



California Sea Grant College Program Annual Report Guidance (2024–2027 Cycle)

Revised: April 2024

This document has been adapted from the original version by the National Sea Grant College Program for ease of use and relevance for California Sea Grant (CASG) funded researchers and Extension Specialists.

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Overview and Guidance for Each Annual Report Category

Project Updates, Highlights, and Accomplishments

Overview and Purpose

Project updates, highlights, and accomplishments are qualitative components of the annual reports. These elements are used to assess project-level progress and impact, broader program impact and evaluation, and are used to inform efforts by the National Sea Grant Office (NSGO) to support local or regional partnership efforts at the national level. NSGO uses these elements to communicate the value of Sea Grant's work for communication products and materials; as talking points for Sea Grant and NOAA leadership; to inform congressional communication; and, to demonstrate the ability of Sea Grant to take advantage of ongoing and emerging opportunities.

Reporting Guidance

Project updates, highlights and accomplishments realized in the reporting year (February 1- January 31) from either current or previously funded projects should be shared with NSGO. Highlights and accomplishments are publicly available on Sea Grant's website through the [website database search function](#). They must be: 1) concise and clear, 2) independent explanations without the need for external information for understanding, which includes referencing the name of the program in the narrative 3) free of typos or grammatical errors, 4) written for lay audiences, and 5) follow the guidance described below. Entries that do not meet these criteria will need to be revised to meet the requirements. The recommended length for all entries is 250 words with a maximum of 350 words. Project updates will not be searchable on the website.

Be sure to report the partners (names, partner type and scope of reach) who supported the actualization for each submitted update, highlight, and/or accomplishment.

Project Updates (mandatory): describe the status and specific progress made towards the stated objectives of a project on an annual basis. Project updates provide the level of detail needed to assess if reasonable progress has been made. They primarily provide straightforward information about projects and accountability of the specific project-level work of Sea Grant programs, and support NSGO communications and program evaluation.

Every project must submit one project update each year. Project updates must briefly describe the specific progress made toward the stated objectives and must be written in complete sentences. The project team must provide an update on the status of that project and document progress, including favorable developments and any problems or delays in meeting the objectives and relevant actions to resolve those challenges. Updates also need to account for all changes made to the project since the last report (or, in the case of a first report, since project initiation) by exercising [prior approval waived](#) authority under the [Research Terms and Conditions](#). A reminder that any updates that result in [revision requests](#) (i.e., significant changes to scope of work, rebudgets, etc) must be submitted and approved in advance*.

The expectation is that information is provided from the reporting year (February 1–January 31). However, if there is a major project update after January, such as a significant project delay that should be conveyed, please include that information in the project update.

***Note:** Requests for changes to project objectives, no cost extensions (NCEs) or rebudgeting must be approved in advance. Email sgfiscal@ucsd.edu (cc sgreport@ucsd.edu) with official requests. Please refer to your award letter and grant terms and conditions for more details.

Highlights (optional): are a collection of stories that serve as the “features” of a program’s work in any given year. Highlights should be able to stand-alone and tell a story that provides the very best of each Sea Grant program and can include significant scientific contributions, major programmatic or administrative advances, impressive results from educational programming, impactful extension activities, innovative research success, and societal changes, etc. Using the 4Rs (recap, relevance, response, results) structure is recommended but not required; see definitions below.

Accomplishments (optional): describe key actions and results that document important Sea Grant outputs and can reflect activities that may have a significant economic, societal, and/or environmental benefit. Reporting is optional and only useful if there is a significant accomplishment to report, likely towards the end of a project or sub-project. There should be only one accomplishment in total for a project over the life of the project, unless there is a strong rationale to have more (e.g., sub-project). Accomplishments must use the 4Rs (recap, relevance, response, results) structure used in previous cycles (see below section).

4Rs Components: The 4Rs (recap, relevance, response, results) narrative text includes a title, recap and body (relevance, response, results).

1. Title: Concise and descriptive headline that is no more than 120 characters
2. Recap (aim for less than 75 words): Clear, one-sentence summary in layman's terms, without abbreviations or acronyms, written in the third person and no more than 500 characters
3. Body: Any part of the body may contain fully written out URLs (not hyperlinks) to webpages, photographs, videos or other supplemental content
 - a. Relevance (aim for less than 75 words): This provides context for the accomplishment and gives brief details on why Sea Grant addressed this particular project or activity. The relevance section may answer one or more of the following questions: Why did our program conduct this effort? What needs were originally expressed for this work? What was the situation/problem and why was it a problem? What aspects of our current implementation plan are addressed?
 - b. Response (aim for less than 75 words): The response, or Sea Grant output, describes what Sea Grant actually did. The response may include answers to one or more of the following questions: What did our program do? Who were the principal partners, collaborators and/or contributors? What were the key actions? Who was the target audience?
 - c. Results (aim for less than 75 words): The results sections will answer one or more of the following questions: What is the social, economic and/or environmental payoff of our work? Who benefitted and how? How was information collected to verify the impacts (e.g., surveys, observation, etc.)? What was the geographic scope of the results?

Estimated Level of Effort per Focus Area

Overview and Purpose

Estimated level of effort data demonstrate the amount of effort in percentages dedicated to each national focus area:

- Environmental literacy and workforce development
- Healthy coastal ecosystems
- Sustainable fisheries and aquaculture
- Resilient communities and economies

The estimated level of effort table provides context for federal program officer review of the entire annual report, budget of the program, the scale of leveraged funds, and the distribution of funding (effort) across national focus areas. It provides a lens through which the federal program officer can scale program expectations for the other sections of the report.

Reporting Guidance

Sea Grant programs are to report resources directed to each focus area to the National Sea Grant Office (NSGO) in the estimated level of effort per focus area section. Estimated level of effort data demonstrate the amount of effort in dollars dedicated to each national focus area. This information is accumulated across all projects on an annual basis.

Leveraged Funding

Overview and Purpose

Funding resources include **leveraged**, **federal**, and **non-federal match/cost sharing** funds.

Federal funds refer to the project funding received directly from California Sea Grant (and thus National Sea Grant Office [NGSO])—is not considered leveraged. **Match/cost-sharing funds** and **pass-through funds** are not considered leveraged.

Leveraged Funds are funds above and beyond those that are awarded by California Sea Grant and associated non-federal "matching funds" or "cost share". Unlike match, which must be from non-federal sources, leveraged funds can be from federal or non-federal sources. If the program helps secure additional grants or new money is leveraged as a result of its previous work, those would be considered leveraged funds. Leveraged funds must be designated as managed (administered by the program) or influenced (not administered by the program) as detailed below. Please note, funding awarded from one Sea Grant program to another is not leveraged funding if any of the funds are federal Sea Grant or matching, to avoid duplicate reporting. Pass-through funds should not be added to the leveraged funds report.

Leveraged funding comes from outside sources and can be of two types:

- **Managed** and administered by the Sea Grant program (**administered by California Sea Grant/UC San Diego/Scripps Institution of Oceanography**). This includes funds the program received from an external source (e.g., state, federal or local grants/awards/allocations). Managed leveraged funds do not include in-kind donations, any federal Sea Grant or matching funds or pass-through funds. An example would be state allocation (above match) or a grant from another federal agency, wherein the funds are sent directly to the Sea Grant program and administered by that Sea Grant program.
- **Influenced** by the Sea Grant program. This includes funding not administered/managed by California Sea Grant (e.g., gift funds awarded to and administered by a funded researcher). A program may still use influenced leverage funds to accomplish the goals and objectives of its strategic plan. Influenced leveraged funds can include in-kind donations, as long as they aren't being used as match, and the value of equipment would be the value at the time of donation, not the retail price (e.g., a program should not get credit for a donated 10-year-old truck at new retail price).

Reporting Guidance

Indicate which leveraged funds are managed and which are influenced. If these funds are associated with a single project, please indicate that on the leveraged funds form. If they are associated with multiple projects, please enter multiple rows, each associated with a single project, and the amount that went to that project.

Overview of National Performance Measures and Metrics Definitions

National Performance Measures

Overview and Purpose

Performance measures are also known as outcome measures and are generally defined as regular measurements of outcomes and results, which generate reliable data on the effectiveness and efficiency of activities and programs, and document the benefits of the program and services to partners. Performance measures are not expected to capture everything that a program does.

National performance measures are used for reporting to NOAA and higher agency levels, in communication products and materials including factsheets, on the Sea Grant website and for program evaluation.

The program (including funded researchers) has to play an essential role in order to report on any performance measure. We define essential as described by constituents and partners as essential for the project's ultimate success.

Reporting Guidance

Sea Grant programs are to report national performance measures to NSGO on the performance measure reporting pages, including the subpages for economic benefits, products, hazard resiliency training and visitors. [National performance measures definitions and detailed explanations of each measure can be found on page 9.](#)

Note: To learn more about individual measures and metrics, simply click the relevant bulleted measure/metric below.

National Performance Measures by National Focus Areas

- [Healthy Coastal Ecosystems \(HCE\)](#)
 - 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 acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities
- [Sustainable Fisheries and Aquaculture \(SFA\)](#)
 - 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
- [Resilient Communities and Economies \(RCE\)](#)
 - 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 hazard resilience practices to prepare for and respond to/minimize coastal hazardous events
- [Environmental Literacy and Workforce Development \(ELWD\)](#)
 - Number of Sea Grant products that are used to advance environmental literacy and workforce development
 - Number of people (youth and adults) engaged in Sea Grant-supported nonformal education programs
 - Number of Sea Grant-supported graduates who become employed in a job related to their degree within two years of graduation.
 - Visitor Attendance: Number of people that visit museums, aquariums, and other nonformal education institutions hosting Sea Grant-supported exhibits or programs (*NEW; Pilot*)
 - Environmental Actions: Number of people participating in environmental actions through Sea Grant education programs (*NEW; Pilot*)

Cross Cutting National Performance Measures

- Number of Sea Grant products (tools, technologies, and information services) that are used by our partners/ customers to improve ecosystem-based management
- Economic and societal impacts and benefits derived from Sea Grant activities (market and non-market; jobs and businesses created or supported; patents)

National Performance Metrics

Overview and Purpose

Programs are required to report on national performance metrics. Performance metrics are also known as output metrics and are used to indicate the product of an activity. These generally track the amount of something accomplished or number of individuals involved.

National performance metrics are used to explain the scope and work of the National Sea Grant College Program. They are used for reporting to NOAA and higher agency levels, in communication products and materials including factsheets, on the Sea Grant website, and for program evaluation.

A note on attribution: The program (including funded researchers) has to play an essential role in order to report on any performance metric. We define essential as described by constituents and partners as essential for the project's ultimate success. More information on attribution can be found in Appendix III.

Reporting Guidance

Sea Grant programs are to report national performance metrics to NSGO. [National performance metrics definitions and detailed explanations of each metric can be found on page 23 of this document.](#)

Cross Cutting National Performance Metrics

- Number of individuals and full-time equivalents (FTEs) devoted to Sea Grant
- 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 educators who participated in Sea Grant-supported professional development programs
- 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
- Number of marinas certified as "Clean Marina" by the Clean Marina Program 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
- Number of peer-reviewed publications produced by Sea Grant*

**Note: Sea Grant-funded documents and publications are submitted by the Sea Grant programs to the Sea Grant Collection at the NOAA Library on an ongoing basis. To be included in each annual report, documents are due to the Sea Grant Collection the first week in June. [More information can be found on page 32.](#)*

Overview of Data Management Plans (aka Data Sharing) Shared with NSGO

During annual reporting, all Sea Grant programs must also provide any updates or changes to project data management plans (aka data sharing), as relevant. If programs are made aware of any changes to data management plans they must submit the updated plans to the NSGO. Project teams are not required to submit annual updates to data management plans if there are none to report.

Detailed National Performance Measures by National Focus Area

Healthy Coastal Ecosystems (HCE) Measures

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

- *Explanation:* This measure counts the number of resource managers who use ecosystem-based approaches in the management of land, water, and living resources in ocean, coastal, and Great Lakes areas as a result of Sea Grant activities.
- *Justification:* This measure indicates Sea Grant's role in informing decisions by delivering scientifically rigorous and integrated approaches to managing ocean, coastal, and Great Lakes ecosystems to resource managers.
- *Definitions:*
 - Ecosystem management is an approach to natural resource management that aims to ensure long-term sustainability and persistence of an ecosystem (e.g., the management of land, water, and living resources in ocean, coastal, and Great Lakes areas).
 - Ecosystem-based approaches are integrated approaches to resource management that consider the entire ecosystem, including humans. They require managing ecosystems as a whole instead of separately managing their individual components or uses.
 - NOAA's definition of ecosystem approaches to management is "management that is adaptive, geographically specified, takes account of ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse social objectives."
 - Resource managers: are professionals who are responsible for the management or protection of entire ecosystems including the plants, water, soil, wildlife, and human use in a designated area in an effort to preserve natural ecosystems and human use within a specific geographic area (e.g., the management of land, water, and living resources in ocean, coastal, and Great Lakes areas). Resource managers may work for a national, federal, or state agency (or program) or historic site. Resource managers may also work for a non-government organization (NGO) or private business.
- *Reporting:*
 - Do Report:
 - Report managers who are engaged in multi-sector, ecosystem-level activities.
 - Resource managers who use ecosystem-based approaches to management (e.g., management implementation based on decision-making, guidance implementation, etc. of land, water, and living resources in ocean, coastal, and Great Lakes areas).
 - An example of ecosystem-based approaches to management by resource managers is to evaluate the impact of humans on natural resources or wildlife habitats and create conservation, restoration, and/or recovery plan implementation.
 - If said resource manager continues to use the approach annually, then report annually.
 - Don't Report:
 - The number of resource managers if they are focused on single sector management (e.g., single species, single resources, single activities, single concerns).

Number of acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities

- *Explanation:* This metric tracks the number of acres involved in successful ecosystem restoration projects, including those projects that also protect or enhance the ecosystem.

- *Justification:* This measure highlights the area (in acres) of ocean, coastal, and Great Lakes habitat relieved of environmental stressors or returned to a more natural state through Sea Grant projects.
- *Definition:*
 - Coastal habitats include ocean, coastal, and Great Lakes habitats as defined in the Sea Grant legislation.
 - Linear measures should either be converted to acres for this measure or reported as project updates, program highlights or (optional) accomplishments.
- *Reporting:*
 - Do Report:
 - Sea Grant involvement that is of active participation, leadership, or provision of a service that was necessary for the restoration activity's ultimate success (e.g., acres cleared of marine debris; acres of dunes enhanced; acres of stream restored through dam removal, etc.).
 - A project with the goal of partial restoration of an ecosystem that significantly meets its goal would count toward this metric, even though the ecosystem was not completely restored. The ecosystem addressed can be of any size.
 - Acre is a measure of area. A mile is a measure of linear distance. For converting linear miles into acres, you need to know the length and width of the stream so that you can convert from linear miles to square feet. To calculate acres, multiply your length and width (in feet) to get square feet.
 - Traditionally, an acre is defined as 66 x 660 feet or 43,560 square feet. There is also 5,280 feet in one mile. Calculate the area of stream restored in ft² by multiplying the length (measured parallel to stream flow) by the width of the restored area at each site. For example, a stream restored 8.5 feet wide has one acre of surface for each mile in length, or if 17 feet wide has 2 acres per mile, or if 100 feet wide and 435.6 feet long is one acre.
 - Don't Report:
 - Indirect protection, enhancement, or restoration (e.g., indirect examples are through policy changes, fish stock enhancement, or habitat located downstream). These items should be highlighted as project updates, program highlights or (optional) accomplishments (if tied to a project), but not included in this measure.

Sustainable Fisheries and Aquaculture (SFA) Measures

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

- *Explanation:* This measure tracks Sea Grant's success in enabling constituents such as industry members, resource managers, customers, and others to adopt responsible fishery practices. Constituents, customers, and partners who recognize the value of responsible use are more likely to adopt such practices.
- *Justification:* This measure tracks Sea Grant's success in assisting industry personnel and consumers with the adoption of responsible harvesting, processing, and culture techniques that improve social, economic, and ecological sustainability.
- *Definitions:*
 - Industry personnel include recreational, commercial (wild and cultured), and subsistence fishery participants, processors, distributors, and retailers.
 - Aquaculture industry includes seafood farmers, aquaculture, mariculture, etc.
 - Seafood consumers include the general public purchasing seafood at storefronts or restaurants, and recreational fishers who keep and eat their catch.
 - Practices include techniques, technologies, and best management practices adopted, including behavior changes, such as purchasing decisions based on conditions other than price (e.g., production or harvest method, imported vs. domestic, visible sustainability certification labeling, etc.).
 - Fisheries sustainability and seafood safety refers to any combination of the ability of the ecosystem to remain diverse and productive; the social, cultural, and economic resilience of the fishing community; personal or crew safety; and quality and safety of the seafood product.
- *Reporting:*
 - Do Report:
 - Sea Grant efforts that result in behavioral changes. Some examples include educating fishers on the benefits of using circle hooks as an alternative to j-hooks, which resulted in the decrease of bycatch and increased the survival of hooked fish. Other responsible harvesting and processing techniques and practices include: other measures to minimize bycatch and/or habitat destruction; support sustainability; aquaculturists who take steps to minimize the spread of pathogens; retailers who seek locally-sourced seafood; ensure seafood safety; fisher who take additional precautions to remain safe at sea.
 - Don't Report:
 - Interactions with industry personnel and consumers that don't result in behavioral change. Thus, conferences, social media, or handouts on fishing practices should not count unless there is evidence of behavioral change (e.g., survey or personal communication).

Resilient Communities and Economies (RCE) Measures

Number of communities that adopt/ implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities

- *Explanation:* This measure tracks communities that have made strides in sustainable development with Sea Grant aid – moving beyond analysis and planning and into implementation.
- *Justification:* This measure provides the number of communities that have improved sustainability by improving the balance of natural resource use and conservation.
- *Definitions:*
 - For the purpose of this measure, communities refer to local governments (cities, towns, villages, townships, counties, parish, borough, or census designated places), cultural communities (e.g., Portuguese community), business communities (e.g., community of marina owners and operators, or of commercial fishermen for a certain species), and other non-jurisdictional communities (e.g., a neighborhood within a municipality). In coastal zones without local governments (e.g., U.S. territories), a community may be an administrative body or organization that formally represents a local geographic area. Tribal nations may be treated similarly as territories (who may not have the traditional county, parish, or borough for their county).
 - Sustainable economic and environmental development practices and policies consist of actions by decision makers in the community to support “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development).
- *Reporting:*
 - Do Report:
 - The number of communities that implement policy changes and practices in land-use planning; working waterfronts; energy efficiency; climate change planning; smart growth measures; green infrastructure; etc.
 - Don't Report:
 - Activities in the analysis or planning phase, this measure tracks activities moving beyond analysis and planning and into implementation.

Number of communities that adopt/ implement hazard resilience practices to prepare for and respond to/ minimize coastal hazardous events

- *Explanation:* This metric tracks Sea Grant’s contribution to communities that develop comprehensive emergency preparedness and response plans to increase their resiliency and enable them to respond effectively. Sea Grant contributes to this by building a sound knowledge base to improve forecasting capabilities, by identifying development and best management practices that reduce the vulnerability of people, buildings, and businesses to coastal hazards, and by advancing ways communities can manage and recover from these events when they occur.
- *Justification:* This measure indicates increased capacity of communities to assess vulnerability, minimize potential impacts to ecological and human systems, and improve ability to respond to hazards and adapt to a changing climate by learning from past events and adopting risk reduction measures. Improving community resilience is a continuous effort that requires ongoing local attention and action.
- *Definitions:*
 - For the purpose of this performance measure, communities refer to local governments (cities, towns, villages, townships, or census designated places). A community is a unit of local government or a special unit of government, such as a planning district. In coastal zones without local governments (e.g., U.S. territories), a community may be an administrative body or organization that formally represents a local geographic area.
 - For the purposes of this performance measure, counties refer to local governments (counties, parish, borough, or census designated places). Tribal nations may be treated

similarly as territories (who may not have the traditional county, parish, or borough for their county).

- Resiliency practices are those that increase the capacity of a community/county exposed to hazards to (1) absorb impacts while maintaining an acceptable level of functioning; (2) reduce the amount of time and financial resources needed to return to full level of functioning; or (3) adapt to future risks by learning from past disasters and adopting risk reduction measures.
- Training - Increase the knowledge, skill, and capabilities of state and local officials to improve hazard and climate resilience. Based on providing Sea Grant-supported training and educational opportunities for local constituents in coastal resilience to hazards and climate change. The training should be focused on locally relevant data, information, or issues and include documented local participation. It is focused on hands-on local capacity building through formal training courses or locally-focused workshops. For this measure, training includes in-person and web-based.
- Technical Assistance - Improve community understanding and consideration of coastal hazard and climate risks, vulnerabilities, and potential impacts. Based on providing Sea Grant-supported technical assistance to local constituents. These include locally relevant hazard resilience data, tools, studies, and direct hands-on technical support delivered directly to local constituents. The products and services should be focused on locally relevant data, information, or issues and include documented local recipients.
- Local Outcomes - Development and implementation of effective community-based hazard and climate resilience plans, policies, and actions. Based on implementation/action plans adopted, policies changed or enacted, and direct actions taken locally (e.g., shoreline protected, floodplain conserved, wetlands restored) as a result of Sea Grant assistance to improve resilience. This category is reserved for institutionally adopted plans or policies and implementation of specific documented local actions to improve resilience.
- *Reporting:*
 - Do Report:
 - Report 1) community, 2) county, 3) number of resiliency training/technical assistance that was provided to that community, and 4) select yes or no if the community/county hazard resiliency was improved. If the state or territory does not use counties, please indicate the closest equivalent that will allow the community to be located (adhering to definitions provided above).
 - For this measure, the county of the community should also be reported along with the number of resilience training/technical assistance that was provided, to meet NOAA reporting requirements.
 - Report coastal community;
 - Report the county (or parish or borough);
 - Report the number of trainings/times technical assistance that was provided to that community; and
 - Report if the community (where hazard resilience was provided) is improved.
 - Communities/counties that adopt resilience assessments, training, technical assistance, local outcomes, local community development planning related to hazards, and climate adaptation planning should be counted.
 - Report only one community/county per entry. For example, if multiple communities attend a hazard resilience-related training, then add each community/county separately.
 - Don't Report:
 - A community or county with non-political jurisdictions or cultural communities (e.g., Portuguese community), business communities (e.g., community of marina owners and operators, or of commercial fishermen for a certain species), or other non-jurisdictional communities (e.g., a neighborhood within a municipality).

Environmental Literacy and Workforce Development (ELWD) Measures

Number of Sea Grant products that are used to advance environmental literacy and workforce development

- *Explanation:* This metric tracks the number of Sea Grants educational products that are utilized (*used*) by constituents, customers, and partners to advance environmental literacy and workforce development.
- *Justification:* This measure indicates Sea Grant efforts to develop and implement Sea Grant educational products and services that are utilized (*used*) by constituents, customers, and partners to advance environmental literacy and workforce development.
- *Definitions:*
 - NOAA defines an environmentally literate person as someone who (1) has a fundamental understanding of the systems of the natural world, the relationships and interactions between the living and non-living environment, and (2) has the ability to understand and utilize scientific evidence to make informed decisions regarding environmental issues.
 - Workforce development describes products and services designed to prepare individuals for entry into or advancement within an industry (e.g., workshops, training, technical assistance, tools, technologies, and information services, etc.).
 - Educational Products are broadly defined as tools, technologies, and information services that address the definitions of environmental literacy and workforce development in the bullets above. Some examples of these are below (not exhaustive list).
 - Nonformal and formal educational training and workshops.
 - Workforce development training, workshops, and technical assistance.
 - Curriculum, lesson plans, and university courses.
 - Outdoor and indoor exhibits: often called waysides (includes interpretive signs, kiosks, or other educational presentation methods developed for use in nonformal outdoor and indoor educational purposes).
 - Used refers to **utilizing** the educational product or workforce development activities that advance environmental literacy and workforce development addressing the definition of environmentally literate person (above definition). “Used” means that the activity has been *applied* to real world scenarios and the result was *improved* environmental literacy/workforce development or changed behavior. Examples:
 - “Used” is not: number of views on social media/videos, number of downloads on a fact-sheet.
 - “Used” is: seven video tutorials created and *applied* by an industry partner to help develop six new oyster restoration projects.
 - “Used” is not: fact sheets were created and downloaded 234 times.
 - “Used” is: fact sheets were created and *utilized* to assist two indigenous Hawaiian community’s damage assessments in the aftermath of a hurricane.
 - “Used” is not: provided an online webinar with 100 attendees.
 - “Used” is: things learned from online webinars which were *applied* by two participants to start a new business and update culture methods.
 - *Note about communication products: factsheets, flyers, brochures, websites, social media, online webinars and videos (e.g., YouTube) and other communication products*
 - These should be reported as “used” only when real-world application of the information that is being conveyed in the communication product was ‘used’ to advanced environmental literacy or workforce development as defined above and confirmed via surveys, personal communication, etc. The number of hits on websites, likes on social media, views of videos or downloads etc., alone do not indicate that environmental literacy was advanced by the communication’s product. If you are reporting newsletters (or publications) that are shared monthly, quarterly, or yearly or other series of products, should only be reported as one product per reporting year. We are looking for real-world application of the information from communication products (i.e., who has become more literate

because they utilized the information to make informed decisions or changed behavior). Please keep in mind that we need to focus more on the information that has helped someone become more environmentally literate or has advanced workforce development and less on the mechanism (communication product) that gets the information out (e.g., online resources like social media, YouTube and other online videos, websites or communication products like flyers, brochures, fact sheets, banners, etc.).

- *Reporting:*
 - Do Report:
 - Report in narrative format (1) description of the ELWD product, (2) what Sea Grant's role is, and (3) who the end user is (who became more environmentally literate; advance environmental literacy; and/or workforce development).
 - Sea Grant product examples (not an exhaustive list): homeowners/residents' handbooks; classroom curricula or lesson plans, formal or nonformal educational items such as outdoor or classroom activities, training, workshops, exhibits, kiosks, and workforce development workshops, training, and technical assistance.
 - Don't Report:
 - To reduce double counting, do not count items which are being reported in
 - other performance measures, metrics, or the Sea Grant Library (e.g., HACCP, peer-reviewed publications, fellowships, and other communication products or publications, etc.).
 - Do not report surveys, schwag, directories, or email listservs (or similar types of products). For example, email listservs are mechanisms to get information out, it in itself isn't an education, environmental literacy, or workforce development product as defined by the above ELWD definitions.
 - Do not report communication products unless they meet the criteria above.

Number of people (youth and adults) engaged in Sea Grant-supported nonformal education programs

- *Explanation:* This metric counts the number of people who engage in Sea Grant nonformal education programs.
- *Justification:* This metric provides an estimate of individuals that actively participate in Sea Grant supported nonformal education programs thus advancing environmental literacy. Sea Grant educates and engages audiences of all ages—from preschoolers to retirees—both inside and outside the classroom. Sea Grant uses a broad set of tools to reach diverse members of society, including videos, lesson plans, and museum exhibits. For example, NOAA-managed places, like national estuarine research reserves and national marine sanctuaries, are living laboratories where visitors can experience science in practice. NOAA and Sea Grant community science opportunities engage people with diverse backgrounds and science experience in research and data collection. From outreach activities that encourage curiosity in our programs to nonformal education offerings that provide opportunities for learning outside the classroom, NOAA and Sea Grant supports lifelong learning. This measure captures the reach of NOAA and Sea Grant's nonformal education programs by counting the number of youth and adults participating in a given year.
- *Definition:*
 - Engaged means that the individuals are actively participating in the program.
 - Non-formal education programs are a set of lifelong learning activities that are delivered or facilitated by an educator, meet clearly defined learning objectives, and provided outside the established formal education system. Participants engage in these activities with the aim of enhancing their own knowledge, skills, and competencies from a personal, civic, social, and/or career-related perspective.
 - Does NOT include exhibits where lifelong learners typically have a self-directed learning experience.

- Program types are categorized as follows:
- Public presentations: Live presentations led by program staff presentations; docent-led Science On a Sphere presentations, docent-led hands-on activities, interactions/activities at nonformal
- science education institutions, speaker series, brown bag lunch lecture series, tours/open houses, community presentations, visitor center programs
- Festivals: Science festivals, public fairs, public events
- Youth programs: Summer, afterschool, or science camps, academic competitions (e.g., NOSB, FIRST Robotics); Scout badges or programs, 4-H, science clubs at Boys & Girls clubs, afterschool programs
- Community programs: Community science, SKYWARN training, safety drills and exercises, community education
- Field programs: Field trips, field-based nonformal education, interpretive walks, canoe/kayaking programs, weekend nature walk programs, some community science
- Family programs - Family fun, parent/toddler programs
- Free choice learning programs
- Youth and adults are individuals younger than and older than 18 years old, respectively.
- Participants should be counted once per nonformal education program per year, if the nonformal education program occurs over multiple years. Any youth or adult who participates in multiple distinct nonformal education programs should be counted for each nonformal education program in which they participate.
- **Reporting:**
 - Do Report:
 - The number of people (youth and adults) who participate in activities such as: “free-choice” learning programs, public presentations, festivals, youth programs, community science programs, field programs, and family programs.
 - Don't Report:
 - Exhibits where lifelong learners typically have a self-directed learning experience.

Number of Sea Grant-supported graduates who become employed in a job related to their degree within two years of graduation

- *Explanation:* This metric counts the number of Sea Grant-supported graduates who become employed in a job related to their degree within two years of graduation.
- *Justification:* This measure indicates the societal benefit Sea Grant education provides by providing the number of students who find jobs relating to their degree after graduating.
- *Definitions:*
 - A job may include traditional employment, fellowships, internships, postdocs, or pursuit of an advanced degree.
 - Sea Grant-supported graduates are students that receive Sea Grant funds (e.g. federal, match, pass-through, or leveraged funds).
- **Reporting:**
 - Do report:
 - Sea Grant-supported graduates who accept Knauss Fellowship or a professional position as defined by a job above; Sea Grant-supported undergraduates who pursue an advanced degree in a Sea Grant related field, such as marine population dynamics, marine biology, ocean engineering; Sea Grant supported graduates who accept positions related to their degree.
 - Don't report:
 - Graduates that obtained a job or employment after two years of graduation.
 - Graduates who you have already counted in a previous reporting year, unless the new job is a different job than previously reported.

Number of people that visit museums, aquariums, and other nonformal education institutions hosting Sea Grant-supported exhibits or programs (*NEW; Pilot*)

- *Explanation:* This common metric captures the number of people who visit Sea Grant-supported exhibits and programs each year.
- *Justification:* Sea Grant programming relies on engagement from members of the public in order to achieve our learning objectives. Visitors come to Sea Grant-supported facilities and protected areas to learn and view different types of nature each year. Sea Grant supports museums, aquariums, and other nonformal education institutions with educational exhibits and programming to help extend Sea Grant's reach into communities across the country.
- *Definitions:*
 - Visitors: Members of the public that attend an nonformal education institution that is owned or managed by either NOAA or Sea Grant or a partner organization and that hosts exhibits that are designed, funded, installed, or curated by Sea Grant.
 - The number of visitors to an nonformal education institution is the annual visitor attendance at each institution that hosted a current exhibit or received a docent training program in the reporting year.
 - We consider the visit to the institution rather than visit to the exhibit. We recognize that a visitor may visit the institution but may not have visited the Sea Grant-related exhibit.
 - We recognize that a visitor may come to an institution multiple times a year, in this case, an individual who enters the institution on more than one occasion would be counted for each visit.
 - We rely on the institutions to report their annual attendance whichever way they count visitors. The reported total for an institution could be the cumulative number of tickets sold or a physical count of the number of persons who enter the institution.
 - Nonformal education institution: Organizations that host indoor or outdoor exhibits for the public to view.
 - Examples: Museums, aquariums, zoos, visitor centers.
 - Exhibits: An organized arrangement of text, graphics, and/or objects that communicate a message or theme that must involve some Sea Grant science, Sea Grant data, or Sea Grant asset.
 - Examples of outdoor exhibits: Often called waysides, they include interpretive signs, kiosks, or other presentation methods developed for use in the outdoors.
- *Reporting:*
 - Do Report:
 - Report the name of the institution or if reporting an exhibit include the name of exhibit and its location.
 - Report the number of visitors.
 - An exhibit if it is a permanent exhibit at a location, in which you can get a head count of visitors.
 - Don't Report:
 - A sign on Jersey shore that people walk by doesn't fly, but a sign at a nature center counts if you can reasonably get a count.

Number of people participating in environmental actions through Sea Grant education programs (*NEW; Pilot*)

- *Explanation:* This measure collects the number of people participating in environmental actions through Sea Grant education programs.
- *Justification:* Taking action as a result of education plays an important role in how people can impact the environment and how the environment can impact people. It is also a core part of many Sea Grant education programs and how they contribute to NOAA's mission of science, service, and stewardship. Without a measure tracking these, there is no way to understand and

communicate how much we are doing collectively to engage participants in environmental actions across our education portfolio.

- **Definition:**
 - People participating in Sea Grant education program(s):
 - Participation should be in the context of a Sea Grant education program, including those delivered by grantees, partners, and volunteers. The education program should be the one providing the instruction or support to participants to take or lead others in the environmental action.
 - It doesn't need to be a formalized education program to be reported. It could be a Sea Grant employee working with a group of students or community members on an environmental project.
 - The people to be counted should be the ones actively completing the activity, not necessarily the audience of that activity.
 - Example: 10 students develop signs intended to inform a neighborhood of 1000 people about a local environmental problem. The number reported should be 10, not 1000 nor 1010.
 - Example: 50 people attend the first part of a workshop but only 10 stay to engage in the action project (e.g., planting seagrass), so only 10 should be reported.
 - Example: 5 students engage two restaurant owners to reduce the restaurant's use of single-use plastics. In this case, the number reported to the common measure is 7, rather than the number of organizations implementing the environmental action.
 - Students, youth, and adults are common types of participants in education programs that enact environmental actions. It could also be professional audiences, like educators, emergency managers, and shop owners. Audience types listed here are provided for descriptive purposes and is neither an exhaustive list nor mutually exclusive. Education programs may choose to collect disaggregated data by audience type.
 - Educators that receive professional development and share that information with their students should NOT be included in this measure.
 - Individual participants might complete multiple activities within the same education program throughout the year. Individuals should be counted once per year per education program, not by the number of actions completed during the year. The identity of individuals does not need to be tracked.
 - Even in situations where we can know that individuals completed multiple activities in a year they should only be counted once per year. For example, a class of 10 students work on three different projects throughout the school year. The number reported should be 10, not 30.
 - People can be counted twice if they were present at two distinct educational programs. They can also be counted once per year for education programs that occur over multiple years.
 - Environmental action: An activity that intentionally addresses an environmental problem, need, or hazard, either directly or indirectly. These could include changes to social or human systems, natural systems, or the built environment. The activity types
 - listed here are for descriptive purposes. The list is neither exhaustive nor mutually exclusive. They include:
 - People change a personal practice (adopting pro-environmental behaviors, such as turning off water while brushing teeth, buying an electric vehicle, investing in a solar installation for their house, carpooling, or biking to school or work).
 - People use their voices in the community to help build awareness of an issue (e.g., students conduct poster campaigns, share information at farmer's market booths).
 - People who volunteer to conduct Sea Grant-related outreach. This does not include outreach by Sea Grant or NOAA employees, contractors, and affiliates as part of their paid work.

- People take civic action that addresses issues of public concern and seek community-based solutions.
 - People participate in habitat conservation, restoration, or adaptation efforts.
 - People collect and monitor environmental data to inform environmental action.
 - People participate in projects that adapt the built environment (e.g., roads, shorelines, buildings) and social systems (e.g., health care, food systems) to climate change impacts.
 - People engage communities in an environmental decision-making process.
 - People participate in capacity-building projects (e.g., raising funds for future environmental action).
 - People participate in carbon reduction, sequestration (soil-based or wetland restoration), and mitigation efforts.
 - People participate in climate change adaptation and resilience efforts.
 - People prepare for and respond to the impact of weather hazards.
- *Reporting:*
 - Do Report:
 - Report the number of people participating in environmental actions through Sea Grant education programs as defined above.
 - When reporting on people who volunteer, you count the person in this measure and remember to count the volunteer hours in the other metric (see cross-cutting national performance metrics section below).
 - Don't Report:
 - Educators that receive professional development and share that information with their students should NOT be included in this measure.
 - When reporting people who volunteer to conduct Sea Grant-related outreach, do not include outreach by Sea Grant or NOAA employees, contractors, and affiliates as part of their paid work.

Detailed Cross Cutting National Performance Measures

Number of Sea Grant products (tools, technologies and information services) that are used by our partners/customers to improve ecosystem-based management

- *Explanation:* This measure tracks success in translating research findings into useful products, including tools, technologies, and information services that improve the use of and/or management of coastal, ocean, and Great Lakes ecosystems.
- *Justification:* This measure communicates the number of Sea Grant products that address the use and management of land, water and living resources in coastal areas resulting from Sea Grant activities and used by partners or customers. Only previously unreported tools, technologies, and information services should be included; a specific product should not be reported in multiple years.
- *Definition:*
 - Ecosystem-based management is an integrated approach to management that considers the entire ecosystem, including humans, and drives decisions at the ecosystem level to protect the resilience and ensure the health of the ocean, our coasts and the Great Lakes. It requires managing ecosystems as a whole instead of separately managing individual resources or use components. This includes the application of technology to coastal resource management through synthesis, integration, training, and the development of new management tools.
 - NOAA's definition of ecosystem approaches to management is "management that is adaptive, geographically specified, takes account of ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse social objectives."
 - Products are broadly defined as tools, technologies, and information services that address the definition of ecosystem-based management above.
- *Reporting:*
 - Do Report:
 - Report in narrative format (1) description of the EBM product, (2) what Sea Grant's role is, and (3) who the end user is.
 - The key here is to account for tools and services utilized and applied by managers.
 - Products that tie to an ecosystem level (and not single sector focused) and are being used to improve the use of and/or management of coastal, ocean, and Great Lakes ecosystems.
 - Some examples include:
 - Use of products for the purpose of determining ecosystem use or change over time (use or management of an ecosystem) and/or decision making for land use planning or coastal resource management from an ecosystem perspective.
 - Products that have been used to improve EBM perspective include: ecosystem assessments, land cover data, benthic habitat maps, environmental sensitivity index maps, planning and mapping tools, sensors and observation tools, decision-support tools, or data-sharing websites. All of these need to be tied to an ecosystem level (and not single sector focused) and they need to be used in the management or uses of land, water and living resources.
 - Research projects that translate research findings into useful products, including tools, technologies, and information services that have been utilized for EBM purposes to improve the use and/or management of coastal, ocean, and Great Lakes ecosystems as defined above may be reported - these should acknowledge the whole ecosystem, as well as the parts, and not be single-sector focused.
 - Don't Report:
 - Products that were reported in a previous year. The same products should not be reported in multiple years. Only previously unreported tools, technologies, and information services should be included.

- Products that are focused on resilience efforts without an explanation that clarifies how it meets the definition of EBM above.
- Products that are not being used in management.
- Products that are single-sector focused.

Economic and societal impacts and benefits derived from Sea Grant activities (market and non-market; jobs and businesses created or supported; patents)

- *Explanation:* Society benefits from Sea Grant-supported technical assistance and innovation that lead to new businesses/jobs and supporting existing businesses/jobs. This measure tracks dollars that communities or businesses save due to Sea Grant assistance (i.e., providing information to help businesses make better decisions and avoid mistakes). This measure also tracks economic benefits from the development of new ocean, coastal, and Great Lakes resources and technology.
- *Justification:* This measure highlights changes in economic impacts and benefits - the jobs, businesses, dollars, and non-market value - that communities or businesses generate or save due to Sea Grant assistance (i.e., providing information to help communities, industries or businesses expand, make better decisions or avoid mistakes). Sea Grant supports research and provides the information and training that informs business decisions, and in some cases creates or supports jobs as a result. Moreover, Sea Grant activities can have positive effects on restoring, maintaining or improving environmental goods and ecosystem services.
- *Definitions:*
 - Economic impacts are the net change in economic activity (e.g., jobs, salaries, gross domestic product [GDP]) in a region. An economic impact either creates or keeps revenue in a given economy that would not exist or that would leave the region otherwise (e.g., creating jobs, saving an entity money, helping to drive up revenue in a region).
 - The Economic Impacts performance measure highlights changes in economic impact - the jobs, businesses, dollars, and non-market value - that communities or businesses generate or save due to Sea Grant assistance (i.e., providing information to help communities, industries, or businesses expand, make better decisions, or avoid mistakes). Sea Grant provides the information and training that informs business decisions, and in some cases firms create or sustain jobs as a result. Moreover, Sea Grant activities can have positive effects on restoring, maintaining, or improving environmental goods and ecosystem services, broadly defined as natural capital.
 - Economic benefits are the net increase in social welfare through market or non-market forces (e.g., enhanced recreation, value of increased knowledge or skills, value associated with improved water quality, reduced damages from storms).
 - Market impacts: the amount of money that will be saved (e.g., through technological efficiencies) or generated (e.g., through sales) as a result of Sea Grant activities.
 - Non-market impacts: Non-market impacts can be broadly defined as changes to goods and services not traded in traditional markets.
 - Ecosystem service is any positive benefit that wildlife or ecosystems provide to people. The benefits can be direct or indirect—small or large. Ecosystem service valuation methods have the potential to provide information that can be used to demonstrate the direct and indirect economic impacts of different nonmarket goods and services. The estimation of non-market economic impacts can assist managers with decision making, as well as increase the public's general understanding of the economic importance and value of habitats. A number of valuation techniques have been developed to estimate the economic value of non-market ecosystem services, including value transfer, household production functions, hedonic analysis, travel cost and contingent valuation methodologies. A toolkit is available on the Sea Grant Social Science
 - Funding resources: federal, match, and leveraged funds should not be reported under this measure.
 - A job created is a new position created and filled as a result of Sea Grant activities.

- A job supported/sustained/retained in an existing filled position that is supported as a direct result of Sea Grant activities.
- A business created is a new firm that was initiated as a result of Sea Grant activities.
- A business sustained/retained is a previously existing firm that is supported as a direct result of Sea Grant activities.
- *Reporting:*
 - Do Report:
 - Report in narrative format (1) the description of the economic impact, (2) what Sea Grant's role is, (3) who the beneficiary is, and (4) any associated project numbers.
 - Report the economic impact or benefit dollar value.
 - Report the number of businesses created.
 - Report the number of businesses retained/sustained/supported.
 - Report the number of jobs created.
 - Report the number of jobs retained/sustained/supported.
 - Report the number of patents (if any).
 - Market impacts examples include: Trade Adjustment Assistance, profits (savings or revenue generated) from technology transfer in fishing and aquaculture industries.
 - Non-market impact examples include: flood and storm protection, provision of fresh water, tourism value of restored ecosystems. All reported jobs should have wages associated with an associated economic impact.
 - The economic impact of jobs created/supported (i.e., wages) is governed by reporting from the employer (if available) or estimated by median wages by sector in a given state using BLS Employment Statistics (<http://www.bls.gov/oes/current/oessrcst.htm>).
 - Jobs created or supported as a result of required training (e.g., HACCP) offered by Sea Grant should be included. However, optional professional development or educational opportunities from Sea Grant that improved applicant credentials should not be counted as jobs created/supported.
 - Jobs created or supported should be expressed as "full-time equivalent" (FTE), calculated as all hours worked divided by the total hours in a full-time schedule.
 - All businesses that are reported as created or supported should include a report of the associated jobs created and supported and the wages for those jobs using BLS Employment Statistics
 - Don't Report:
 - This measure should not include economic impact from volunteer hours, directly-supported staff, or fellows, these are collected through other performance measures/metrics.
 - Economic impacts should not include employment or expenditures funded directly from the Sea Grant award (including match). Leveraged funds should be reported in the leveraged funding section of annual reporting and not duplicated within this performance measure (for example, if a program assists a constituents, customers and partners in obtaining funds via grant writing or technical assistance and if the funds are awarded then those are considered influenced leveraged funds and the program should claim them under the leveraged funding section of annual reporting and what the program can claim under this measure is the value of the time spent in providing the grant writing/technical assistance).
 - An existing position that is filled with a Sea Grant-trained applicant should not be reported in this measure.
 - A job cannot be reported as both created and supported in the same year. A business cannot be reported as both created and supported in the same year.
 - When reporting on market impacts multipliers should not be used; this measure focuses on direct market impacts.

Detailed Cross Cutting National Performance Metrics

Number of individuals and full-time equivalents (FTEs) devoted to Sea Grant

- *Explanation:* Number of individuals and FTEs devoted to Sea Grant during the reporting period.
- *Justification:* In order to describe and monitor the size of the Sea Grant network, this metric provides the information about personnel composition of each program.
- *Definition:*
 - Individuals financially supported by Sea Grant may be supported part-time/quarter-time/one-month time, etc. but are counted as one individual. The “number of individuals” should be a whole number (integer only). If an individual works in more than one functional area (e.g., administration, communications, education research, and extension), please count that individual in both areas. For example, if you have an individual 50% time working in support of communication and 50% time working in education, report that individual in both areas as a whole number of 1 (e.g., 1 for communication and 1 for education).
 - Individuals Staffing the program in all areas: This is essentially a head count (a whole number (integer only)). For example, if you have an individual 50% time working in support of communication and 50% time working in education, report that as 1 individual.
 - A Full Time Equivalent (FTE) is equivalent to 12 months of full time effort (or 12 months of full time effort is equivalent to 1 FTE). One individual’s time can be counted in different functional areas. For example, an individual’s time (who is only part-time Sea Grant) can be counted as 0.25 administration and 0.25 extension. Another example is if you have 24 Researchers each with only 1 month time, they would add up to a total of 2 FTEs.
- *Reporting:*
 - Do Report:
 - All personnel, including PIs, graduate students, technicians, and support staff.
 - Number of Individuals: Individuals financially supported by Sea Grant may be supported part-time/quarter-time/one-month time, etc. but are counted as one individual as defined above.
 - FTEs: should be reported in two categories, those funded by federal Sea Grant money and those funded by match and non-Sea Grant money as defined above.
 - “Individuals” staffing the program in all areas: count all individuals in all functional areas as 1 person as defined above.
 - “Individuals staffing the program in all areas”: count a person only once regardless of how many functional areas make up their portfolio.
 - Note: the values reported for the “Individuals” categories will likely vary from the “Individuals staffing the program in all areas” category because one person may be counted more than once in the “Individuals” categories and not in the “Individuals staffing the program in all areas” category.

Number of volunteer hours

- *Explanation:* The estimated number of hours that the general public, constituents, customers, and partners people volunteer without payment for their time and services to help a state Sea Grant program accomplish the goals and objectives of its strategic plan (e.g., co-sponsored events/trainings).
- *Justification:* This metric shows how Sea Grant coordinates individuals who are willing to donate time without payment for their time and services in order to help a state Sea Grant program accomplish the goals of its strategic plan.
- *Definition:*
 - Volunteer hours are the time the general public, constituents, customers, and partners spend to assist Sea Grant programs without pay or other compensation; include training required to become a volunteer.

- *Reporting:*
 - Do Report:
 - This measure is looking for general public, constituents, customers, and partner volunteers.
 - Volunteers who participate at a beach clean-up; ecosystem restoration; community-science; or supporting an outreach/education event that is sponsored by Sea Grant.
 - Don't Report:
 - Anyone who is being compensated by salary, credits, stipend, etc.
 - Sea Grant financially supported staff, PIs, undergrads, graduates, etc. who volunteer
 - Students who are receiving credit, etc.

Number of postsecondary students and degrees financially-supported by Sea Grant in higher education programs (undergraduate, graduate)

- *Explanation:* The number of undergraduate/graduate students and degrees supported by Sea Grant through financial means.
- *Justification:* To indicate Sea Grant's investment in postsecondary education, this metric tracks the number of undergraduate/graduate students and degrees financially supported by Sea Grant. This includes undergraduate/graduate students and degrees supported by Sea Grant funding
- (e.g.. federal, match, and leveraged funds).
- *Definition:*
 - New students: undergraduate/graduate students who have not previously been counted and are supported by Sea Grant.
 - Continuing students: undergraduate/graduate students who were previously counted and are still supported by Sea Grant.
 - Graduate or Professional Degrees Awarded: The number of degrees awarded to students who received full or partial support from Sea Grant at any point during the degree program.
 - Funding resources: include all federal, match, and leveraged funds.
- *Reporting:*
 - Do Report:
 - The number of postsecondary students and degrees in four categories 1) undergraduate students and degrees, 2) M.A./M.S. students and degrees, 3) Ph.D. students and degrees, and 4) all other degree-seeking students supported by Sea Grant (such as J.D. or post-graduate students) should be counted under "Other Sea Grant supported professional degree students."
 - Eligibility to report the same person from undergraduate to graduate and beyond renews with additional degrees. For example, if a student was supported as an undergraduate and obtained a bachelor's degree then went on to be supported as a graduate student, that same student may be counted again.
 - Don't Report:
 - Student or degrees if not financially supported by Sea Grant funds (e.g., federal, match, leveraged funds).

Number of P-12 Students who participated in Sea Grant supported formal education programs

- *Explanation:* This measure collects the estimated number of preschool thru 12th grade (P-12) students who attend a Sea Grant-sponsored formal education programs (i.e., by an educator/extension agent), as well as the number of students reached by teachers who have utilized information from a Sea Grant workshop/training.
- The 2018-2023 metric called, "*Number of P-12 Students Reached Through Sea*

- *Grant-Trained Educators or directly through Sea Grant Education Programs*“ has been split into two metrics: (1) *Number of P-12 Students who participated in Sea Grant supported formal education programs*, and (2) *Number of educators who participated in Sea Grant-supported professional development programs*.
- *Justification*: This metric demonstrates the number of Preschool through 12th grade (P-12) students who have increased environmental literacy by attending a Sea Grant-sponsored program. Sea Grant reaches students in the classroom to share a type of science they don't normally get to see there. Sea Grant's science is place-based and locally relevant, enabling students to make connections to their own lives. It is also conducted aboard ships, at the bottom of the ocean, in space, and inside hurricanes. Many of the programs reach students in formal classroom settings, so this measure captures the number of P-12 students participating in our formal education programs.
- *Definitions*:
 - Formal education programs are an organized set of educational activities that meet clearly defined learning objectives with a connection to the curriculum of the school or state. Programs and outreach for education activities provided by nonformal educators can be included.
 - Examples include: classes, lab courses, workshops, seminars, field trips, internships, classroom presentations, synchronous, or asynchronous online learning events.
 - P-12 students are children attending public, private, or charter schools from kindergarten to grade 12, preschools, or are homeschooled.
 - Students can be counted more than once, if they participated in more than one distinct education program in a reporting year. Students can be counted once per program per year if the program occurs over multiple years.
- *Reporting*:
 - Do Report:
 - The number of P-12 students who participated in Sea Grant sponsored formal education programs as defined above.
 - Don't Report:
 - The number of P-12 students who participated in nonformal programs.

Number of educators who participated in Sea Grant-supported professional development programs

- *Explanation*: This metric indicates the number of educators who attend a Sea Grant-supported professional development program.
- The 2018-2023 metric called, “*Number of P-12 Students Reached Through Sea Grant-Trained Educators or directly through Sea Grant Education Programs*“ has been split into two metrics: (1) *Number of P-12 Students who participated in Sea Grant supported formal education programs*, and (2) *Number of educators who participated in Sea Grant-supported professional development programs*.
- *Justification*: This metric demonstrates the number of educators who have increased environmental literacy by attending a Sea Grant-supported professional development program. Educators engage people in science and inspire them to use science and data to make informed decisions. Nonformal and formal educators are one of our core audiences. Through educator resources and professional development, we give educators the tools they need to teach about the ocean and atmosphere and use environmental data and the process of science in their lessons.
- *Definition*:
 - Professional development programs: An organized set of educational activities that are designed: 1) for educators as the primary target audience, 2) to enhance their understanding of Sea Grant-related topics, and 3) to provide guidance on how to integrate knowledge, skills, and educational and scientific resources to educate others.
 - Examples include all-day and multi-day workshops, teacher research experience programs, online courses, outdoor field experiences. Presentations at conferences

should be reported if the intention of the presentation is to meet a professional development objective with respect to educational content or pedagogy.

- **Educators:** Those who facilitate learning in various roles: public school teachers, private or independent school teachers, nonformal educators, interpreters, volunteers serving as docents or educators, homeschool educators, or preservice teachers.
- The number of educators is the cumulative number of participants in professional development programs that were offered in the reporting year.
- Educators can be counted twice if they were present at two distinct professional development programs. Educators can be counted once per year for programs that occur over multiple years.
- Educators should be counted as participants upon completion of the workshop, program or course, not just based on registration.
- **Reporting:**
 - **Do Report:**
 - On the number of educators who participate in Sea Grant-sponsored professional development programs as defined above.
 - **Don't Report:**
 - Professional development programs should not include presentations that just describe Sea Grant offerings or other marketing types of outreach activities.
 - Educators cannot be counted twice when there is one-to-one consultation or mentoring as a follow up to a professional development program.
 - Educators who are chaperones on student programs.

Number of Sea Grant-sponsored/organized events

- **Explanation:** The number of events in which Sea Grant support was integral (e.g., planning, financial, personnel contributions).
- **Justification:** This metric indicates the scale of Sea Grant outreach as it provides the number of meetings, workshops, festivals, conferences, etc. in which Sea Grant played an integral role (e.g., planning, financial, personnel contributions).
- **Definition:**
 - **Events** include organized meetings, workshops, and conferences.
- **Reporting:**
 - **Do Report:**
 - On the number of events in which Sea Grant played an integral role as defined above.
 - Some examples include: Coast Day; Community Supported Fisheries Summit; Graduate research symposia, etc.
 - **Don't Report:**
 - Inward-facing organized events and training (e.g., Sea Grant Week; regional Sea Grant meetings; network meetings).

Number of attendees at Sea Grant-sponsored/organized events

- **Explanation:** The estimated number of attendees at the events counted in the preceding metric (i.e., events in which Sea Grant support was integral via its planning/ financial/ personnel contributions).
- **Justification:** This metric also demonstrates the scale of Sea Grant outreach as it includes the estimated number of attendees at the events counted in the preceding metric.
- **Definition:**
 - **Events** include organized meetings, workshops, and conferences.
- **Reporting:**
 - **Do Report:**
 - On the number of attendees at Sea Grant-sponsored/organized events, for

example: Coast Day or a community-supported fisheries summit.

- Don't Report:
 - People engaged in Sea Grant-supported nonformal education programs; should be reported in that performance measure and not duplicated here.

Number of public or professional presentations

- *Explanation:* Report the estimated number of public or professional presentations given by Sea Grant staff and/or researchers supported by Sea Grant-funded projects.
- *Justification:* This metric indicates efforts to share Sea Grant's impact and highlight Sea Grant's engagement; it is the number of presentations given by Sea Grant staff or Sea Grant-funded researchers.
- *Definition:*
 - Report the number of presentations given by Sea Grant staff regarding Sea Grant-funded research.
 - For funded researchers, please report public/professional presentations on Sea Grant-related projects.
- *Reporting:*
 - Do Report:
 - Public presentations given by Sea Grant staff to local volunteer, community, and service organizations (i.e., Libraries, Council meetings, etc.).
 - Presentations to scientific or professional association conferences (i.e., the American Society of Limnology and Oceanography, ASLO, AGU, NMEA, ASA, WAS, AFS, CERF, AGU, etc.) or similar professional conferences.
 - Presentations at university wide symposia and events.
 - Presentations by funded researchers and students at the aforementioned venues.
 - Presentations by Sea Grant Staff and extension agents at the aforementioned venues.
 - Don't Report:
 - Presentations in this metric if you have reported them in another measure or metric.
 - Presentations at Sea Grant sponsored organized events (Coast Day, Ocean Fun Days, etc.).
 - Presentations to local classrooms (these are considered formal education programs).
 - Outreach exhibits or booths at festivals or conferences.
 - Internal-facing presentations (e.g., Sea Grant Week; regional Sea Grant meetings; network meetings).

Number of attendees at public or professional presentations

- *Explanation:* The estimated number of attendees at public and professional presentations counted in the previous metric.
- *Justification:* The estimated number of attendees at the public and professional presentations given by Sea Grant staff or Sea Grant funded researchers on Sea Grant funded projects indicates the size of the audience reached by the preceding metric.
- *Definition:*
 - Report the number of attendees at public and professional presentations given by Sea Grant staff or Sea Grant funded researchers on Sea Grant funded projects.
- *Reporting:*
 - Do Report:
 - The number of attendees at:
 - Public presentations given by Sea Grant staff to local volunteer,

community, and service organizations (i.e., Libraries, Council meetings, etc.).

- Presentations to scientific or professional association conferences (i.e., the American Society of Limnology and Oceanography, ASLO, AGU, NMEA, ASA, WAS, AFS, CERF, AGU, etc.) or similar professional conferences.
 - Presentations at university wide symposia and events.
 - Presentations by funded researchers and students at the aforementioned venues.
 - Presentations by Sea Grant Staff and extension agents at the aforementioned venues.
- Don't report:
 - The number of attendees at:
 - Presentations at Sea Grant sponsored organized events (Coast Day, Ocean Fun Days, etc.).
 - Presentations to local classrooms (these are considered formal education programs).
 - Outreach exhibits or booths at festivals or conferences.
 - Internal-facing presentations (e.g., Sea Grant Week; regional Sea Grant meetings; network meetings).

Number of marinas certified as “Clean Marina” by the Clean Marina Program as a result of Sea Grant activities

- *Explanation:* This metric is used to track the number of newly certified or recertified marinas by the Clean Marina Program as a result of Sea Grant activities. The Clean Marinas Program is an ongoing endeavor, by a marina industry alliance, determined to provide environmentally clean facilities and protect the states' coastal and inland waters from pollution through compliance of best management practices.
- *Justification:* This metric tracks Sea Grant efforts to provide clean facilities to the boating community and protect waterways from pollution through Clean Marina certifications or re-certifications awarded as a result of Sea Grant activities.
- *Definition:*
 - Clean Marina is a voluntary compliance program that stresses environmental and managerial best management practices that exceed regulatory requirements. A facility must meet all legal regulatory requirements and a percentage of voluntary best management practices to become a certified Clean Marina.
- *Reporting:*
 - Do Report:
 - The number of newly certified or recertified Clean Marinas.
 - The name(s) and location(s) of newly certified or recertified Clean Marinas.

Number of individuals certified in Hazard Analysis Critical Control Point (HACCP) due to Sea Grant training efforts

- *Explanation:* Sea Grant programs provide HACCP training for individuals looking to become certified. Technically, the certificates of training completion are issued by the Association of Food and Drug Officials at the Food and Drug Administration (FDA), not Sea Grant programs.
- *Justification:* This metric demonstrates Sea Grant's effort to train professionals to identify and prevent hazards that could cause foodborne illnesses through the number of HACCP certifications awarded as a result of Sea Grant training activities. Sea Grant offers required standardized training that enables people to meet the FDA training requirement in the seafood HACCP regulation. The certificates of training completion are issued by AFDO.

- *Definition:*
 - The number of individuals newly certified or recertified HACCP practitioners due to Sea Grant training efforts should be reported.
 - The number of individuals who have taken HACCP should be reported by the program that supports the HACCP trainer, even if the trainer travels to another state.
 - If multiple programs supply trainers, the programs can divide the values reported, but do not double count the number of individuals certified.
- *Reporting:*
 - Do Report:
 - The number of individuals who have taken HACCP training for programs in commercial and regulatory settings, training for importers, processors and distributors of fish and fishery products, etc.
 - Don't Report:
 - To limit duplicate reporting, if a joint HACCP training was given by two Sea Grant programs, only one program should be reporting.

Number of peer-reviewed publications produced by Sea Grant

- *Explanation:* This metrics tracks the number of publications produced by Sea Grant. The end product of scientific and engineering research is information, and Sea Grant research results are not realized until they are available to users in the marine community. To further the use and development of marine and coastal resources, NOAA encourages wide dissemination of the results of Sea Grant research and other activities. A major part of that dissemination occurs in the form of publications and other communications documents and products aimed at Sea Grant's various audiences.
- *Justification:* This metric indicates the breadth of Sea Grant's research portfolio and comes from the Sea Grant Collection at the NOAA Library. These refereed documents are subject to rigorous peer- review and are usually written by the investigators for use by other scientists. Their quality is generally high and they represent an important scholarly contribution to the wise use and development of marine resources.
- *Definition:*
 - Peer-reviewed publications include journal articles that have undergone a thorough peer-review process. Book chapters, proceedings papers, and periodical articles that have been peer-reviewed also fall under this category.
- *Reporting:*
 - Do Report:
 - Peer-reviewed publications that are published on or before January 31, 2025
 - For publications that are not peer-reviewed, consider if the publication fits into another reporting category such as products or tools, formal or nonformal education, economic benefits, etc. We encourage you to submit your publication information even if you are not sure how it should be categorized, as we will help make that determination.

California Sea Grant (CASG) Reporting - Supplemental Questions

Government Relations

- *Explanation:* This form tracks the geographic location of your project's work and the impacts against California's congressional districts and the United States congressional district.
- *Justification:* The locations of CASG's work are referenced and reported in meetings with governmental bodies that highlight CASG's scope of impact and thus help influence NOAA and Sea Grant budgets.
- *Reporting:*
 - Do Report:
 - California congressional district number for the California State Assembly.
 - California congressional district number for the California State Senate.
 - California congressional district number for the United States House of Representatives.
 - Justification and/or links for your district selections (optional).

Partners this Period

- *Explanation:* This metric tracks new and continuing partnerships developed by California Sea Grant funded researchers and Extension Specialists over the reporting period.
- *Justification:* This metric illustrates the scope of California Sea Grant's impact and influence by identifying key partners who supported individual PIs, projects, research, education, extension, and outreach. Collaborative partnerships are foundational to California Sea Grant's efforts and successes, and exist across sectors including but not limited to local, state, and federal agencies; California tribal nations; non-governmental organizations; industry and business; academia including colleges, universities, and high schools; and community organizations.
- *Definition:*
 - Partner refers to an organization/institution/agency/company and not an individual. For example, do not report on "Mr. Smith", report on the institution that Mr. Smith is associated with.
 - Partner name should match official organizational titles. These are most commonly found with an organization's physical address or "About Us" information. However, if an organization uses CAPS or unique grammar (-), it should not be included (e.g. Wislow Research Associates LLC should not have a comma).
 - Partner type should represent the managing entity of the partner and is generally associated with the overarching organization. Examples include private industry/businesses, government, academic institutions, NGOs, other Sea Grant programs. Those that don't fall into one of these categories should be listed as "Other". If you select "Other" as an option for Type or Scale, describe the partner in the Notes section.
 - Partner scale should match the geographic reach/scope of the partner. For example, if the partner is an NGO working in coastal ecosystems in California and Mexico, their Scale is "International". If the partner is a high school, their scale is "Local".
- *Reporting:*
 - Do Report:
 - Partnerships that were developed or established during the reporting period.
 - At the organization/institution/agency/company level; individual contributions can be specified in the Notes section as needed.
 - Match official organization/institution/agency/company names, type, and scales as accurately as possible.
 - Don't Report:
 - Individuals as partners. Report at the organization/institution/agency/company level. Individual contributions can be specified in the Notes section as needed.
 - Abbreviations or acronyms unless these are the official/registered name

Press and Media Coverage

- *Explanation:* This metric tracks the public-facing coverage over the reporting period.
- *Justification:* When California Sea Grant-funded researchers, Extension Specialists, and Fellows are covered by the media and press, it's an incredible opportunity for the general public to increase their environmental literacy and to help individuals better connect with and to their environment.
- *Reporting:*
 - Do Report:
 - Interviews, articles, images, videos, etc., related to you and/or your project that have been published by a source other than yourself.
 - Don't Report:
 - Photos or videos that you have taken yourself. Share these with California Sea Grant staff by emailing sgreport@ucsd.edu a downloadable zipped file or link to an accessible Google Drive folder. Be sure to include information about the content of the image/video (including names of individuals or institutions represented, description of the content, date/location of content, and if California Sea Grant has a right to reshare publicly).

Working Groups, Committees, and Advisory Panels and/or Boards*

**Note: Only CASG Extension Specialists complete this form*

- *Explanation:* Use this form to report about your participation in any type of working group, committee, advisory panel and/or board during the reporting period that is relevant to Sea Grant's mission and values, your project, research, or area of expertise.
- *Justification:* This metric illustrates how Sea Grant staff members are leaders in research, policy and education communities and serve valuable roles as advisors to local, state and federal government agencies and community planning groups. Submit a separate entry for each different group or role within a group.
- *Reporting:*
 - Do Report:
 - Name and type of working group, committee, or advisory panel and/or board.
 - Purpose of group and your role in the group.
 - Number of hours spent at meetings of or working on content from said group.
 - Outcomes and results from time spent serving on the group as applicable. Report these on the Project Updates, Highlights, or Accomplishments form.
 - Don't Report:
 - Groups that are not relevant to your work with Sea Grant (e.g., don't report your leadership on your local PTA board).

Sea Grant Collection at the NOAA Library

Sea Grant-funded documents and publications are submitted by the Sea Grant programs to the Sea Grant Collection at the NOAA Library on an ongoing basis.

Peer-reviewed publications published between February 1 and January 31 are counted towards the final numbers at the end of the reporting period.

Only peer-reviewed journal articles are counted for annual reporting. Other publications and multimedia submitted to the Sea Grant Collection during the reporting period will be collected and cataloged for use by NSGO and the Sea Grant networks, but these publications and products will not be counted towards annual reporting totals.

If the article being submitted is not published as an open-access article, submitters must use the manuscript version of the article (often called the post-refereed, pre-publication manuscript). Articles may be submitted individually or as a batch, utilizing the required spreadsheet for batch submissions. The following information is required to be submitted:

- Sea Grant program
- Journal title
- Publication year
- Publication DOI (or URL if DOI is unavailable)

Additional information such as authors, keywords, and grant information will enhance the ability for others to find the publication in the library catalog.