National Sea Grant College Program

2024-2027 Strategic Plan

Fall 2022

Introduction

The National Sea Grant College Program Act calls for a strategic plan to be developed at least every four years that establishes priorities for the National Sea Grant College Program (Sea Grant) and provides an appropriately balanced response to local, regional and national needs. 33 USC §1123(c)(1). The National Sea Grant College Program 2024-2027 Strategic Plan was developed in 2022 by the National Sea Grant Office (NSGO) of the National Oceanic and Atmospheric Administration (NOAA) in consultation with the National Sea Grant Advisory Board (Board) and the 34 university-based Sea Grant programs. As called for in the legislation, this plan is reflective of integration with the relevant portions of the strategic plans of NOAA, the U.S. Department of Commerce (DOC) and the Administration.

The process to develop this national strategic plan was iterative and integrative with the development of individual plans for each of the 34 Sea Grant programs, with the national plan serving as an umbrella framework to guide the direction of Sea Grant at a higher level. The national process used the National Sea Grant College Program 2018-2023 Strategic Plan as a starting point for engagement led by NSGO staff, who collected and reviewed relevant information from a range of resources, including draft program plans, listening sessions, topical experts, and numerous external partners. This review also included consideration of national priorities identified in documents such as the DOC 2022-2026 Strategic Plan, the NOAA Oceanic and Atmospheric Research 2020-2026 Strategy, the NOAA Blue Economy Strategic Plan 2021-2025 and the Sea Grant network's visioning documents.

At a minimum, the plans of the 34 Sea Grant programs are expected to align to the national strategic plan and national performance measures. This iterative and integrative planning process enables the network to harmonize their plans at all levels: local, regional and national. The programs' strategic plans guide and inform their four-year award applications for core funding from NOAA; thus, the plans inform the programs' requests for proposals and other research, outreach and education activities. In addition, the programs' strategic plans are used as the basis for program evaluation. Sea Grant program plans are expected to be developed through an inclusive stakeholder process and in collaboration with the assigned Federal Program Officer.

Sea Grant is continually examining policies, procedures and stakeholder needs that will shape future plans and programs to enhance the value we deliver to the nation. We will build upon Sea Grant's historic impacts, our short-range achievements and long-range visioning efforts with partners to support those initiatives that have been successful and identify innovative new approaches to ensure continued progress in the future.

Vision

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

The Sea Grant vision complements the vision articulated in the DOC Strategic Plan, NOAA's draft strategic plan and the NOAA Oceanic and Atmospheric Research Strategy.

Mission

Sea Grant's mission is to enhance the use and conservation of coastal, marine and Great Lakes resources to create a sustainable and resilient economy founded on a healthy environment and vibrant, diverse communities.

The Environment in Which We Work

[*largely a graphical component, under development*]

How We Work

Sea Grant was created by the U.S. Congress in 1966 to be a highly leveraged federal and state partnership harnessing the intellectual capacity of the nation's universities and research institutions to solve problems and generate opportunities with coastal communities and partners. Sea Grant engages individuals, communities, educators, scientists, lawyers, organizations, industries and governments to sustain and enhance the vitality, value and use of the nation's coastal resources. Administered and supported by NOAA and matched by the state institutions and other sources, Sea Grant provides unique access to scientific and engagement expertise through the 34 university-based Sea Grant programs located throughout the nation. Sea Grant works with stakeholders to generate, translate and deliver cutting-edge, unbiased science-based information to address complex issues.

Sea Grant is a national network consisting of the NSGO, 34 university-based Sea Grant programs, the Board and hundreds of participating research institutions. This network enables NOAA and the nation to tap into the best science; technology; expertise; and trusted, long-standing community connectors to balance human use and environmental and socioeconomic issues in coastal communities. Sea Grant's alliance with major research universities provides access to thousands of scientists, students and outreach professionals. Sea Grant's 34 university-based programs are also fundamental to the development of critically important professionals, such as scientists, educators, community leaders, policy makers and resource managers needed to research, inform and guide the responsible use and conservation of our nation's coastal resources. With its strong research capabilities, local knowledge and on-the-ground workforce, Sea Grant provides an effective network (encompassing national, regional, state and local levels) to rapidly identify and capitalize on opportunities and to generate timely, practical solutions to real problems in real places.

Sea Grant serves America's communities along the coasts of the Atlantic, Pacific, Gulf of Mexico, Great Lakes and the United States' territories. Sea Grant is broad and nimble, with access to the depth and knowledge of the nation's academic institutions. To address issues that face coastal communities, Sea Grant provides the information, tools and services to ensure coastal communities are sustainable. Sea Grant integrates its science and engagement programs regarding watersheds, coastal and ocean ecosystems and highlights the vital connections between these systems and the well-being of the nation's coastal communities. Sea Grant's presence in the academic community gives it the ability to engage in a broad diversity of topics, mobilizing local, regional and national expertise while maintaining

the ability to address unforeseen needs. Sea Grant's presence in coastal communities gives it the ability to respond to local needs by working directly with knowledge networks and decision-makers.

Sea Grant programs integrate their efforts across the following functional areas, which represents how Sea Grant generates, transmits, translates and transitions knowledge to address critical issues with stakeholders and partners:

- Research. The generation of new knowledge is a core part of Sea Grant, providing answers to key questions about our ocean, coasts, watersheds and Great Lakes. Research may be conducted by Sea Grant staff or through extramural research that has been reviewed for merit and that is often competitively selected.
- Education. Transmitting knowledge through formal and nonformal mechanisms to allow learners to act is central to the transformational nature of Sea Grant's work.
- Extension. The exchange of knowledge and its application by communities, governments, NGOs, business and industry--often accomplished through direct interaction, technical assistance, and demonstration projects--is at the heart of Sea Grant's operational model.
- Communication. The transmission of information to targeted audiences through a variety of media to create awareness and engagement complements traditional extension and education activities.
- Management. Establishing and maintaining the infrastructure and partnerships needed to support the activities of a Sea Grant program is an essential task. This function allows programs to exist, grow and serve.

Core Values

Sea Grant's core values are essential and enduring tenets that influence the organization and support its mission. The core values support a culture of integrity and scientific neutrality enabling Sea Grant to serve as a trusted broker of information.

Vision – Advancing creative, innovative solutions that address emerging and chronic challenges through engagement, science and stewardship.

Collaboration – Seeking and sustaining partners with whom we leverage each other's strengths, and responsively, respectfully integrating diverse expertise and perspectives to reach shared goals.

Sustainability – Advancing environmental stewardship practices and communicating the value of the services that the coastal, watershed, ocean and Great Lakes ecosystems provide to the nation.

Accountability – Operating with integrity and transparency while maintaining quality and relevance in all functional areas, including program management.

Diversity, Equity, Inclusion, Justice and Accessibility – Proactively engaging with the range of identities, cultures, communities and capacities present throughout our areas of work, with respect and sensitivity to each person's experiences, history and systemic challenges.

Cross-Cutting Principles

These concepts provide a common foundation for all of the following Focus Areas and the work Sea Grant conducts. Recognizing these Cross-Cutting Principles enhances Sea Grant's capabilities in order to meet future national needs. In the course of implementing the 2024-2027 National Strategic Plan, Sea Grant will:

- Cultivate and sustain partnerships by integrating the expertise and capabilities of partners from international, federal, tribal, state and local communities as well as from academia, nongovernmental organizations and industry.

- Enhance diversity, equity, inclusion, justice and accessibility by seeking and integrating diverse perspectives to advance cultural understanding and enable the network to pursue its vision and mission with, and for, all audiences. We will actively create mechanisms to allow all people to participate in network activities. Bringing a range of perspectives, values and tools together to find solutions that are more innovative, creative, inclusive and responsive will help us be successful in tackling problems facing coastal and Great Lakes communities.

Focus Area Overview

National focus areas enable Sea Grant to concentrate capabilities, programs and resources to address and respond to the nation's most urgent ocean, coastal and Great Lakes needs. By addressing the following focus areas, Sea Grant aims to prepare communities to address risks from events such as drought, flooding, hurricanes and declines in fisheries as well as other changing conditions that may affect a community's resilience and sustainability.

A national framework of focus areas describes Sea Grant's overarching priorities based on national, regional and local needs and initiatives. The focus areas also provide a structure to organize relevant accomplishments, impacts and outcomes with applicable priority. Each Sea Grant program contributes to the national focus areas and goals. Program strategies are aligned with the national framework, but participation in individual focus areas and goals are determined after consultation with local and regional stakeholders and advisors, allowing local-level input to identify and develop methods to address emerging and chronic issues.

Focus areas provide an order to the wide expanse of Sea Grant's topical interests. In practice, we recognize focus areas are interrelated and that a single activity may advance the goals of multiple focus areas. Additionally, no focus area is structured to align with a single Sea Grant functional area or another. Rather, we expect each focus area will be fulfilled through effort in each of the functional areas.

Focus Area: Environmental Literacy and Workforce Development

Goal: A diverse, environmentally literate public participates in lifelong formal, nonformal and free-choice learning opportunities.

ACTION: Create and implement educational resources and opportunities that are diverse, equitable, inclusive, just and accessible for formal, nonformal and free-choice learners to explore multiple ways of learning and knowing and to develop their curiosity and learning abilities throughout their lives.

DESIRED OUTCOME:
- Individuals consider themselves environmentally literate lifelong learners who utilize knowledge to support, build and restore healthy natural and human communities.

ACTION: Develop, provide and assess research, curricula, tools and other resources for teachers, students and lifelong learners to support personal choice, participatory decision-making and community planning processes.

DESIRED OUTCOMES:
- Teachers, students and lifelong learners have current information and innovative tools that meet or exceed relevant standards and practices.
- People know and can act on issues that impact their lives, communities and environments.
- Community members use their knowledge to remove barriers and act for personal and social resilience and adaptation to changing economic, environmental and social conditions.

ACTION: Strengthen the ability of individuals, organizations and communities to acquire, synthesize and use knowledge in an environmentally literate way.

DESIRED OUTCOMES:
- Individuals, organizations and communities create innovative opportunities, businesses and communities that respect diverse ways of knowing and learning, address systemic problems in equitable and just ways, and integrate traditional and novel cultures.
- Coastal and Great Lakes communities are sustainable, healthy, diverse centers of tradition, innovation and prosperity.

Goal: A diverse, skilled and environmentally literate workforce that is engaged and able to build prosperous lives and livelihoods in a changing world while addressing critical local, regional and national needs through traditional and innovative careers.

ACTION: Identify and remove barriers to accessing training and learning opportunities so that the nation's diverse population is connected to and prepared for the range of career paths that support the needs of coastal and Great Lakes communities.

DESIRED OUTCOME:
- All members of a community are enabled to explore and pursue the variety of occupations that are essential to sustain coastal and Great Lakes communities, economies and ecosystems.

ACTION: Increase opportunities for students at all levels (P-12, undergraduate, graduate, post-graduate and technical and vocational) to gain knowledge and experience addressing issues that are important to our ocean, coasts and Great Lakes and their respective watersheds.

DESIRED OUTCOMES:
- Sea Grant student opportunities provide increased literacy, experience and preparedness in critical disciplines, skills and issues.
- Students from all backgrounds and with diverse needs are thoughtfully and intentionally supported in and have access to formal and experiential learning, training and research experiences.

ACTION: Prepare a responsive and diverse workforce to advance and benefit from sectors that support the needs of coastal communities and ecosystems and to adapt and thrive in changing conditions.

DESIRED OUTCOME:
- Employment in coastal, Great Lakes and watershed communities expands and diversifies. The existing and future workforce is able to adapt and thrive in changing environmental, social and economic conditions.

Focus Area: Healthy Coastal Ecosystems

Goal: Coastal and Great Lakes habitats, ecosystems and the services they provide are protected, enhanced and/or restored.

ACTION: Co-develop, improve and share knowledge, decision-support tools, technologies and approaches to protect and restore ecosystems.

DESIRED OUTCOMES:
- Communities have greater awareness and understanding of ecosystem functions and the services they provide.
- Coastal and Great Lakes ecosystem science and conservation needs are identified and prioritized through diverse stakeholder participation.
- Evidence-based science, traditional and local knowledge and innovative solutions inform and improve the management and conservation of coastal habitats.
- Coastal and Great Lakes biodiversity, habitats and ecosystem functions and services are restored and sustained.
- Collaborative and inclusive planning and decision-making leads to enhanced stewardship and community benefits, especially for the most vulnerable.

Goal: Land, water, and living resources are managed by applying science, tools and services to sustain resilient coastal and Great Lakes ecosystems.

ACTION: Support a science- and management-driven framework that integrates research, observations, monitoring and modeling and that includes stakeholder engagement and traditional and local knowledge to provide a scientific basis for informed decision-making.

DESIRED OUTCOMES:
- Inclusive collaborations with diverse stakeholders and partners support planning, research and innovative solutions to address coastal and Great Lakes resource management needs, especially for vulnerable communities.
- Community science initiatives are utilized and contribute to improving our knowledge with respect to stewardship of ecosystems and their contributions to coastal and Great Lakes communities and economies.
- Coastal and Great Lakes communities and resource managers have access to and use science, data, tools and training to be effective in planning and decision-making processes.
- Resource managers understand the risks, options, tradeoffs and impacts of their decisions.

ACTION: Identify and advance successful strategies that enhance resilient ecosystems and watersheds in the context of changing conditions, including environmental variability and climate change.

DESIRED OUTCOMES:
- Communities share, access, understand and use information regarding projected changes and related impacts within ecosystems.
- Communities can apply knowledge from case studies, training and tools to improve their ability to plan, prepare and adapt to environmental variability and climate change.

Focus Area: Sustainable Fisheries and Aquaculture

Goal: Domestic fisheries, aquaculture and other coastal and freshwater natural resources supply food, jobs and economic and cultural benefits.

ACTION: Promote and support harvest and processing techniques that lead to safe, sustainable, high-quality food as well as economic, social and ecosystem benefits.

DESIRED OUTCOMES:
- Coastal and Great Lakes residents and U.S. seafood consumers understand the benefits of domestically-produced seafood, both wild and farmed, for individual and environmental health.
- Coastal and Great Lakes resource industries employ technologies and reinforce strategies to ensure safe and sustainable seafood and products.
- Coastal and Great Lakes resource industries employ strategies that balance economic, community, cultural and conservation goals.

ACTION: Support development of a trained and diverse workforce and enhance technology transfer in a manner that recognizes a variety of methodologies and approaches, including those based on traditional and local knowledge.

DESIRED OUTCOMES:
- Increased understanding and technological solutions aid management and production.
- Stakeholder engagement and partnerships enable the industry to adapt and acquire innovative technologies.

Goal: Natural resources are sustainably managed to support fishing communities and industries, including commercial, recreational, subsistence fisheries and aquaculture.

ACTION: Ensure the best available science, services and tools are available to and trusted by resource managers, the fishing and aquaculture communities and consumers.

DESIRED OUTCOMES:
- Commercial and recreational fishers and aquaculturists are knowledgeable about efficient, sustainable and responsible tools, techniques and uses of coastal and freshwater resources.
- Resource managers and fishing and aquaculture communities have access to and share diverse knowledge and tools to increase their capability to adapt to changing resource management needs, including those driven by climate change.
- Consumers understand the health and sustainability benefits of domestically produced seafood and use that knowledge to inform their seafood purchasing decisions.

Focus Area: Resilient Communities and Economies

Goal: Coastal and Great Lakes communities have the capability and resources to prepare for and adapt to extreme and chronic weather and coastal hazards, climate change, economic disruptions and other threats to community health and well-being.

ACTION: Improve and expand exchanges of knowledge to better identify the diverse needs of communities and to increase the public's understanding of changing conditions and related impacts.

DESIRED OUTCOMES:
- Scientific understanding, including traditional and local knowledge, provides foundational information, and all community members understand the impacts of changing conditions and coastal hazards and have the capability to prepare, respond and adapt.
- Community leaders improve their understanding of changing conditions and coastal hazards and their capability to implement mitigation and adaptive strategies.

ACTION: Work with communities to advance collaborative comprehensive planning, actionable science, and adaptive management strategies.

DESIRED OUTCOME:
- Inclusive collaborations with diverse stakeholders and partners support mitigation and adaptation efforts built on knowledge from and responsive to the needs of all, especially the most vulnerable.

ACTION: Work with communities to explore and support diversification, strengthening, sustainability and social equity within coastal economic sectors and the blue economy.

DESIRED OUTCOMES:
- Coastal and Great Lakes communities have access to and share knowledge, tools, services and technologies to adapt and grow resilient economies.
- Leaders in coastal and Great Lakes economic sectors understand how they can become more resilient through diversification including expanded renewable, regenerative, and clean practices.

Goal: Water resources are enhanced, sustained and protected to meet existing and emerging needs of the communities and economies that depend on them.

ACTION: Use engagement and information exchange to advance the understanding of how actions impact water quality, quantity and availability.

DESIRED OUTCOME:
- Community members understand watershed and coastal functions and the ecosystem services they provide, understand how their actions will impact water resources, and are able to make informed decisions.

ACTION: Collaborate with diverse partners and stakeholders, especially the most vulnerable, to advance plans and management practices for protecting and managing water resources.

DESIRED OUTCOMES:
- Communities work with knowledge networks to share and access science, data, tools and services to anticipate changes in water resources, to protect and sustain water resources, and to make informed decisions.
- Communities have diverse, sustainable economies and industries that support existing and emerging water resource needs.

Where We Work
[map graphic]

Appendix A: Definitions

Accessibility: The quality of being reachable or easily obtainable

Action: A tactic or means used to achieve desired outcomes

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

Blue economy: The use of coastal and Great Lakes resources for the production of goods and services

Coastal communities: Marine, coastal, island, Laurentian Great Lakes, and Lake Champlain communities that represent a variety of interests (e.g., individuals, government, business, education, industry, research, non-governmental organizations, etc.) served by the National Sea Grant College 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

Comprehensive planning: A formal planning process resulting in an official document adopted by a local government setting forth goals, policies and guidelines for current and future development within its jurisdiction

Core values: Values that guide behavior and actions of the National Sea Grant College Program

Cross-cutting Principles: Fundamental propositions embraced by the National Sea Grant College 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

Ecosystem: A dynamic and complex association of plant, animal and human communities and associated non-living physical components interacting as a functional unit

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 decision making 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

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

Focus Areas: Areas of emphasis that are shaped to address the nation's most urgent ocean, coastal and Great Lakes needs

Formal education: Classroom-based learning provided by trained teachers

Goal: An aspirational concept that inspires a level of success in a focus area and broadly describes a desired future state

Inclusion: The creation of an open and welcoming environment that recognizes and affirms the value and dignity of all people

Justice: The systematic removal of barriers that result in equitable opportunities and outcomes for every individual in a diverse society

Knowledge network: Formal or nonformal social networks that enable the transfer of traditional and local knowledge

Lifelong learner: Any person who learns through all or much of their life using both formal and informal learning opportunities in order 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 informal, undertaken throughout life, with the aim of enhancing knowledge, skills, and competencies from a personal, civic, social, or employment-related perspective

Mission: Communicates the purpose of the organization

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, community-based organizations, museums, libraries, or at home

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)

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

Sustainable: Able to be maintained

Traditional and local knowledge: Ways of knowing that are passed down through generations (often through oral tradition) and/or reflects the observations and experiences of people living in a region and that often emphasizes interconnectedness between humans and their environment

Vision: A description of a future state that explains the basis for developing a strategic plan

Vulnerable: Indicating a higher risk for negative impacts as a result of the barriers to social, economic, political and environmental resources

Appendix B: 2024-2027 National Performance Measures and Metrics

NOTE - We intend to include an Appendix on Performance Measures and Metrics (PMMs) in the Final 2024-2027 Strategic Plan as we have done in the past. The table below is an annotated table intended to provide background detail on where things stand at this time given the parallel ongoing Strategic Planning and PMM Review efforts. This table has more detail than will be provided in the final 2024-2027 National Strategic Plan, which is expected to only list the known PMMs (refer to the current plan for example). Please note that the NSGO has not made any final changes or updates to the performance measures, metrics, publications and documents collected in PIER and the SG Library at this time. However, we do acknowledge the need to provide everything that we can to allow programs to develop and refine their strategic plans and PMMs over the coming months. This table is a draft and is a starting point to engage in conversation. Information gathered here represents feedback from strategic plan listening sessions and public comments, and engagement with network groups, as well as comments that have come in the past several years seeking clarity about confusing definitions, etc. Our intent is to be as transparent as possible as we work together to have a conversation assessing what is still essential and/or valuable to collect and what PMMs might not be necessary to continue to collect as we seek to minimize reporting while being able to tell the Sea Grant story. Now is a good time to reassess what we are collecting and have a conversation around why it may or may not still be important to collect. It is also an important time to assess and plan for any changes prior to 2024 implementation.

The first column (PMM #) has been created solely for convenience when discussing items listed in this table.

Draft Summary of the National Performance Measures and Metrics Titles from the 2018-2023 Plan Versus the 2024-2027 Plan
PMM #	**FA or CC**	**2018-2023 National Performance Measure and Metrics**	**2024-2027 National Performance Measure and Metrics**	**Changes to PMMs**	**Comments / Notes**
PMMs Required to Report "up" to NOAA, DOC or OMB
1	HCE	Number of acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities.	Number of acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities.	Retained (Providing Example)	Providing example based on network feedback to convert linear miles to acres; This PM requires targets; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
2	SFA	Number of fishermen, seafood processing or aquaculture industry	Number of fishersmen, seafood processorsing, aquaculture industry	Retained (Under Review	SFA Lead heard from network to broaden what is being captured in this measure to include

		personnel who modify their practices using knowledge gained in fisheries sustainability and seafood safety as a result of Sea Grant activities	personnel or seafood consumers who modify their practices using knowledge gained in fisheries sustainability and seafood safety as a result of Sea Grant activities	For Modification)	seafood consumers and behavior changes; Better aligns to agency goals and seafood strategy; This PM requires targets; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
3	RCE	Number of communities that adopt/ implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities	Number of communities that adopt/ implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities	Retained (Under Review For Modification)	Definition of 'communities' under review for change based on network feedback (which may also better align for marine debris reporting); This PM requires targets; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
4	RCE	Annual number of communities that adopt/ implement hazard resilience practices to prepare for and respond to/ minimize coastal hazardous events	Annual number of communities that adopt/ implement hazard resilience practices to prepare for and respond to minimize coastal hazardous events	Retained (Clarifying Definition(s))	Addressing network confusion over current definitions of community and county; Adding tribal nations to the definitions; Defining training, technical assistance, and local outcomes; This PM requires targets; Reported to NOS CZMA Program; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
5	ELWD	Number of Sea Grant products that are used to advance environmental literacy and workforce development.	Number of Sea Grant products that are used to advance environmental literacy and workforce development.	Retained (Clarifying Definitions(s))	Addressing network confusion over the current definition of the word "use." This PM requires targets; SGEN supports this PM; Used for responses to the Hill
6	ELWD	Number of people engaged in Sea Grant-supported informal education programs	Number of people (youth and adults) engaged in Sea Grant-supported informal education programs	Retained (Clarifying Definitions & Providing Example(s))	Clarifying definitions based on SGEN feedback to align to NOAA Office of Ed PM; This PM requires targets; Used for responses to the Hill
7	Cross-Cutting	Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management.	Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management.	Retained (No Change)	This PM requires targets; Used for responses to the Hill

8	Cross-Cutting	Economic and societal impacts derived from Sea Grant activities (market and non-market; jobs and businesses created or sustained)	Economic and societal impacts and benefits derived from Sea Grant activities (market and non-market; jobs and businesses created or sustained; patents/licenses)	Retained (Clarifying Definition(s))	Considering ERG Report recommendations to include wording to encompass what we are already collecting (e.g., benefits) & other wordage being used (created/sustained); This PM requires targets; Patents are optional and occasionally asked for by NOAA; PM used for responses to the Hill; Used in annual Sea Grant by the Numbers
9	Cross-Cutting	Number of Postsecondary Students and Degrees Financially-Supported by Sea Grant in Higher Education Programs (Undergraduate, Graduate)	Number of Postsecondary Students and Degrees Financially-Supported by Sea Grant in Higher Education Programs (Undergraduate, Graduate)	Retained (Clarifying Definition(s))	Clarifying funding source definition based on feedback from the network; SGEN supports this Metric; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
10	Cross-Cutting	Number of P-12 Students Reached Through Sea Grant-Trained Educators or Directly through Sea Grant Education Programs	Number of P-12 Students Reached Through who participated in Sea Grant-Trained Educators or Directly through Sea Grant Education Programs supported formal education programs	Retained and Split (Under Review For Modification)	Clarifying definitions based on SGEN feedback to align to NOAA Office of Ed PM, therefore splitting this PM into two separate PMs, the other (#11) is listed in the next line; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
11	Cross-Cutting	Number of P-12 Students Reached Through Sea Grant-Trained Educators or Directly through Sea Grant Education Programs	Number of P-12 Students Reached Through Sea Grant-Trained Educators or Directly through Sea Grant Education Programs	Retained and split (Under Review For Modification)	Splitting this PM into two separate PMs, the other (#10) is listed on the previous line; Used in annual Sea Grant by the Numbers
12	Cross-Cutting	Number of P-12 Educators who participated in Sea Grant education programs	Number of P-12 educators who participated in Sea Grant-supported professional development education programs	Retained (Under Review For Modification)	Clarifying definitions based on SGEN feedback to align to NOAA Office of Ed PM; SGEN supports this metric; Used for responses to the Hill
13	Cross-Cutting	Number of individuals certified or recertified in Hazard Analysis Critical Control Point (HACCP) as a result of Sea Grant activities	Number of individuals certified or recertified in Hazard Analysis Critical Control Point (HACCP) as a result of Sea Grant activities	Retained (No Change)	Used in annual Sea Grant by the Numbers
14	Cross-Cutting	Number of peer-reviewed publications produced by Sea Grant	Number of peer-reviewed publications produced by Sea Grant	Retained (No Change)	This PM requires targets; Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other

					audiences; Used for responses to the Hill
center	**PMMs Not Required to Report "up" to NOAA, DOC or OMB that are used internally with various frequencies**
15	HCE	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	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	Retained (Clarifying Definition(s))	Addressing network feedback to clarify the definition of resource manager; This PM requires targets; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
16	ELWD	Number of Sea Grant supports graduates who become employed in a job related to their degree within two years of graduation.	Number of Sea Grant supported graduates who become employed in a job related to their degree within two years of graduation.	Retained (No Change)	SGEN supports this Metric; This PM requires targets
17	Cross-Cutting	Number of individuals and full-time equivalents (FTEs) by Sea Grant	Number of individuals and full-time equivalents (FTEs) by Sea Grant	Retained (Clarifying Definition(s))	Incorporating PIER language into the definitions; Used for responses to the Hill
18	Cross-Cutting	Number and Origination of Core Funding Pre-and Full Proposals	Number and Origination of Core Funding Pre-and Full Proposals	Retained (Clarifying Definitions & Providing Example(s))	Addressing network feedback to clarify home institution reporting, clarify reporting when proposals are selected verses funded, and pull in PIER language into definitions; Used for responses to the Hill
19	Cross-Cutting	Number of Volunteer Hours	Number of Volunteer Hours	Retained (Clarifying Definitions)	Addressing network feedback to clarify whose hours can be reported; Used for responses to the Hill; Used in annual Sea Grant by the Numbers
20	Cross-Cutting	Number of Marinas Certified as "Clean Marina" by the Clean Marina Program as a result of Sea Grant Activities	Number of Marinas Certified as "Clean Marina" by the Clean Marina Program as a result of Sea Grant Activities	Retained (No Change)	Historically requested by Programs active in the Clean Marina Program
21	Cross-Cutting	Number of Sea Grant- Sponsored/ Organized Events	Number of Sea Grant- Sponsored/ Organized Events	Up for Discussion	
22	Cross-Cutting	Number of Attendees at Sea Grant-Sponsored/ Organized Events	Number of Attendees at Sea Grant-Sponsored/ Organized Events	Up for Discussion	

23	Cross-Cutting	Number of Public or Professional Presentations	Number of Public or Professional Presentations	Up for Discussion	Clarifying definition to address confusion around what should or shouldn't be reported (e.g., limited to SG research or broader)
24	Cross-Cutting	Number of Attendees at Public or Professional Presentations	Number of Attendees at Public or Professional Presentation	Up for Discussion	
Proposed/Potential New PMMs for Program Reporting					
25	Cross-Cutting	*This metric was collected from a select few programs in previous years (outside of PIER reporting) and now we are opening up reporting to others that meet the criteria.*	Number of people that visit museums, aquariums, and other informal education institutions hosting NOAA-supported exhibits or programs.	NEW; Piloting	SGEN supports better alignment with NOAA Office of Ed PMs; Historically 6 SG programs have been reporting on this; Will now open it up to the network for reporting
26	Cross-Cutting	*NA*	Number of people participating in environmental actions through NOAA education programs	NEW; Piloting	SGEN supports better alignment with NOAA Office of Ed; Coordinating with OoE to better understand what is being collected
27	Cross-Cutting	*NA*	DEIJA measures or metrics (TBD) - Under discussion by DEI Network; SG Advisory Board, & at NOAA, DOC & OMB	Potentially NEW PMM(s); Piloting	General support across multiple network entities
New Required PMMs for Tracking and Reporting on IIJA Marine Debris Projects					
28	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Percentage of projects located within underserved communities as defined under the Executive Order 13985	NEW	Required by OMB; Request that programs please label I&A reporting from these NOFOs with "IIJA Marine Debris". Internal NSGO tracking of % for PM reporting.
29	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Percent of projects with meaningful engagement of tribal or underserved communities	NEW	Required by OMB; Request that programs please label I&A reporting from these NOFOs with "IIJA Marine Debris". Internal NSGO tracking of % for PM reporting.
30	IIJA/ Marine	*NA*	IIJA/Marine Debris: Number of Sea Grant products that are used to mitigate	NEW	Required by OMB; Request that programs please label I&A reporting from these NOFOs

	Debris		marine debris		with "IIJA Marine Debris". Internal NSGO tracking of PM project reporting.
31	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Number of peer-reviewed publications produced related to marine debris	NEW (based on existing PM)	Required by OMB; Built on Existing PMM from 2018-2023 (# 14); Request that program please note in pubs reporting from these NOFOs with "IIJA Marine Debris"
32	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Economic and societal impacts related to marine debris derived from Sea Grant activities (market and non-market; jobs and businesses created or sustained; patents/licenses)	NEW (based on existing PM)	Required by OMB; Built on Existing PMM from 2018-2023 (# 8); Request that program please label reporting from these NOFOs with "IIJA Marine Debris" in Econ PM narrative statement
33	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Number of communities that adopt/implement sustainable economic and environmental development practices and policies related to marine debris as a result of Sea Grant activities	NEW (based on existing PM)	Required by OMB; Built on Existing PMM from 2018-2023(# 3); Request that program please label reporting from these NOFOs with "IIJA Marine Debris" in PM comment box
34	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management of marine debris	NEW (based on existing PM)	Required by OMB; Built on Existing PMM from 2018-2023 (# 7); Request that program please label reporting from these NOFOs with "IIJA Marine Debris" in Products PM narrative statement
35	IIJA/ Marine Debris	*NA*	IIJA/Marine Debris: Number of Sea Grant products that are used to advance environmental literacy and workforce development related to marine debris	NEW (based on existing PM)	Required by OMB; Built on Existing PMM from 2018-2023 (# 5); Request that program please label reporting from these NOFOs with "IIJA Marine Debris" in Products PM narrative statement

The Sea Grant Collection at the NOAA Central Library serves as a comprehensive collection of Sea Grant-produced publications from across the country. The Collection supports the Sea Grant mission by ensuring that Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences. Listed below are the types of documents (in addition to peer-reviewed journal articles listed above

(#14)) accepted to the Sea Grant Collection, along with corresponding examples.

Documents Accepted to the Sea Grant Collection					
#	FA or CC	SG Collection Document Type	Example of Document Type	Changes to Pubs / Docs	Comments / Notes
36	Cross-Cutting	Conference Proceedings/ Workshops	- BP Deepwater Horizon Restoration & Recovery: Implementing the RESTORE Act in Texas - Research Needs for the Sustainable Management of Crustacean Resources in the South Atlantic Bight - Proceedings of the twentieth U.S.-Japan Symposium on Aquaculture Nutrition	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
37	Cross-Cutting	Technical Reports	- Nonparametric and parametric estimation of wave statistics and spectra - Sedimentology of Kahana Bay, Oahu, Hawaii - The Economics of Fish Protein Concentrate - Regional Waterway Management System for South Sarasota County	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
38	Cross-Cutting	Handbook/ Manual/ Guidelines	- The Scripps Institution of Oceanography Marine Technician's Handbook: The Sonar Pinger - The City of Lewes Hazard Mitigation and Climate Adaptation Action Plan - EIS Handbook: A Guide to Hawaii's Requirements and Process - Guide to common tidal marsh invertebrates of the northeastern Gulf of Mexico	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
39	Cross-Cutting	Strategic/Program Document (Program Reports may also fall into this category)	- A Suggested Model for the Management of a Sea Grant Institutional Program - California Sea Grant strategic plan, 2001-2005: looking ahead - Building Sea Grant: the role of the National Sea Grant Office - Research highlights from USC Sea Grant September 2017 (Program Report)	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
40	Cross-Cutting	Annual/Biennial Reports	- The state of Sea Grant 2014: impacts, challenges and opportunities: biennial report to Congress by the National Sea Grant Advisory Board, November 2014 - Delaware Sea Grant Reporter 2017 Annual Report (Volume 36): Putting	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other

				Science to Work!		audiences.
41	Cross-Cutting	Educational Materials (i.e. lesson plans, teacher guides, curricula, packaged workbooks)	- Exotic aquatics on the move: lesson plans - Wet and wild: a multidisciplinary marine education teacher guide, grades K-6 - Marine survival equipment and maintenance: fisheries safety and survival series (second edition) - Cooperative Education ln Ocean Engineering Florida Atlantic University - Outdoor survival training for Alaska's youth: instructor manual	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
42	Cross-Cutting	Newsletters (will be grouped together into one record when possible)	- Fishlines - The Charter Log	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
43	Cross-Cutting	Sea Grant-Authored Books	- Change and Resilience in Fishing	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
44	Cross-Cutting	Sea Grant-funded Theses/Dissertations	- A radiative transfer model for determination of water depths - Dynamic response and maneuvering strategies of a hybrid autonomous underwater vehicle in hovering	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
45	Cross-Cutting	Bibliographies	- Shoreland planning in the Great Lakes Basin and selected coastal zones of the United States	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.
46	Cross-Cutting	Maps/ Atlases/ Charts	- A hydrographic atlas of larger North Carolina sounds - Regulations for deepwater marine protected areas in the South Atlantic	Retained (No Change)	Sea Grant publications are made accessible to researchers, students, teachers, policy makers, and other audiences.