborative initiatives. In addition, the Northeast Region Sea Grant Programs continue to collaborate on initiatives and opportunities provided through the National Sea Grant Office, such as the American Lobster Initiative, which includes both research and extension programming.

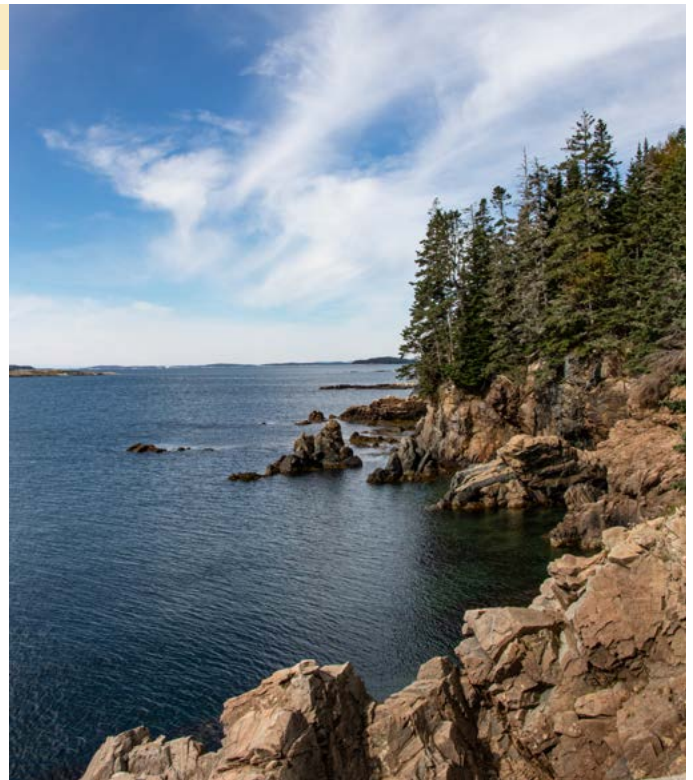
# Strategic Focus Areas

A national framework of focus areas describes the National Sea Grant Network’s overarching priorities based on national and regional needs and initiatives. The focus areas provide a structure to organize relevant accomplishments, impacts, and outcomes with applicable priority. Each university-based Sea Grant program contributes to the national focus areas and goals. Program strategies are aligned with the national network, but participation in individual focus areas, goals and performance measures are determined after consultation with local and regional constituents and advisors. This iterative and flexible planning process, as outlined above, allows for local level input to identify and develop methods to address emerging issues while ensuring alignment with the national strategic plan. National strategic focus areas are Sustainable Fisheries and Aquaculture; Healthy Coastal Ecosystems; Resilient Communities and Economies; and Environmental Literacy and Workforce Management. Maine Sea Grant uses these same major Focus Areas with simplified names. Each is described below.

## Coastal Ecosystems

Maine’s extensive coastline varies from sand dune systems and barrier beaches in the south, to rocky peninsulas and islands in the central portion of the state, to the steep cliffs and rugged shores Downeast. Large bays, salt marshes, mud flats, beaches, rocky intertidal zones, and rivers and streams support commercial fisheries and tourism, all of which depend on clean water, fresh and salt, plentiful marine resources, and diverse wildlife (Lichter et al 2006). Our coastal ecosystems are relatively intact, a situation that presents challenges, e.g., preserving ecosystem function, connectivity, health, and beauty, as well as opportunities for innovative management and restoration (e.g., McClenachan et al. 2015). We use NOAA Fisheries Ecosystems Program’s definition of ecosystems, which recognizes humans as an integral part of ecosystems, as well as the connectivity between earth’s terrestrial, marine, freshwater, and atmospheric systems (see [Appendix A](#)).

Healthy ecosystems are the foundation for the future of the people in the region. Maine Sea Grant relies on diverse partnerships, cross-sector collaborations, and sources of information to stay abreast of issues and challenges that affect coastal ecosystems and connected inland areas, with climate change centered as a priority issue in all of our ecosystems work. We strive to ensure that all phases of our research and programming take potential benefits and impacts on vulnerable species and underserved or historically marginalized people into account, and we collaborate with all of our constituents and partners to develop resilience strategies that match their particular needs and capacities (e.g., Chief et al. 2014).



Our coastal ecosystems work is designed to inform and improve state and local ecosystem management efforts through research, monitoring, facilitation, and science communication. Our research investments in this focus area are as diverse as the ecosystems in the state, with emphasis on applied research that has the potential to address complex challenges. Water quality, species-specific research and habitat monitoring and restoration, along with efforts to identify and protect ecosystem services are major priorities for our work in this focus area.



In our efforts to identify and protect ecosystem services, we use the definition developed through the UN Millennium Ecosystem Assessment, which defines ecosystem services as the benefits people obtain from ecosystems, and equally values extractive services such as food and water, and non-extractive services such as flood and disease control, nutrient cycling, and spiritual, recreational, and cultural benefits (Millennium Ecosystem Assessment 2005). Further, in recognizing ecosystem services as benefits to humans, we also endeavor to in-

corporate perspectives or practices rooted in traditional ecological knowledge (TEK), particularly acknowledging the importance of giving back to the ecosystem (e.g., Kimmerer 2013).

Maine Sea Grant's primary partners and constituents in this focus area include local, state, national, and tribal researchers, resource managers, and conservation organizations, citizens of all ages, formal and nonformal educators and students, municipal officials, and private businesses.

## Strategic Goal, Actions, and Desired Outcomes

**GOAL:** Coastal ecosystems are healthy, connected, and functional. People understand the links between ecosystem function and resilient communities and support ecosystem stewardship activities.

**ACTION 1:** Support research and extension services to ensure coastal ecosystem connectivity and function.

**Desired Outcome:** Improved coastal ecosystem health, connectivity, and function.

**ACTION 2:** Develop and support activities that protect and improve the quality and availability of water resources that supply coastal ecosystems.

**Desired Outcome:** Improved water quality for coastal communities and ecosystems.

**ACTION 3:** Conduct and support community-informed applied research and extension services to protect and improve habitat for marine, coastal, and diadromous species.

**Desired Outcome:** Improved or protected habitat for marine, coastal, and diadromous species.

**ACTION 4:** Identify and protect ecosystem services to support vulnerable populations and improve coastal community resilience to changes in climate, habitat, and species composition.

**Desired Outcome:** Ecosystem services support vulnerable coastal ecosystems and communities.

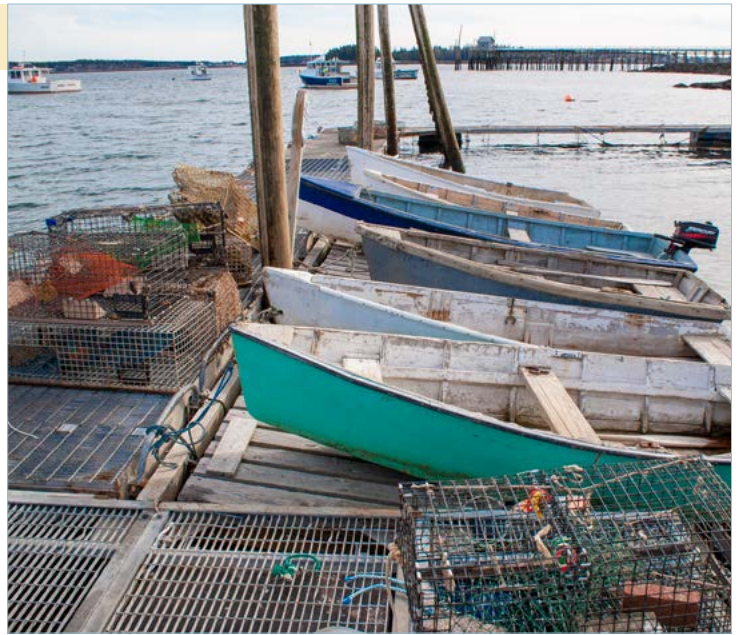
**ACTION 5:** Develop and expand relationships with tribal communities and other vulnerable populations to identify shared goals and engage diverse sources of knowledge in efforts to protect and improve ecosystem health.

**Desired Outcome:** Expanded and strengthened efforts to protect and improve coastal ecosystem health.



## Communities and Economies

Maine's first coastal communities and ways of life were established by indigenous people. Through centuries of change and conflict, coastal communities have relied on the seasonal bounty of our diverse coastal ecosystems for their survival as well as cultural and spiritual heritage, recreation, and economic prosperity. From fish and shellfish to granite, salt, and a tradition of building wooden ships that connected the forests of inland Maine to the coast, these connections evolved over time to include generation of electricity from hydropower and now ocean renewable energy, as well as aquaculture farms and new non-food uses of marine species in technology and commercial products. Tourism, recreation, and the arts have remained important economic drivers and cultural assets.



Including coastal islands, Maine's shoreline stretches for 5,300 miles, yet only about 12% supports public shoreline access (Duff 2016). The vast majority is held in private ownership, including much of the infrastructure that supports marine and coastal industries, making working waterfronts and other infrastructure vulnerable to conversion to residential and other private uses. The entire coast, including connected inland watersheds, is subject to increasingly frequent extreme weather events, sea level rise, and other impacts of climate change (Sweet et al. 2019). With changing demographics and highly valued coastal properties, year-round residents in Maine's coastal communities often struggle to find housing, afford their rent or mortgage and property taxes, and pay their bills in the face of increasing costs (Gleason et al. 2021; Mitch 2022). Growth and change in coastal industries and other economic drivers have also changed workforce needs and job opportunities (Council on Foreign Relations 2018; Cha et al. 2022; Haines et al. 2020).

Demographic changes have accelerated over the past three decades, and were exacerbated by the economic and social impacts of the COVID-19 pandemic, often resulting in conflict around shared uses of coastal assets, increased demands on the coastal environment, and impacts on vulnerable populations (Loucks 2021). Inclusive and adaptive planning and management approaches are essential to provide flexible frameworks for shared and equitable uses of public assets. Efforts to support multi-disciplinary collaborations, build capacity for facilitation and community engagement, and create equitable access to diverse forms of information, educational resources, and decision-making processes are essential to build trust and avoid or manage conflicts as new challenges or opportunities emerge.

Maine Sea Grant's primary partners and constituents in this focus area are connected with every aspect of life in our coastal communities. They include our diverse year-round and seasonal residents and visitors, and the businesses, industries, and nonprofit and cultural organizations and agencies that drive and support their economies and social and cultural activities.

## Strategic Goal, Actions, and Desired Outcomes

**GOAL:** Coastal communities are prepared to address current and emerging environmental, economic, and social/cultural challenges and opportunities using relevant scientific, local, and traditional knowledge and assets.

**ACTION 1:** Support efforts to understand and center community needs and assets as the foundation for activities that build resilience to change.

**Desired Outcome:** Communities strategically build resilience, leveraging local assets and external support.

**ACTION 2:** Support research and extension services that facilitate efforts to identify, prioritize, and address challenges and opportunities related to changing environmental, economic, and social/cultural conditions.

**Desired Outcome:** Communities respond to transformational change in environmental, economic, and social/cultural conditions in ways that meet the diverse needs of their members.

**ACTION 3:** Create and support opportunities for all community members to have a voice in decisions that impact their social, economic, and environmental well-being, ensuring that vulnerable community members have equitable access to these opportunities.

**Desired Outcome:** All community members, including those from vulnerable populations, are represented and empowered in local decision-making.

**ACTION 4:** being, ensuring that vulnerable community members have equitable access to these opportunities.

**Desired Outcome:** All community members, including those from vulnerable populations, are represented and empowered in local decision-making.

**ACTION 5:** Facilitate collaboration across sectors to engage diverse knowledge and experience, enable mutually beneficial action, and support shared use of coastal assets and infrastructure.

**Desired Outcome:** Cross-sector collaborations yield increased capacity to share diverse sources of knowledge and access to coastal assets and infrastructure.

**ACTION 6:** Assist coastal communities in activities that value and celebrate diverse cultural heritage, including fisheries, working waterfronts, and other unique assets related to the sea.

**Desired Outcome:** Community events and celebrations value and celebrate diverse cultural heritage.





## Fisheries and Aquaculture

Fisheries, aquaculture, and their associated processing, retail, technology, and tourism businesses support diverse economic and cultural activities that help to define the region's identity, support the livelihoods of people, and draw millions of visitors each year. The pressures of climate change affect current and future conditions for fisheries and aquaculture, from warming waters, acidification, and introduction of new species, to the impacts of sea level rise and extreme storms on coastal infrastructure (Cha et al. 2022; Maine Climate Council 2020; Fernandez et al. 2020). For these reasons, an important focus of the fisheries and aquaculture work undertaken by Maine Sea Grant is related to sustainable diversification along the working waterfront. This includes adding to what we catch or grow, broadening income opportunities for those in the seafood industry, preserving and expanding the scope of working waterfront activity, and developing new opportunities for people from diverse backgrounds to acquire the knowledge, skills, and expertise to enter the seafood industry or associated fields.

Maine Sea Grant's research, extension, and community engagement work in this area is focused on developing and supporting sustainable and adaptive management; engaging harvesters, sea farmers, and community partners in science, monitoring, and management; and supporting efforts to help communities and industry realize direct benefits from their engagement. We work with our partners to enhance these opportunities for all of our constituents, including vulnerable and historically marginalized communities. We support efforts to create new or value-added products and facilitate collaboration across the seafood, non-food commercial sectors, and associated parts of the marine workforce and supply chains. Our work in aquaculture includes development of new culture techniques and target species, applied research, technical support, and efforts to facilitate communication among conservation groups, resource managers, consumers, adjacent landowners, and other community groups.

Because of the far-reaching influence of fisheries and aquaculture in Maine's economy and culture (Maine DECD 2019; Springuel 2019), much of our work in this focus area also addresses seafood-related education, professional training, and science communication needs. We support opportunities for fishermen and aquaculture professionals at all stages of their careers, ranging from educational programming and workforce development for secondary and post-secondary students, to targeted workshops and technical assistance for marine business owners and those looking to enter the workforce. To ensure a resilient and sustainable future for Maine's fishing and aquaculture activities, we support opportunities for both residents and visitors to learn about seafood, its dependence on coastal ecosystems, and the broader marine economy: how it is produced, processed and distributed, as well as the management and science that guide the seafood industry and influence related cultural, recreational, and tourism activities and career opportunities. Programming in other focus areas also addresses ecosystem health, economic and community resilience, climate impacts, and education and workforce issues related to seafood.

Maine Sea Grant's primary partners and constituents in this focus area include professionals working in all aspects of fisheries, aquaculture and associated supply chains, and marine resource management agencies, researchers, community organizations, industry associations, educational institutions, and seafood consumers.



## Strategic Goal, Actions, and Desired Outcomes

**GOAL:** Fisheries and aquaculture, their associated value chains, and the communities that depend on them, are economically viable, resilient to change, and ecologically sustainable.

**ACTION 1:** Support applied research and extension services that enable responsive coastal and marine fisheries/aquaculture governance, including monitoring and management, and engagement of diverse constituents in all levels of management and planning processes.

**Desired Outcome:** Diverse audiences of constituents contribute to coastal and marine governance by engaging in efforts to create responsive management, monitoring, and planning processes.

**ACTION 2:** Create and support opportunities for diverse, equitable, and inclusive participation in fisheries and aquaculture research, industry, and management.

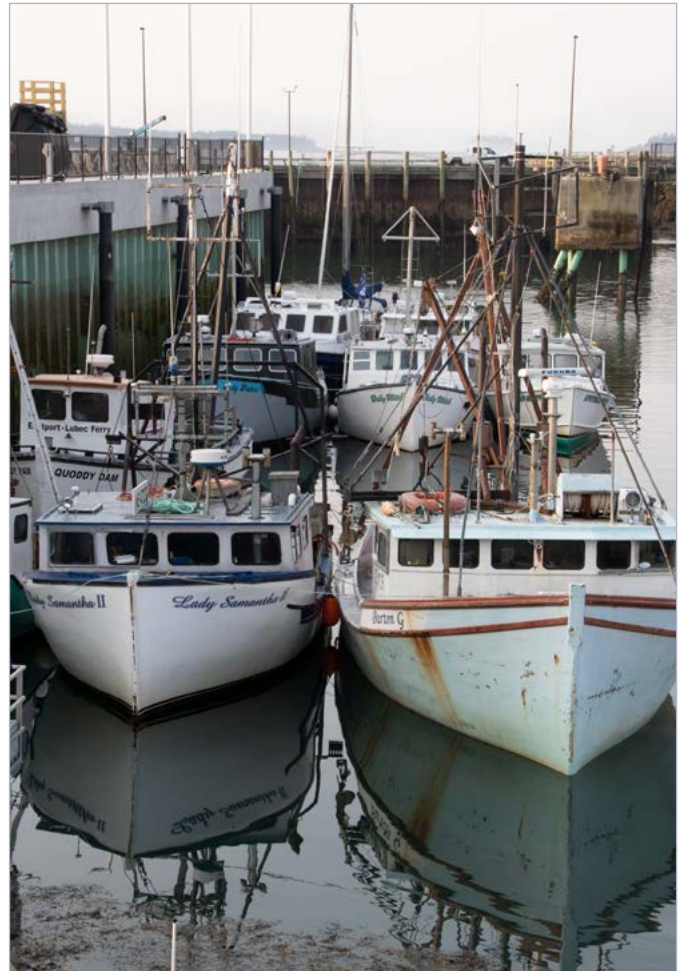
**Desired Outcome:** All community members, including those from underserved and historically marginalized groups, have opportunities to participate in or access fisheries and aquaculture research, industry, and management.

**ACTION 3:** Develop and support opportunities for harvesters and aquaculture producers to enter, strengthen, or diversify seafood-related businesses and supply chains, and collaborate to support environmentally and economically sustainable practices and increase resilience to change.

**Desired Outcome:** Expanded and/or diversified fisheries and aquaculture businesses, products, collaborations, and sources of income that are sustainable and resilient.

**ACTION 4:** Support applied research and extension services to diversify commercial seafood species, products, and consumer markets through innovations in aquaculture and wild-fishery harvesting methods, post-harvest processing, and collaborative marketing and distribution initiatives.

**Desired Outcome:** Diversified and improved seafood value chains.



**ACTION 5:** Increase the accessibility and exchange of scientific, traditional, and cultural information about fisheries, aquaculture, and the changing environments on which coastal and marine species depend.

**Desired Outcome:** Diverse sources of scientific, traditional, and cultural information about fisheries, aquaculture and the changing environments on which they depend are accessible and used in research, education, community engagement, and science communication.



## Environmental Literacy and Workforce Development

Finding sustainable solutions to the complex challenges that dominate headlines throughout Maine and around the world, requires a level of environmental literacy and new approaches to workforce development that expand upon those traditionally provided in formal education and technical training programs. Challenges such as the many impacts of climate change are urgent and require an ability to understand nuanced technical information from a wide variety of sources (McKenzie 2021; Fernandez et al. 2020). To be effective, solutions must create new or enhanced career paths and training opportunities that serve all stages and sectors of the existing and potential workforce equitably (Maine Climate Council 2020; Cha et al. 2022). Ideally, they also form the basis for new opportunities or conditions that increase resilience to ongoing and expected future changes.

Maine Sea Grant's work in this focus area is integrated with the issues, content, and approaches used in our other three focus areas, and covers a continually evolving range of topics. We begin with listening and learning from our diverse constituents about their needs and assets, and work with them to co-develop programming and products. Maine Sea Grant's communications team works with our staff, partners, and constituents to produce science communication and educational materials that support our literacy and workforce programming.

Sea Grant staff provide opportunities for nonformal education, professional training, participatory research, and community science in collaboration with formal and nonformal education institutions, researchers, and public and private partner organizations. We serve as the point of contact for graduate students interested in marine-related fellowships through NOAA, and we support research and community engagement opportunities for graduate and undergraduate students working on marine and coastal topics. Maine Sea Grant also awards undergraduate student scholarships in marine science, and supports students and professionals in coastal and marine fields through internships and other professional opportunities.

Our nonformal education activities range from public presentations, workshops, and exhibits at regional and local events to public lectures and interpretive tours. Nonformal learning opportunities include public displays at landmarks and museums and interactive 'trails' that offer information and experiences for residents and visitors. Formal science education opportunities engage PK-16 students, educators, undergraduate and graduate students in evidence-based learning, research, and monitoring. Professional training programs for adults include formal courses on a variety of topics and coordination for peer-to-peer learning communities. Our community science programs engage residents of all ages in collecting environmental data used by researchers and resource managers.

Our primary constituents in this focus area are coastal and marine professionals, PK-16 students and educators, graduate students in coastal and marine fields, and lifelong learners, and we partner with other organizations and educational institutions that serve each audience. While many of the other three focus area goals include topics related to environmental literacy and workforce development, we outline below the goal and objectives that strictly target environmental literacy and workforce development.





## Strategic Goal, Actions, and Desired Outcomes

**GOAL:** An environmentally literate public and diverse workforce are skilled and ready to use and apply scientific, traditional, and cultural knowledge to identify questions, draw evidence-based conclusions, and address issues that affect the ecological health, economic vitality, and resilience of coastal communities and ecosystems.

**ACTION 1:** Support inquiry-based learning opportunities that are aligned with Science, Technology, Engineering, Arts, and Mathematics (STEAM) principles and learning standards, and with relevant sources of traditional and cultural knowledge.

**Desired Outcome:** Increased environmental literacy in topics related to Sea Grant focus areas.

**ACTION 2:** Support community science programs that engage participants of all ages and backgrounds in environmental monitoring and educational activities that increase environmental literacy and generate data that advance critical research and management efforts.

**Desired Outcome:** Community science data is used to inform decisions and actions in support of research, planning, and environmental management.

**ACTION 3:** Support research and evaluation efforts to assess science communication needs and opportunities, reduce inequities in scientific and environmental literacy, and increase informed public engagement in research and management issues related to Sea Grant focus areas.

**Desired Outcome:** Science communication efforts are adaptive and respond to research findings and the needs of audiences served.

**ACTION 4:** Seek and support collaboration and engagement with partners in education and outreach programming that enhance understanding of diverse sources of knowledge and increase inclusivity in learning.

**Desired Outcome:** Diverse sources of information and collaborations improve capacity to address the needs of underserved or vulnerable populations.

**ACTION 5:** Increase the accessibility and exchange of scientific, traditional, and cultural information about coastal ecosystems and issues related to Sea Grant focus areas.

**Desired Outcome:** Vulnerable communities have increased (or more) access to information related to Sea Grant focus area topics and less vulnerable communities better understand the needs of vulnerable communities in these topic areas.

**ACTION 6:** Support efforts to recruit, train, and retain a diverse workforce that is resilient to changing conditions, responsive to evolving career paths, and serves the needs of coastal communities and ecosystems.

**Desired Outcome:** Sea Grant programs and participation reflect the diversity of needs and people in areas we serve.

**ACTION 7:** Support formal and nonformal learning, mentorship, training, and professional opportunities for all ages, related to Sea Grant focus areas.

**Desired Outcome:** Learning and mentorship opportunities are aligned with workforce needs, resulting in expanded career pathways related to Sea Grant focus areas.

**ACTION 8:** Support efforts to understand and serve the workforce development needs and opportunities of underserved and historically marginalized communities.

**Desired Outcome:** Underserved and historically marginalized communities have increased awareness of and access to careers and opportunities in sectors related to Sea Grant focus areas.

## Works Cited

- Cha, J., H. Moskowitz, M. Phillips, and L. Skinner. (2022). *Maine Climate Jobs Report*. ILR Worker Institute. Cornell University School of Industrial and Labor Relations. Ithaca, NY. [hdl.handle.net/1813/111020](https://hdl.handle.net/1813/111020)
- Chief, K., J.J. Daigle, K. Lynn, and K.P. Whyte. (2014). Indigenous experiences in the US with climate change and environmental stewardship in the Anthropocene. In: Sample, V. Alaric; Bixler, R. Patrick, eds. *Forest conservation and management in the Anthropocene: Conference proceedings*. Proceedings. RMRS-P-71. Fort Collins, CO: US Department of Agriculture, Forest Service. Rocky Mountain Research Station. p. 161-176. (Vol. 71, pp. 161-176).
- Council on Foreign Relations. (2018). *The Work Ahead: Machines, Skills, and U.S. Leadership in the Twenty-First Century*. Independent Task Force Report No. 76. New York, NY. United States.
- Duff, John. (2016). *Public Shoreline Access in Maine: A Citizen's Guide to Ocean and Coastal Law*, Third Edition. Orono, ME: Maine Sea Grant College Program.
- Fernandez, I., S. Birkel, C. Schmitt, J. Simonson, B. Lyon, A. Pershing, E. Stancioff, G. Jacobson, and P. Mayewski. 2020. *Maine's Climate Future 2020 Update*. Orono, ME: University of Maine. [climatechange.umaine.edu/climate-matters/maines-climate-future/](https://climatechange.umaine.edu/climate-matters/maines-climate-future/)
- Gleason, K. D., M. Dube, E. Bernier, and J. Martin. (2021). Using geographic information systems to assess community-level vulnerability to housing insecurity in rural areas. *Journal of Community Psychology*.
- Haines, M., R. Reid, and A. Parker, J. Bostock. (2020). *Maine Aquaculture Workforce Development Strategy: Evidence Report*. Gulf of Maine Research Institute. Portland, Maine.
- Kimmerer, R. W. (2015). *Braiding sweetgrass*. Milkweed Editions.
- Lichter, J., H. Caron, T.S. Pasakarnis, S.L. Rodgers, T.S. Squiers, and C.S. Todd. (2006). The ecological collapse and partial recovery of a freshwater tidal ecosystem. *North-eastern Naturalist*, 13(2), 153-178.
- Loucks, D. (2021). *The Impacts of Climate Change. A Comprehensive Study of Physical, Biophysical, Social, and Political Issues*. Cornell University, Ithaca, NY. United States.
- McKenzie, M. (2021). Climate change education and communication in global review: Tracking progress through national submissions to the UNFCCC Secretariat. *Environmental Education Research*, 27(5), 631-651.
- Maine Climate Council. (2020). *Maine Won't Wait: A Four-Year Plan for Climate Action*. Augusta, Maine. [maine.gov/future/sites/maine.gov/future/files/inline-files/Maine-WontWait\\_December2020.pdf](https://maine.gov/future/sites/maine.gov/future/files/inline-files/Maine-WontWait_December2020.pdf)
- Maine Department of Economic and Community Development. (2019). *Maine Economic Development Strategy 2020-2029: A Focus on Talent and Innovation*. Augusta, Maine.
- McClenachan, L., S. Lovell, and C. Keaveney (2015). Social benefits of restoring historical ecosystems and fisheries: alewives in Maine. *Ecology and Society*, 20(2).
- Merriam-Webster. (2022). *Ecosystem Definition*. [merriam-webster.com/dictionary/ecosystem](https://merriam-webster.com/dictionary/ecosystem)
- Millennium Ecosystem Assessment. (2005). *Ecosystems and Human Well-being: Synthesis*. Island Press, Washington, DC.
- Mitch, N. (2022). *Sea Level Rise and Housing Affordability in Small Coastal Communities: A Case Study in Maine* (Doctoral dissertation).
- National Oceanic and Atmospheric Administration. (2020). *National Oceanic and Atmospheric Administration Diversity and Inclusion Strategic Plan Fiscal Years 2020-2024*. Washington, D.C. [noaa.gov/sites/default/files/legacy/document/2020/Dec/NOAA%202020-2024%20Diversity%20and%20Inclusion%20Strategic%20Plan.pdf](https://noaa.gov/sites/default/files/legacy/document/2020/Dec/NOAA%202020-2024%20Diversity%20and%20Inclusion%20Strategic%20Plan.pdf)
- National Oceanic and Atmospheric Administration (NOAA) Ecosystems Program. (2022). *NOAA Ecosystems Program Website*. [fisheries.noaa.gov/topic/ecosystems](https://fisheries.noaa.gov/topic/ecosystems)

National Sea Grant College Program. (2021). National Sea Grant's 10-year Diversity, Equity, Inclusion, and Justice (DEI) Vision, Version 2.

National Sea Grant Network. (2018). Traditional and Local Knowledge: A Vision for the Sea Grant Network. [alaskaseagrant.org/wp-content/uploads/2018/12/Traditional-and-Local-Knowledge-A-vision-for-the-Sea-Grant-Network.pdf](http://alaskaseagrant.org/wp-content/uploads/2018/12/Traditional-and-Local-Knowledge-A-vision-for-the-Sea-Grant-Network.pdf)

Sea Grant Diversity, Equity, Inclusion and Justice Community of Practice. (2020). Diversity, Equity and Inclusion: Current Conditions and Best Practices across the National Sea Grant Network. [seagrant.noaa.gov/Portals/1/DEI%20Best%20Practices%20Paper.pdf](http://seagrant.noaa.gov/Portals/1/DEI%20Best%20Practices%20Paper.pdf)

Shi, L. and G. Stevens. (2021). Vulnerable Populations in the United States. Edition 3. Wiley and Sons, Inc. Hoboken, NJ.

Springuel, N. (2019). Voices of the Maine Fishermen's Forum. NOAA Fisheries. Voices From the Fisheries. [voices.nmfs.noaa.gov/collection/voices-maine-fishermens-forum-2019](http://voices.nmfs.noaa.gov/collection/voices-maine-fishermens-forum-2019)

Sweet, W., G. Dusek, G. Carbin, J. Marra, D. Marcy, and S. Simon. (2020). 2019 State of U.S. High Tide Flooding with a 2020 Outlook. National Oceanic and Atmospheric Administration, National Ocean Service, Center for Operational Oceanographic Products and Services. NOAA technical report NOS CO-OPS; 092. DOI : [doi.org/10.25923/q56g-ba90](https://doi.org/10.25923/q56g-ba90)

United States Executive Order 13985. 3 C.F.R. 20 January 2021. Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. The White House. Washington, D.C. [whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/](http://whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/)





# National and State Performance Measures and Metrics for 2024-2027

## National Performance Measures

Focus Area	Performance Measure
<b>Coastal Ecosystems</b>	Number of acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities.
<b>Coastal Ecosystems</b>	Number of resource managers who use ecosystem-based approaches in the management of land, water, and living resources as a result of Sea Grant activities.
<b>Communities and Economies</b>	Number of communities that adopt/implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities.
<b>Communities and Economies</b>	Annual number of communities that adopt/implement hazard resilience practices to prepare for and respond to/minimize coastal hazardous events.
<b>Fisheries and Aquaculture</b>	Number of fishers, seafood processors, aquaculture industry personnel or seafood consumers who modify their practices using knowledge gained in fisheries sustainability and seafood safety as a result of Sea Grant activities.
<b>Environmental Literacy and Workforce Development</b>	Number of people (youth and adults) engaged in Sea Grant-supported nonformal education programs.
<b>Environmental Literacy and Workforce Development</b>	Number of Sea Grant supported graduates who become employed in a job related to their degree within two years of graduation.
<b>Environmental Literacy and Workforce Development</b>	Number of Sea Grant products that are used to advance environmental literacy and workforce development.
<b>Cross-cuts all Focus Areas</b>	Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management.
<b>Cross-cuts all Focus Areas</b>	Economic and societal impacts and benefits derived from Sea Grant activities (market and non-market; jobs and businesses created or sustained; patents). <b>Note:</b> this is a 5-part measure, with the subcategories listed below collected and compiled separately.
<b>Cross-cuts all Focus Areas</b>	Direct Economic Benefits (including market and non-market benefits)
<b>Cross-cuts all Focus Areas</b>	Jobs Created
<b>Cross-cuts all Focus Areas</b>	Jobs Sustained/Expanded
<b>Cross-cuts all Focus Areas</b>	Businesses Created
<b>Cross-cuts all Focus Areas</b>	Businesses Sustained/Expanded

## State Performance Measures

Focus Area	Performance Measure
<b>Cross-cuts all Focus Areas</b>	Number of Sea Grant-trained citizens who collected and submitted environmental data that were used to improve resource management and advance environmental research.
<b>Cross-cuts all Focus Areas</b>	Number of legislation, policy, or management changes informed by Sea Grant activities.
<b>Cross-cuts all Focus Areas</b>	Number of strategies implemented to advance DEI initiatives within the program.

## National Performance Metrics

Sea Grant Staffing: Number of individuals and full-time equivalents (FTEs) devoted to Sea Grant
Core Funding Proposals: number and origination of core funding pre- and full-proposals
Number of volunteer hours
Number of postsecondary students and degrees financially-supported by Sea Grant in higher education programs (undergraduate, graduate)
Number of P-12 students who participated in Sea Grant-supported formal education programs
Number of P-12 students reached through Sea Grant-trained educators
Number of educators who participated in Sea Grant-supported professional development programs
Number of peer-reviewed publications produced by Sea Grant or as a result of Sea Grant-supported research
Number of Sea Grant-sponsored/organized events
Number of attendees at Sea Grant-sponsored/organized events
Number of public or professional presentations
Number of attendees at public or professional presentations
Visitor Attendance: Number of people that visit museums, aquariums, and other informal education institutions hosting NOAA-supported exhibits or programs (NEW; Pilot)
Environmental Actions: Number of people participating in environmental actions through NOAA education programs (NEW; Pilot)

# APPENDIX A

Throughout this strategic plan, we use deliberate language and definitions to try to address tensions that arise with references to terms, natural resources, legal processes, science, and diverse forms of knowledge. For the purpose of this plan, we include the definitions we are using below.

**Accessibility:** The quality of being reachable or easily obtainable.

**Adaptive management:** A systematic approach for improving resource management by monitoring and learning from management outcomes. An adaptive management approach provides a framework for making informed decisions in the face of critical uncertainties and a formal process for reducing uncertainties so that management can improve over time.

**Coastal communities:** Marine, coastal, island, and affected inland communities that represent physical, geographic spaces or interests (e.g., individuals, government, business, education, industry, research, non-governmental organizations, etc.) served by the Maine Sea Grant Program.

**Community science:** Place-based research, outreach and education strategy providing inclusive, and equitable opportunities for diverse participants and partners to advance science and inform decision making.

**Core values:** Values that guide behavior and actions of the Maine Sea Grant College Program.

**Cross-cutting principles:** Fundamental assertions embraced by the Maine Sea Grant Program that will strengthen the organization as it implements its strategic plan.

**Diversity:** The full representation of and collaboration between people with different identities, knowledge sets, experiences, and perspectives (From: National Sea Grant 10-year Diversity, Equity, Inclusion, and Justice (DEIJ) Vision 2021).

**Ecosystem:** The complex of a community of organisms and its environment functioning as an ecological unit (Merriam-Webster 2022). Coastal and marine ecosystems involve complex interactions between organisms and their environment, and include human activities. Ecosystem components interact through dynamic chemical, physical, and biological processes that

influence organism populations and ecosystem sustainability. These systems are ever changing and can be vulnerable to natural and human-induced stressors such as extreme weather, fishing pressure, pollution, and habitat loss. (Description: NOAA Ecosystems Program 2022)

**Ecosystem Services:** Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth. (Definition: Millennium Ecosystem Assessment 2005). This definition equally values extractive services (e.g., “provisioning services”), and non-extractive services (e.g., “regulating,” “cultural,” and “supporting” services). Further, in recognizing ecosystem services as benefits to humans, we also acknowledge traditional ecological knowledge (TEK), as in the work of plant ecologist and writer, Dr. Robin Wall Kimmerer, who urges restoration of “a respectful, reciprocal relationship to the natural world.” As she writes, “our work in restoration needs to heal that relationship, as well as the land” (Kimmerer 2015).

**Environmental literacy:** The possession of knowledge and understanding of a wide range of environmental concepts, problems, and issues; cognitive and affective dispositions toward the environment; cognitive skills and abilities; and appropriate behavioral strategies to make sound and effective decisions regarding the environment. It includes informed decisions made both individually and collectively and a willingness to act on those decisions in personal and civic life to improve the well-being of other individuals, societies and the global environment.

**Equity:** The allocation and accessibility of resources for fair distribution of services, benefits, and burdens (From: National Sea Grant 10-year Diversity, Equity, Inclusion, and Justice (DEIJ) Vision 2021).



**Focus Areas:** Areas of emphasis in Maine Sea Grant and National Sea Grant programming that are shaped to address the state and nation's most urgent ocean, coastal and Great Lakes needs.

**Formal education:** Classroom-based learning provided by trained educators.

**Free choice learning:** Self-motivated learning that takes place all the time, outside of the classroom, regardless of age. The learner decides what, where, and how they want to learn over their lifetime.

**Historically marginalized populations:** Groups and communities that have experienced historical (and often ongoing) discrimination and exclusion (social, political and economic) because of unequal power relationships across economic, political, social and cultural dimensions.

**Inclusion:** The creation of an open and welcoming environment that recognizes and affirms the value and dignity of all people (From: National Sea Grant 10-year Diversity, Equity, Inclusion, and Justice (DEIJ) Vision 2021).

**Justice:** The systematic removal of barriers that result in equitable opportunities and outcomes for every individual in a diverse society. (From: National Sea Grant 10-year Diversity, Equity, Inclusion, and Justice (DEIJ) Vision 2021).

**Lifelong learner:** Any person who learns through all or much of their life using both formal and nonformal learning opportunities to foster the continuous development and improvement of the knowledge and skills needed for employment and personal fulfillment.

**Lifelong learning:** All learning activity, formal and nonformal, undertaken throughout life, with the aim of enhancing knowledge, skills, and competencies from a personal, civic, social, or employment-related perspective. Local and traditional knowledge: The knowledge, born from sea and shore, and knowledge gained via modern scientific methods, are different—and often complementary and parallel—ways of knowing. Traditional and local knowledge includes information about the biological, physical, social, cultural, and spiritual worlds that knowledge bearers inhabit and engage with. Such place-based knowledge

can inform science by providing local ecological information and narrative histories of local ecosystems, as well as best practices and rules about how to live within and care for the natural world that is our shared home. (From: National Sea Grant Network 2018, Traditional & Local Knowledge: A Vision for the Sea Grant Network).

**Maine:** The United States' 23rd and northernmost state. We recognize that Maine is a geopolitical term, as much of our state consists of unceded lands of the Penobscot, Passamaquoddy, Maliseet, and Mi'kmaq. The concept of Maine as a colonial entity and a state recognized by the Federal government is engendered in the very name of our program, Maine Sea Grant.

**National Sea Grant College Program:** Includes the National Sea Grant Office, 34 Sea Grant programs, and the National Sea Grant Advisory Board.

**Nonformal education:** Learning that happens outside the classroom, in after-school programs, with community-based organizations, or at museums, libraries, or home.

**Objective:** A tactic or means used to achieve desired outcomes.

**Outcome:** An intended result or consequence.

**Performance measures and metrics:** Indicators used to gauge program performance.

**Resilience:** The ability to prepare and plan for, absorb, recover from and more successfully adapt to adverse events and changing conditions (e.g., severe weather, climate change, economic disruptions, demographic shifts, ecosystem changes).

**Resources (i.e., natural resources, coastal resources):** Resources can be defined as gifts or benefits provided by the Earth and Ocean. The term coastal resources is used in the Congressional Bill that authorizes the Sea Grant program and is reflected in the National Sea Grant College Program's mission, as well as our own, referring to materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain. While we are beholden to this language, we also acknowledge from TEK that goods and services that are provided by the Earth as

gifts, inviting us to have gratitude. This knowledge system enables us to contextualize the importance of stewardship, as we are connected to the Earth and Ocean, and it is connected to us.

**Restoration:** Activity to assist the recovery of something that has been damaged or destroyed.

**Sustainable:** Able to be maintained.

**Underserved communities:** Refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life (as defined under U.S. Executive Order 13985).

**Vulnerable populations:** Vulnerability is a multidimensional concept that includes the convergence of predisposition, access/opportunity, and needs at both individual (human and non-human species) and ecological levels (including both human communities or other social/political constructs and ecosystems). Vulnerable populations experience risks in clusters and those susceptible to multiple risk factors, such as being of racial/ethnic minority background and living in poverty, or biologically vulnerable (e.g., dependent on a narrow range of conditions or a single other species for survival) are likely to be more vulnerable than those with a single risk. (Shi and Stevens 2021)

# Strategic Planning Process and Timeline

**DECEMBER 2021:** Maine Sea Grant Leadership Team collected input from the Program Advisory Committee (PAC) on a process for revising and extending the 2018-2023 strategic plan. Maine Sea Grant staff identified a six-member strategic planning committee to guide and facilitate the process, coordinated by the director and associate director.

**JANUARY–FEBRUARY 2022:** The full Maine Sea Grant team reviewed the Maine 2018-2023 strategic plan and assessed gaps and opportunities to expand and update the plan for 2024-2027.

**MARCH –APRIL 2022:** Maine Sea Grant staff met in sub-groups to update the goals and objectives for each of the existing focus areas and to revise other sections of the plan, including those devoted to cross-cutting issues and program values.

**APRIL–MAY 2022:** Maine Sea Grant’s strategic planning committee compiled and synthesized input from each sub-group discussion and shared the result back to the full Team.

**JUNE 2022:** The full Maine Sea Grant team met to refine the draft goal and objective language, identify other updates needed in the plan’s introduction and appendices (glossary of terms, etc.), and develop draft outcomes for each focus area.

The Leadership Team developed an online survey to solicit public and PAC input on the priorities and topic areas addressed in the 2024-2027 Strategic Plan, which was opened for one month, and shared via the Maine Sea Grant e-newsletter, website, and social media, as well as numerous staff professional networks and email contact lists.

The strategic planning committee synthesized the input and shared the updated draft goals and objectives with the Maine Sea Grant PAC, along with the survey instrument, ahead of a full-day PAC meeting in late June. The Team solicited and received verbal and written input from the PAC prior to, during, and as a follow up to the June PAC meeting.

**JUNE–JULY 2022:** The strategic planning committee reviewed numerical data and ratings from the 250 responses to the public survey, coded responses to the open-ended survey questions, and compiled the data for summarization and presentation to the full Maine Sea Grant team. These data are available to the National Sea Grant Office as needed.

**JULY–AUGUST 2022:** The strategic planning committee made recommendations to the full Maine Sea Grant team for additional changes and revisions to the draft plan, based on the survey and PAC member input and the Draft National Sea Grant Program 2024-2027 Strategic Plan. The proposed changes were endorsed and then made. Maine Sea Grant director and associate director met with the National Sea Grant program officer to review the overall approach and seek input prior to draft submission. The Draft Maine Sea Grant 2024-2027 Strategic Plan was submitted to the National Sea Grant Program on August 11, 2022, and received feedback from the program officer on August 26, 2022.

**SEPTEMBER 2022:** The strategic planning committee reviewed the program officer’s feedback, as well as the Second Draft National Sea Grant 2024-2027 Strategic Plan, received on September 6, 2022. The strategic planning committee discussed and incorporated both into a second draft of the Maine Sea Grant 2024-2027 Strategic Plan. The second draft was resubmitted to the full Maine Sea Grant team and the PAC for review and additional feedback.

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## Strategic Planning Process and Timeline *(continued)*

**OCTOBER 2022:** The Maine Sea Grant Leadership Team collected input from the full staff and the PAC on the second draft plan, and feedback from both groups was reviewed and addressed by the strategic planning committee before sending the final draft to the University of Maine Office of the Vice President for Research and Dean of the Graduate School (VPRDGS) for review and feedback. The strategic planning committee reviewed and incorporated input from the VPRDGS and submitted the second Draft Maine Sea Grant 2024-2027 Strategic Plan to the National Sea Grant Office.

**NOVEMBER–DECEMBER 2022:** The strategic planning committee reviewed and incorporated additional suggested or required changes received from the National Sea Grant Office, and provided a final opportunity for review by the full Maine Sea Grant team and the University of Maine VPRDGS before submitting the final Maine Sea Grant 2024-2027 Strategic Plan to the National Sea Grant Office.

**JANUARY 2023–FEBRUARY 2023:** The final, approved Maine Sea Grant 2024-2027 Strategic Plan was designed and published.



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Maine Sea Grant's work across Maine, from the Piscataqua River to Passamaquoddy Bay, is carried out on the lands and waters of the Penobscot, Passamaquoddy, Maliseet, and Mi'kmaq, collectively known as the Wabanaki people. We thank the Wabanaki, people of the Dawn Land, for their stewardship and continued strength and resilience in protecting it. We support all efforts for healing and protecting the land and water we share.

In complying with the letter and spirit of applicable laws and pursuing its own goals of diversity, the University of Maine System does not discriminate on the grounds of race, color, religion, sex, sexual orientation, transgender status, gender, gender identity or expression, ethnicity, national origin, citizenship status, familial status, ancestry, age, disability physical or mental, genetic information, or veterans or military status in employment, education, and all other programs and activities. The University provides reasonable accommodations to qualified individuals with disabilities upon request. The following person has been designated to handle inquiries regarding non-discrimination policies: Director of Equal Opportunity, 101 Boudreau Hall, University of Maine, Orono, ME 04469-5754, 207.581.1226, TTY 711 (Maine Relay System).