



Marine Extension and
Georgia Sea Grant
UNIVERSITY OF GEORGIA



2024 - 2027 STRATEGIC PLAN

Image of the R/V Georgia Bulldog (top right on cover) is courtesy of goldenisles.com.

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INTRODUCTION

Marine Extension and Georgia Sea Grant has been serving the state of Georgia for more than 50 years, providing integrated research, education and extension programs that foster the responsible use of Georgia’s coastal resources by individuals, decision-makers and management agencies.

The program is managed through a federal-state partnership between the University of Georgia (UGA) and the National Oceanic Atmospheric Administration’s (NOAA) National Sea Grant College Program, a national network of 34 Sea Grant programs located in coastal and Great Lakes states and territories.

Every four years, Marine Extension and Georgia Sea Grant develops a strategic plan designed to establish priorities and guide the program’s response to changing social, environmental and economic conditions along the coast. The plan is structured in accordance with the National Sea Grant College Program’s 2024-2027 Strategic Plan, which capitalizes on Sea Grant’s unique capacities and strengths, and allows for flexibility and creativity on the part of state Sea Grant programs.

Marine Extension and Georgia Sea Grant’s 2024-2027 Strategic Plan is designed to be dynamic, enabling the program to shift direction and approach based on the needs and priorities of Georgia’s coastal stakeholders. The following sections provide context about the program’s setting and its organizational structure before detailing the strategic planning process that informed the key components of the plan, which include the vision, mission, core values, cross cutting principles, and focus area goals, strategies and outcomes.

WHERE WE WORK

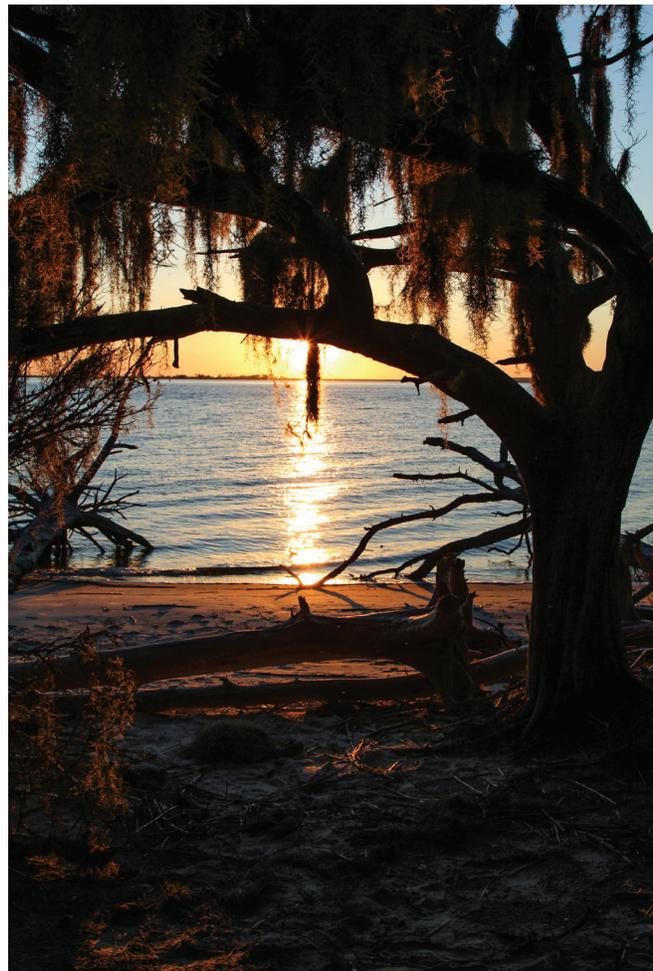
The primary focus of Marine Extension and Georgia Sea Grant's programmatic efforts is the Georgia coast, while recognizing its interconnection to the state's mountains, piedmont and coastal plain. The program's administrative offices are located on UGA's main campus in Athens, but most of its faculty and staff are based on the coast at one of three facilities. The Shellfish Research Lab and the Marine Education Center and Aquarium are located on Skidaway Island near Savannah, and the program's third office is based in Brunswick. The placement of staff and facilities on the coast allows Marine Extension and Georgia Sea Grant to work closely with coastal partners, maintain relationships with diverse communities, study Georgia's unique coastal environment and provide experiential learning opportunities for coastal residents, visitors, and students, helping them understand what makes the coast unique while inspiring them to protect it.

Nothing conveys the dynamism of Georgia's coastal zone more convincingly than its tremendous tides. The difference between high and low tide is 6–8 feet. Twice a day the tides submerge and expose Georgia's 368,000 acres of expansive salt marshes. In so doing, they nourish and sustain one of the most biologically productive ecosystems on earth, providing habitat for important migratory birds, marine mammals, and commercially valuable fish and shellfish. Georgia's salt marshes lie between the mainland and a series of 14 barrier islands. Like all barrier islands, they protect the coastline from storm surge and erosion. They also support recreational activities and tourism. Georgia's natural coastal resources are critical to the health and economic prosperity of the coastal region.

Dynamism also characterizes social aspects of Georgia's coastal zone. Unlike most coastal regions in the eastern U.S., Georgia's coast did not become accessible to most of the population until late in the 20th Century, after the completion of Interstates 95 and 16. Population increased from about 280,000 people in 1970 to more than 868,000 in 2021 based on estimates from the U.S. Census Bureau. Population distribution in Georgia is unusual for a coastal state in that most of the population lives in the piedmont region and is largely disconnected from coastal issues. Decision-makers in the state's capital, Atlanta, are far removed from the coast. The remoteness of the coast from the state's population centers makes it imperative that Marine Extension and Georgia Sea Grant inform the entire state's citizens about coastal issues and inspire action to develop solutions to those issues.

Georgia's dynamic coastal environment and its communities are changing rapidly. Population increase, shifting demographics, coastal development, loss of working waterfronts, aging infrastructure, pollution, habitat loss, species migration, and sea level

rise are just a handful of pressing issues that are currently impacting the health of the Georgia coast. These issues demand careful consideration and informed decision-making, and, because many of these issues extend beyond state lines, they also demand working across geographic boundaries to establish regional and national partnerships that address issues on a broader scale. Marine Extension and Georgia Sea Grant's immediate and long-term challenge is to balance economic vitality, ecological integrity and social responsibility.



THE ENVIRONMENT

THE GEORGIA COAST

has **105 miles** of sandy beaches and **368,000 acres** of saltmarsh. These marshes provide critical habitat for fish, shellfish and migratory birds.

They also filter pollutants from our waterways, improving Georgia's coastal water quality.

THE AVERAGE TIDAL RANGE IS

↑ **6' - 8'** ↓

14 BARRIER ISLANDS

located along the coast between the Savannah River and the St. Mary's River help protect the mainland from the energy of the ocean. Only four are accessible by car (Tybee Island, St. Simons, Sea and Jekyll Islands). Most are protected by the state or federal government.

Georgia's entire barrier island complex is so critical to shorebirds that it was designated as a **Landscape of Hemispheric Importance** by the Western Hemisphere Shorebird Reserve Network in 2019.



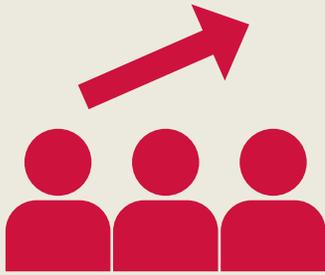
GEORGIA HAS

14 RIVER BASINS.

Of those, the Altamaha, Ocmulgee, Oconee, Ogeechee, Satilla, Savannah, and St. Marys basins drain into the Atlantic Ocean.



THE PEOPLE



Population in Georgia's 11 coastal counties increased from about 280,000 people in 1970 to more than 868,644 people in 2021 (U.S. Census Bureau, 2021).

LESS THAN



of the state's total population lives in coastal areas (NOAA Office for Coastal Management).

COASTAL GEORGIA

EMPLOYS APPROXIMATELY

244,300

PEOPLE ANNUALLY,

earning **\$10.7 billion**, which equates to almost **\$27.6 billion** in GDP (NOAA Office of Coastal Management).



Coastal Georgia is part of the **Gullah Geechee Cultural Heritage Corridor**.



Median household income ranged from **\$34,679** (Brantley County) to **\$76,121** (Bryan County) in 2020, compared to the state median income of **\$61,224** (U.S. Census Bureau, 2020).

9 of 11

coastal counties have **greater than 10%** of their population living in poverty (U.S. Census Bureau, 2021).

THE ECONOMY



In 2020, Georgia's commercial fishing industry

Top commercial species in 2020

SUPPORTED

GENERATED

BROUGHT IN

965

\$10.9

\$60

FULL- AND PART-TIME JOBS

MILLION IN EARNED LABOR INCOME

MILLION IN TOTAL SALES



SHRIMP



BLUE CRAB



FARM-RAISED
CLAMS

Georgia's seafood industry, including domestic and imported seafood, supported **19,883 jobs** and generated more than **\$3.2 billion in sales** in 2019.

The largest contributing sector to Georgia's marine economy is **tourism and recreation** (NOAA 2022 Marine Economy Report).

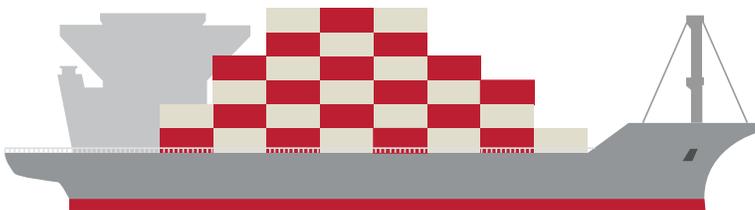
30.3 MILLION VISITORS

traveled to the Georgia coast in 2021 (2021 Georgia Day Travel USA Visitor Profile).

More than **29,500 jobs** in Georgia's 11 coastal counties were directly and indirectly supported by visitor activity. (Economic Impact of Tourism in Georgia Report, Explore Georgia, 2020).



Georgia Ports Authority supported **561,087** full-and part-time jobs in Georgia and generated **\$140 billion** in sales (Georgia Ports, 2021).



Georgia is ranked **10th** in the nation for the number of recreational fishing trips taken by anglers (Fisheries of the U.S. Report, NOAA, 2020).

In 2021, charter fishing supported **667** full- and part-time jobs and brought in **53.3 million** in sales

(For-hire Recreational Fishing in Georgia Report, Marine Extension and Georgia Sea Grant, 2022).



THE THREATS

SIX

WEATHER AND CLIMATE DISASTERS

affected Georgia in 2021, all reaching or exceeding **\$1 billion** in damages/costs
(National Centers for Environmental Information, 2021).

MANY COASTAL COMMUNITIES
IN GEORGIA ARE PREPARING FOR

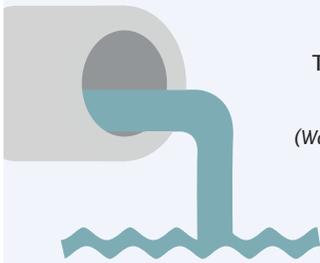
4' - 6.3'

of sea level rise by **2100**
(Sweet et al., 2017).



The frequency and intensity of heavy precipitation events across the U.S. have increased more than average precipitation and are **expected to continue to increase over the coming century**

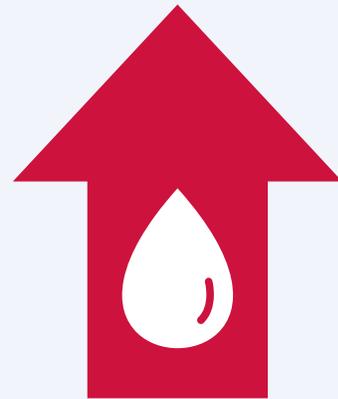
(U.S. National Climate Assessment Report, 2018).



The biggest threat to water quality in coastal Georgia is **nonpoint source pollution**
(Water Quality in Georgia 2020-2021 Report, Georgia EPD).

52%

of waters assessed for surface water quality are not supporting their designated uses, **including 106 miles of coastal streams, 24 square miles of sounds and harbors, and 6.85 miles of coastal beaches.**



Water demand in the coastal Georgia region is forecast to increase by **71 million gallons** per day between 2015 and 2050

(Coastal Georgia Regional Water Plan, 2017).

HOW WE WORK

Marine Extension and Georgia Sea Grant's applied research capabilities, local knowledge, and on-the-ground workforce allows the program to rapidly identify issues, capitalize on opportunities, and generate practical solutions to real problems. This is achieved through a place-based, transdisciplinary approach that combines research, education, extension, law and policy, and communications efforts to understand risks and uncertainties and provide solutions.



Research

Marine Extension and Georgia Sea Grant supports multidisciplinary research led by scientists from institutions across the state. The program consistently engages stakeholders, including the scientific community, to help identify emerging opportunities and threats, and assist in making optimal investments of state and federal resources through competitive grant programs, fellowships, and scholarships that support use-inspired research related to Georgia's coastal environments. By serving as a sustained conduit of funding and resources, the program's network of Sea Grant-funded researchers, in partnership with education and extension staff, deliver credible and timely information to those who need it in ways that are accessible and effective. Some problems are best addressed through regional-level collaboration, so the program works extensively with partners to make regional research investments.

Extension

Extension specialists act as a bridge between scientists, local governments and marine industries, connecting university knowledge with local needs to facilitate change in a complex social and economic environment. Stormwater, water quality, sustainable land use and coastal resilience specialists work with community stakeholders to identify areas that are vulnerable to flooding, sea level rise, storm surge, pollution or other coastal hazards before implementing demonstration projects that manage stormwater, promote green infrastructure and conserve water resources. Fisheries and aquaculture extension specialists assess the social and economic challenges impacting Georgia's commercial and recreational fishing industries while also conducting applied research and providing training on fishing and aquaculture practices that are economically and environmentally sustainable. Extension specialists build networks within the coastal tourism sector and provide training to small businesses on sustainable tourism practices that promote stewardship of coastal resources. By partnering with marine industries, local governments, students, coastal professionals, and other groups, Marine Extension and Georgia Sea Grant's extension programs help sustain healthy ecosystems and marine resources while maximizing the resilience and economic vitality of coastal communities.

Education

Marine Extension and Georgia Sea Grant works to advance environmental literacy and workforce development by nurturing the next cadre of young investigators through research, scholarship, and creative learning activities in coastal, ocean, and marine science.

Educators based at the program's Marine Education Center and Aquarium on Skidaway Island lead educational programming focused on marine science and coastal ecology, and provide training to pre-K-12 students, college students and adults. Professional development provided through internships and fellowships for college students helps cultivate the next generation of educators and marine scientists. Many early career professionals who participate in the program's student opportunities go on to work in marine policy, coastal resource management or environmental education. Coastal stakeholders are also engaged through community science programs that focus on monitoring coastal habitats and wildlife through long-term data collection, improving understanding and conservation of Georgia's valuable coastal resources.

Law and Policy

Launched in 2014, Marine Extension and Georgia Sea Grant's Legal Program provides law and policy analysis of coastal, environmental and land use issues affecting the state's coastal resources. Legal experts provide objective legal information and analysis to assist extension professionals, state and local government decision-makers, coastal residents, and business owners in their understanding and navigation of complex legal and policy issues that impact the environment surrounding coastal communities. Experts also provide mentorship to students on a variety of law and policy concerns confronting coastal Georgia.

Communications

Communications staff support the implementation of Marine Extension and Georgia Sea Grant's mission through internal and external communication efforts that advance brand identity, broaden awareness of the program and its priorities, and increase the visibility of research, education and extension efforts. Activities and accomplishments are shared through earned media as well as through the program's core communications outlets, including e-newsletters, websites and social media platforms. Communications staff disseminate results of Sea Grant-funded research projects through accessible and inclusive messaging and products to ensure that all stakeholders are provided with pertinent, science-based information required to make informed decisions.

2024-2027 STRATEGIC PLANNING PROCESS

Marine Extension and Georgia Sea Grant's strategic planning process took place over multiple months, engaging a wide variety of stakeholders, including representatives from colleges and universities, government agencies, businesses and industry, community organizations, nonprofits and residents of Georgia. Stakeholder engagement is incredibly important in the development of the strategic plan as it provides insight into emerging trends, needs, and opportunities while shaping the program's vision for the future of Georgia's coastal ecosystems and communities.

For the 2024-2027 strategic planning process, a committee made up of faculty and staff was formed in March 2022. The committee was charged with gathering feedback through a variety of data collection methods, including creating and disseminating a stakeholder survey and soliciting targeted stakeholder feedback through virtual listening sessions, one-on-one meetings, and telephone surveys designed to gain a better understanding of priority coastal issues and stakeholder needs within each focus area.

The stakeholder survey was shared in April 2022. It solicited input on research, extension and education programming, and assessed perceptions of importance of several coastal issues. The survey received 319 responses, and a summary of the results can be found in Appendix A.

In addition to gathering input from stakeholders, the program's staff and advisory board also participated in the strategic planning process, providing input on the draft strategic plan, including an evaluation of the vision, mission, core values, and focus area goals and strategies.

An outline of the strategic planning process is provided below.

DATE	ACTIVITY
March 2022	Marine Extension and Georgia Sea Grant leadership met to determine the timeline and process for strategic planning. Focus area leads were identified and tasked with developing smaller focus area teams. These teams solicited feedback from stakeholders and assisted with drafting goals, strategies and outcomes within each focus area.
March 2022	A unit-wide meeting among faculty and staff was held to initiative planning efforts and gather input on the vision. Staff were invited to join focus area teams.
April 2022	The stakeholder survey was disseminated to the public.
April - June 2022	Targeted stakeholder feedback was solicited for each focus area through listening sessions, one-on-one meetings and telephone surveys.
June 2022	Results of the stakeholder survey, targeted listening sessions and telephone surveys were shared with staff during a summer unit-wide meeting. Staff provided feedback on process, core values and cross cutting principles (partnerships and DEI).
June 2022	The strategic planning committee wrote the initial draft plan based on feedback from all stakeholders. Each focus area section (Environmental Literacy and Workforce Development, Healthy Coastal Ecosystems, Sustainable Fisheries and Aquaculture and Resilient Communities and Economies) was written by the focus area lead. Other components of the plan (introduction, vision, mission, core values, and cross cutting principles) was written by the program’s public relations coordinator.
July 2022	The advisory board reviewed the strategic planning process and provided feedback on the initial draft.
August 2022	The first draft plan was submitted to staff as well as the National Sea Grant Office for review and feedback.

DATE	ACTIVITY
September 2022	The first draft plan was shared with stakeholders for a 30-day public comment period.
October 2022	Comments from the National Sea Grant Office, staff and stakeholders were incorporated into the plan. The final plan was submitted to the National Sea Grant Office and published on Marine Extension and Georgia Sea Grant's website.

Through the strategic planning process, Marine Extension and Georgia Sea Grant developed a vision, mission, organizational goals, and measurable outcomes within the program's four focus areas – **Environmental Literacy and Workforce Development, Healthy Coastal Ecosystems, Sustainable Fisheries and Aquaculture and Resilient Communities and Economies.**



VISION

An engaged and informed public supports thriving coastal ecosystems and resilient and inclusive communities.

MISSION

To improve the environmental, social and economic health of the Georgia coast through research, education and extension.

CORE VALUES

Marine Extension and Georgia Sea Grant's core values are essential and enduring tenets that influence the program and support its mission.

Collaboration: Seek partnerships that leverage our strengths, inviting and integrating diverse expertise and perspectives to reach shared goals. Establish a culture of respect and open communication with our partners, stakeholders and staff.

Innovation: Support and encourage creative solutions to emerging challenges and adapt to changing needs.

Diversity, equity, inclusion, justice and accessibility: Pursue and engage new, diverse perspectives to enhance understanding of coastal challenges and communities. Be responsive and accessible to all stakeholders.

Sustainability: Balance the social, economic and environmental resilience of coastal communities by communicating best practices that preserve the health of our natural resources so people can continue benefitting from the services they provide.

Accountability: Operate with integrity and transparency while maintaining scientific accuracy, quality and relevance in all program areas, including program management and administration.

CROSS CUTTING PRINCIPLES

Cross cutting principles provide a common foundation for the following focus areas and the work Marine Extension and Georgia Sea Grant conducts. While implementing the 2024-2027 Strategic Plan, Marine Extension and Georgia 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 us to pursue our vision and mission with, and for, all audiences that we serve. We will actively create mechanisms to allow all people to participate in programmatic activities. Bringing a range of experiences, values and tools together to find solutions that are more creative, inclusive and responsive will help us be successful in tackling problems facing coastal communities.

FOCUS AREAS

The strategic plan outlines goals, strategies, outcomes and corresponding performance measures organized under the program's four national focus areas:

- 1. Environmental Literacy and Workforce Development**
- 2. Healthy Coastal Ecosystems**
- 3. Sustainable Fisheries and Aquaculture**
- 4. Resilient Communities and Economies**

Environmental Literacy and Workforce Development

Environmental education imparts knowledge and values that lead to better choices and a greater appreciation of natural resources. It is especially important in Georgia, where many people live far from the coast. Many inland communities are not aware of how deeply intertwined their lives are with coastal ecosystems, communities and economies. To foster the wise use and stewardship of coastal and marine resources, it is critical to increase the basic understanding of coastal ecosystems among individuals across the state through hands-on research, environmental education and workforce development. The program is charged with not only educating students of all ages and from diverse communities, but also training the next generation of educators, researchers and coastal resource professionals who will seek solutions to coastal challenges.

Goal 1: Cultivate a diverse, environmentally literate public that participates in lifelong formal, nonformal and free choice learning opportunities.

STRATEGY: Create and implement education 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.

OUTCOME:

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

STRATEGY: 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.

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.*

STRATEGY: Support community science programs that engage participants of all ages

in environmental monitoring to generate data that advance critical research and environmental management efforts.

OUTCOMES:

- *Collaboration with diverse stakeholders and partners supports the development and delivery of community science programs that address resource management needs.*
 - *Citizens and volunteers participate in Sea Grant-supported community science training programs and have broad access to current scientific information related to Sea Grant focus areas.*
 - *Citizens collect and contribute data to Sea Grant-supported community science programs and applied research projects.*
 - *Data generated through community science programs are used to advance research or resource management needs.*
-

Goal 2: Develop a diverse and skilled workforce that is engaged and able to build prosperous lives and livelihoods in a changing world while addressing critical coastal needs through traditional and innovative careers.

STRATEGY: Identify and remove barriers to accessing training and learning opportunities so that Georgia’s diverse population is connected to, and prepared for, the range of career paths that support the needs of the state’s coastal communities.

OUTCOME:

- *Members of a community are enabled to explore and pursue the variety of occupations that are essential to sustain Georgia’s coastal communities, economies and ecosystems.*

STRATEGY: Increase opportunities for students at all levels (P-12, undergraduate, graduate students, post-graduate, technical and vocational) to gain knowledge and experience addressing issues that are important to our ocean, the Georgia coast and watersheds.

OUTCOMES:

- *Student opportunities provide increased literacy and experience in different disciplines, skills and issues.*
- *Students from all backgrounds, and with diverse needs, are supported and have access to formal and experiential learning, training and research experiences.*
- *Innovative models of education and training are used to engage a wide variety of students.*

STRATEGY: Prepare a responsive and diverse workforce to advance and benefit from sectors that support the needs of Georgia's coastal communities and ecosystems and to adapt and thrive in changing environmental, social and economic conditions.

OUTCOMES:

- *Employment in Georgia's coastal and watershed communities expands and diversifies. The existing and future workforce can adapt and thrive in changing environmental, social and economic conditions.*
- *Current and future professionals working on coastal adaptation and resilience have the training and skills to equitably and inclusively assist communities that prepare for, adapt to, and recover from disasters and disturbances.*



Healthy Coastal Ecosystems

Healthy coastal ecosystems are critical to Georgia. These ecosystems, their benefits and functions have intrinsic ecological, cultural, social, economic and aesthetic value. They are essential for sustaining the diversity of marine life that draws people to the coast and supports coastal communities. The health of Georgia's coastal ecosystems is impacted by various natural and anthropogenic stressors. When population growth, climate change and weather patterns increase demand on land and water resources, pollution or other threats stress the ecosystem. As a result, coastal water and land resources decline and the economic and environmental prosperity of coastal communities suffer. With these ongoing pressures, there is an increasing need for community-engaged and natural infrastructure solutions to protect and enhance coastal land and water resources for future needs. Economic growth must be balanced with environmental conservation in a way that meets present needs without compromising the quality of life for future generations.

Goal 1: Enhance watersheds, habitats and communities through the implementation of natural infrastructure solutions coupled with the application of sound science in informed decision-making.

STRATEGY: Implement collaborative and applied research projects to educate, train, and demonstrate natural infrastructure solutions that enhance, preserve and protect coastal ecosystems.

OUTCOMES:

- *Research results improve communities' understanding of projected changes and impacts to coastal ecosystems and natural resources.*
- *Resource managers, decision-makers, private-sectors and regulatory agencies have access to high-quality, interdisciplinary, applied research that advances their understanding of natural infrastructure solutions and the impacts of human activity on ecosystem health.*

STRATEGY: Develop and sustain relationships with policy makers and resource managers that engage and support evidence-based problem-solving when addressing coastal management needs.

OUTCOMES:

- *Decision-makers have improved scientific understanding of ecosystem processes and environmental variability.*

- *Communities are informed about science-based tools and resources that can be used to improve coastal and watershed management.*

STRATEGY: Utilize and integrate outreach and service-learning activities to demonstrate the value and function of healthy ecosystems.

OUTCOMES:

- *Communities are engaged and informed of ecosystem functions.*
- *Communities understand the role they play in supporting healthy coastal ecosystems.*

Goal 2: Support social, economic, environmental and management-driven research that informs and reinforces the sustainability of healthy coastal ecosystems.

STRATEGY: Conduct needs assessments and fund applied (social, economic, environmental and management-driven) research in the areas of pollution, climate change or ecology that will increase the body of knowledge needed to sustain or adapt diverse and healthy ecosystems.

OUTCOMES:

- *New methods and policy tools will be identified and developed to monitor and enhance coastal habitats.*
- *Information will be obtained and shared about threats to diverse and healthy ecosystems, the effects of altered environments, and innovative approaches to avoid or mitigate threats and negative effects.*

STRATEGY: Share applied research results, technology-based resources and policy tools with local communities and decision-makers through technical assistance and training opportunities.

OUTCOMES:

- *Resource managers, decision-makers, regulatory agencies and local governments have access to new methods and tools used to monitor, enhance and protect coastal habitats, communities and watersheds.*
- *Resource managers and decision-makers will use research results, resources and tools to improve coastal habitats and water quality.*
- *Residents and communities are routinely participating in programs that enhance, protect or restore natural coastal habitats.*

- *Residents and communities consider the importance of proactive and comprehensive land use and infrastructure planning to guide local policies and decision-making.*



Sustainable Fisheries and Aquaculture

Georgia has deep historic ties to its marine fisheries resources. The commercial harvest of shrimp, blue crab, shellfish and various finfish has played a prominent role in weaving the cultural and economic fabric of the state's coastal communities for decades. Georgia's relatively healthy coastal and marine ecosystems, coupled with the region's popularity as a prime tourist destination, also support prominent recreational fishing activities. The need for responsible harvesting practices is crucial to conserving Georgia's marine fisheries for all users. Equally important is the need for habitat protection and informed fisheries management decisions to address concerns about overfishing, changing environmental conditions and coastal development that persist among many user groups. Factors ranging from an aging workforce and rising operating costs to complex regulatory frameworks and competition with cheaper imported seafood also threaten the sustainability and resiliency of Georgia's domestic seafood industry. Despite these challenges, opportunities exist to expand and diversify shellfish aquaculture and work with businesses to improve seafood marketing and distribution strategies.

Goal 1: Support wild harvest, aquaculture and seafood sectors so they remain safe, economically viable and resilient to changing conditions.

STRATEGY: Provide relevant training and technical assistance to keep Georgia seafood products, and the workforce harvesting and handling them, safe and in compliance with local, state and federal regulations.

OUTCOME:

- *Fishing, aquaculture and seafood processing workforces are able to safely harvest and handle their products and remain in compliance with local, state and federal regulations.*

STRATEGY: Engage in outreach, research and communication efforts that support policies, workforce development and economic development needed to sustain the state's wild harvest, aquaculture and seafood sectors.

OUTCOMES:

- *Businesses that harvest or process seafood increase their knowledge, skills or awareness of resources needed to remain operational and competitive.*
- *The shellfish industry is knowledgeable about techniques and approaches to new production and grow-out technologies that maximize efficiency and productivity.*

STRATEGY: Foster collaboration among industry, government, community and academic partners to enhance the resiliency of Georgia’s fishing, aquaculture and seafood sectors.

OUTCOME:

- *New or enhanced collaborations will enable fishing, aquaculture or seafood sectors to better plan for or adapt to changing market and environmental conditions.*
-

Goal 2: Promote the sustained use of marine fisheries resources through responsible fishing or harvesting practices, stewardship actions and informed management decisions.

STRATEGY: Provide outreach and technical assistance to commercial and recreational fishers and aquaculturists on sustainable fishing or harvesting practices relevant to their sectors.

OUTCOME:

- *Commercial and recreational fishers and aquaculturists adopt sustainable fishing or harvesting practices that help sustain marine fisheries resources.*

STRATEGY: Support outreach, research or partnership efforts to co-develop and enhance new or existing fishing or harvesting methods that minimize environmental impacts while maximizing economic and social benefits to Georgia’s fishing communities and industries

OUTCOMES:

- *New or enhanced fishing or harvesting practices are co-developed between industry and relevant partners.*
- *New and improved harvesting practices reduce negative impacts on coastal and marine resources.*

STRATEGY: Develop and share outreach materials with resource users focused on stewardship of marine ecosystems and the connections between human activity and the health and sustainability of the state’s marine fisheries resources.

OUTCOME:

- *Resource users are more informed on stewardship actions they can take to protect and sustain marine fisheries resources.*

STRATEGY: Support outreach, research or partnership efforts that examine how changing environmental conditions or management actions impact the health and productivity of marine fisheries resources.

OUTCOME:

- *Resource managers and fishing and aquaculture industries are more informed of how changing environmental conditions and management actions impact the health and productivity of marine fisheries.*

Goal 3: Increase interest and use of seafood products that are harvested, developed or sold in Georgia among consumers, culinary professionals and relevant businesses.

STRATEGY: Provide outreach, technical assistance and resources for consumers, culinary professionals, wholesale and retail operations, or hospitality-related businesses on the safety, nutritional benefits and sustainability of local seafood products and their economic and cultural importance to the state and local communities.

OUTCOME:

- *Consumers, culinary professionals and relevant businesses are more knowledgeable about sourcing, promoting, purchasing, handling or consuming seafood products.*

STRATEGY: Facilitate collaboration between fisheries, aquaculture, tourism and culinary industries to enhance the development, promotion and utilization of Georgia seafood products.

OUTCOME:

- *New and existing partnerships help promote the cultural and economic importance of local seafood products and the communities that depend on them.*

STRATEGY: Support outreach, research or partnership efforts that enhance the production, diversification, marketing and distribution of Georgia's seafood products, both in and out of state.

OUTCOME:

- *Diverse, Georgia-based seafood products are developed, distribute and promoted in and out of state.*



DORA F

FLYING CLOUD

Resilient Communities and Economies

Coastal communities and economies are exposed to short-term and long-term risks from extreme weather events, climate change and other disruptions. Immediate hazards such as coastal storms, heat waves and flooding can quickly threaten property, infrastructure and people. More persistent stressors such as sea level rise, population growth and drought can further exacerbate and compound impacts on coastal communities, economies and environments. To increase the resilience of coastal Georgia, effective and inclusive engagement is needed across multiple scales (i.e., local, regional or national) and sectors (i.e., public, private or academic). Most importantly, solutions must be collaboratively developed to address local needs and protect the safety of Georgia's most vulnerable communities.

Goal 1: Increase coastal community preparedness and adaptation to extreme and chronic weather and coastal hazards, climate change, economic disruptions, regional growth and other threats through capacity building and resource development.

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

OUTCOMES:

- *Communities are able to access and use scientific information, including local and traditional knowledge, to implement mitigation and adaptive strategies.*
- *Decision-makers in Georgia understand the legal, policy and regulatory regimes informing adaptation and climate resilience measures, including coastal and riparian property rights, disaster relief and insurance issues.*
- *Tangible, science-based solutions and innovations are developed through inclusive collaboration with vulnerable communities to meet local needs and build resilience.*

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

OUTCOMES:

- *Well-coordinated and collaborative networks strengthen relationships, share information and transfer best practices across sectors and regions to build coastal resilience.*
- *Comprehensive and effective coastal resilience strategies are developed through regional community coordination.*

- *Communities have access to funding and resources available at the federal, state and local level, including those available to defense communities, enabling them to plan and prioritize projects that build resilience based on scientific data and community needs.*
-

Goal 2: Support coastal businesses and industries in implementing sustainable practices that increase resilience to changing environmental conditions and strengthen local economies.

STRATEGY: Work with businesses and industries to explore and support diversification, sustainability and social equity within coastal economic sectors and the blue economy.

OUTCOMES:

- *Coastal businesses are able to access, utilize and share knowledge, tools, services, technologies and partnerships to adapt and grow resilient economies.*
- *Georgia’s private sector understands how they can become more resilient through disaster planning and expanding renewable, regenerative and clean practices*
- *Vulnerable coastal communities are able to diversify livelihoods and engage in emerging professions, including natural infrastructure.*

STRATEGY: Facilitate planning for coastal tourism to enable economic development, support of healthy coastal ecosystems and sustainable use of natural resources.

OUTCOMES:

- *Communities implement initiatives that capitalize on the value of their natural and cultural resources while balancing resource conservation and economic development.*
 - *Businesses maximize the economic, environmental and socio-cultural benefits of sustainable coastal tourism.*
-

Goal 3: Enhance, sustain and protect coastal resources to meet the needs of communities, economies and ecosystems that depend on them.

STRATEGY: Support research, outreach and education activities on population growth, land use changes, natural infrastructure and the impacts of climate change to advance understanding of how actions impact water quality, quantity and availability.

OUTCOMES:

- *Communities understand watershed and coastal functions, and the ecosystem services they provide.*
- *Communities balance economic, environmental and social goals to sustain, protect and improve the quality of Georgia's coastal resources.*
- *Communities understand the rationale behind legal, policy and regulatory regimes that affect the use and allocation of coastal resources.*
- *Communities implement smart growth practices and natural infrastructure solutions to conserve and restore natural systems, habitat, water supplies and water quality.*

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

OUTCOMES:

- *Communities share and access science, data, tools and services that conserve and restore natural resources, sustain and Improve ecological and human health, and contribute to the well-being of the whole community.*
- *Natural infrastructure solutions are implemented in coastal communities that are vulnerable to the impacts of weather, climate, pollution and development.*



PERFORMANCE MEASURES AND METRICS

Most of the performance measures and metrics below are based on the performance measures and metrics included in the 2024–2027 National Sea Grant Strategic Plan. Performance measures and metrics are indicators used to gauge program performance.

Healthy Coastal Ecosystems

- Number of acres of coastal habitat protected, enhanced or restored as a result of Sea Grant activities. **4-year target: 80**
- 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. **4-year target: 2,000**
- Number of best management practices adopted, installed or implemented. **4-year target: 10**
- Number of ecosystem-based approaches developed to manage land, water and living resources in coastal areas as a result of Sea Grant activities. **4-year target: 5**

Sustainable Fisheries and Aquaculture

- 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. **4-year target: 782**

Resilient Communities and Economies

- Number of communities that adopt/implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities. **4-year target: 50**
- Number of communities that adopt/implement hazard resilience practices to prepare for and respond to/minimize coastal hazardous events. **4-year target: 50**

Environmental Literacy and Workforce Development

- Number of Sea Grant products that are used to advance environmental literacy and workforce development. **4-year target: 10**
- Number of people (youth and adults) engaged in Sea Grant-supported informal education programs. **4-year target: 20,000**
- Number of Sea Grant supported graduates who become employed in a job related to their degree within two years of graduation. **4-year target: 40**

Cross-Cutting

- Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management. **4-year target: 4 - 6**
- Economic and societal impacts and benefits derived from Sea Grant activities (market and non-market; jobs and businesses created or sustained; patents/licenses).
4-year target: \$1,000,000
- Number of postsecondary students and degrees financially supported by Sea Grant in higher education programs (Undergraduate, Graduate). **4-year target: 150**
- Number of P-12 students who participated in Sea Grant-supported formal education programs.
4-year target: 10,000
- Number of P-12 students reached through Sea Grant-trained educators. **4-year target: 7,000**
- Number of educators who participated in Sea Grant-supported professional development programs. **4-year target: 400**
- Number of individuals certified or recertified in Hazard Analysis Critical Control Point (HACCP) as a result of Sea Grant activities. **4-year target: 120**
- Number of peer-reviewed publications produced by Sea Grant. **4-year target: 5**
- Number of public or professional presentations. **4-year target: 320**
- Number of attendees at public or professional presentations. **4-year target: 8,000**
- Sea Grant staffing: Number of individuals and full-time equivalents (FTEs).
- Core funding proposals: Number and origination of core funding pre- and full proposals.
4-year target: 10
- Number of volunteer hours. **4-year target: 8,000**
- Number of marinas certified as “Clean Marina” by the Clean Marina Program as a result of Sea Grant activities. **4-year target: 10**
- Number of Sea Grant-sponsored/organized events. **4-year target: 100**
- Number of attendees at Sea Grant-sponsored/organized events. **4-year target: 4,000**
- Visitor attendance: Number of people that visit museums, aquariums, and other informal education institutions hosting NOAA-supported exhibits or programs (NEW; Pilot).
4-year target: 80,000
- Environmental actions: Number of people participating in environmental actions through NOAA education programs (NEW; Pilot). **4-year target: TBD**

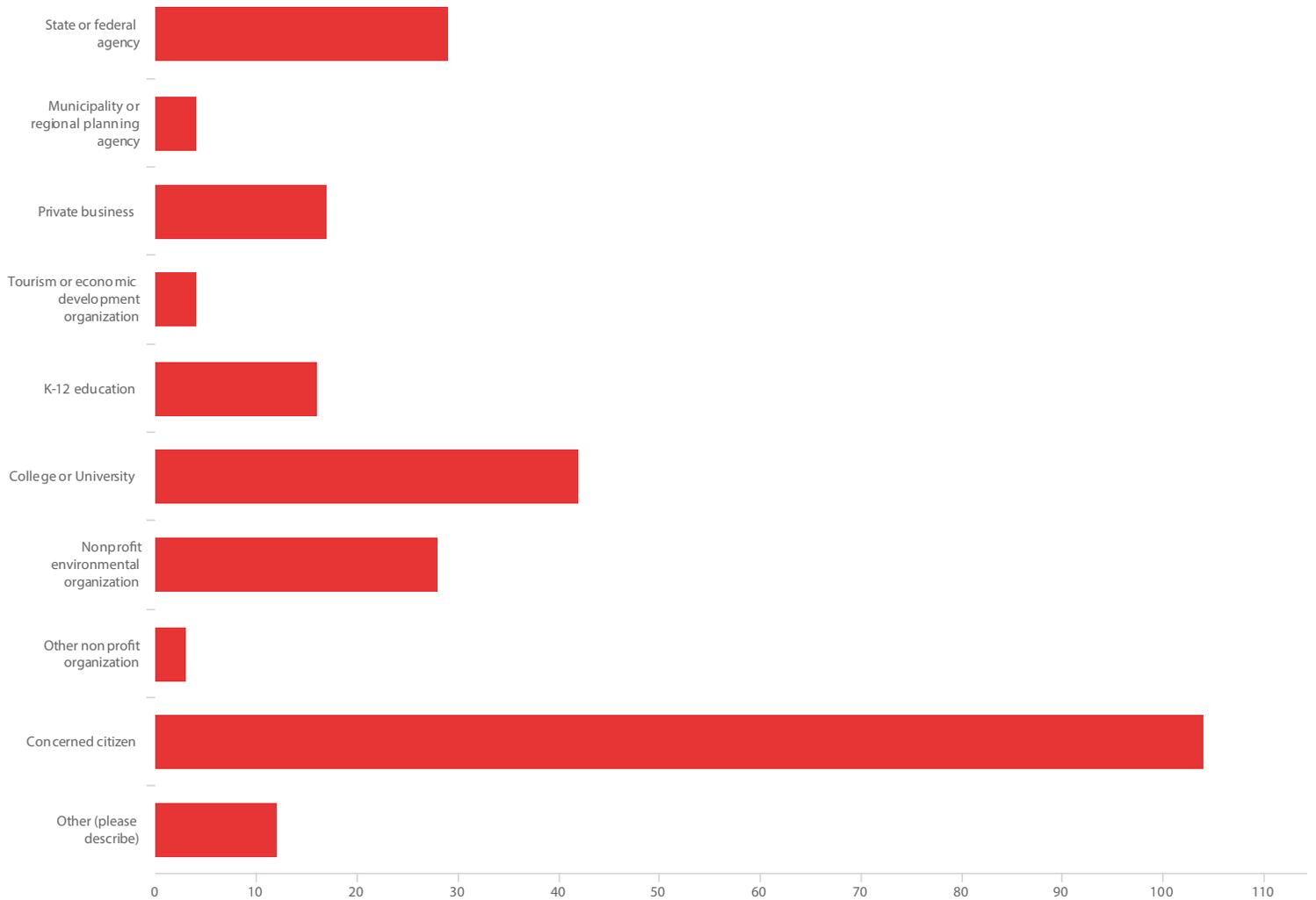
- Number of individuals engaged in protection, enhancement or restoration activities.
4-year target: 100
- Number of new partners. **4-year target: 30**

APPENDIX A: STAKEHOLDER SURVEY RESPONSE SUMMARY

- **319** responses*
 - 51% female; 45% male
 - 71% of over the age of 50
 - 87% White, 3.6% Black/African American, 1.2% Native American/
Alaska Native, 1.2% Hispanic/Latino X
 - Responses from 30 Georgia counties including every coastal county
 - #1 – Chatham
 - #2 – Glynn
 - 6 States (FL, SC, AL, NY, CO, IL)
 - 88% have at least a bachelor's degree

**includes complete/incomplete responses*

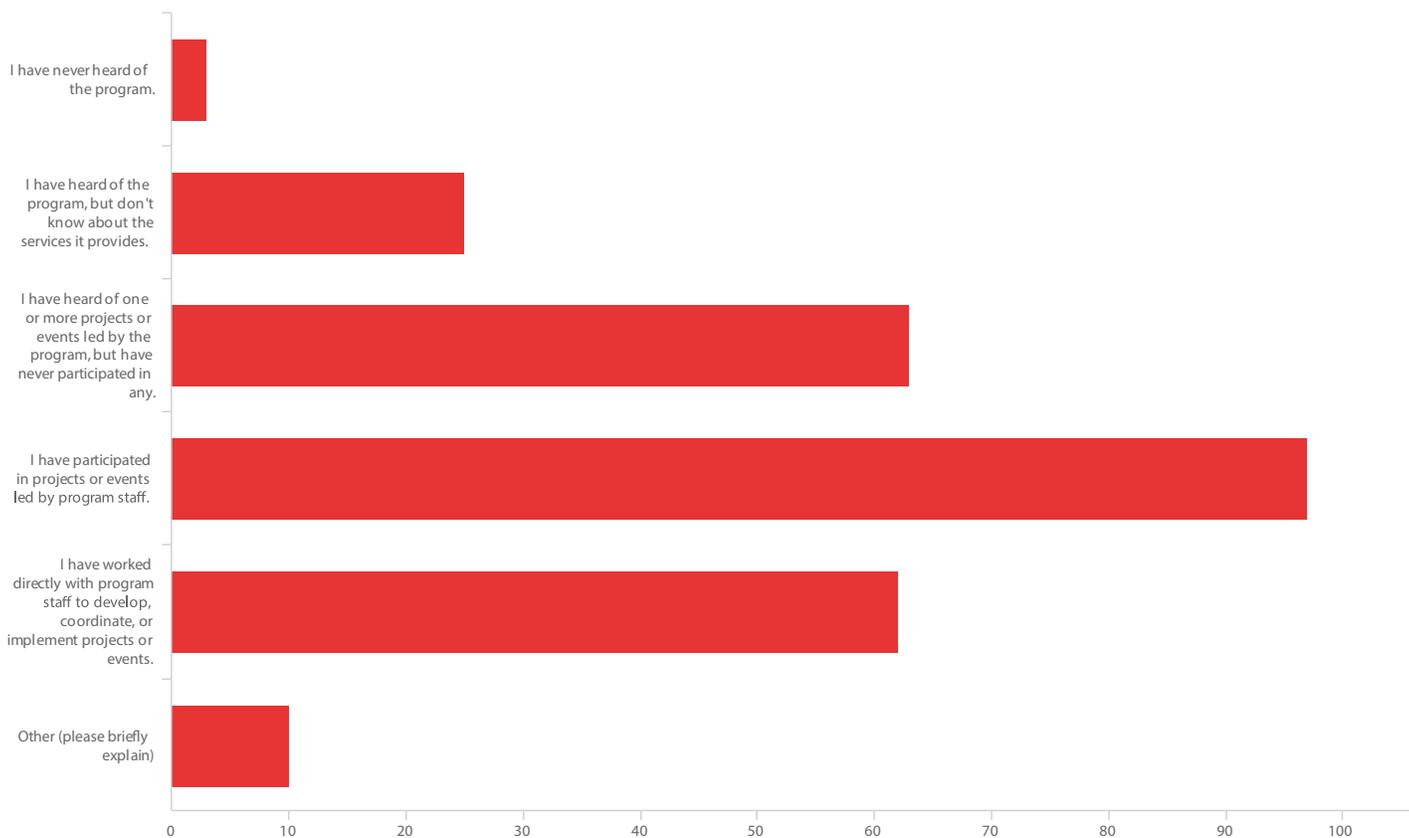
Which of the following descriptions best represents your perspective as a Marine Extension and Georgia Sea Grant stakeholder?



OTHER RESPONDENT CATEGORIES

- UGA Alumni Volunteer
- UGA Aquarium Volunteer
- Private business
- Nonprofit environmental organization
- Marine Education Fellow
- Affordable Housing Developer (nonprofit)
- Retired science teacher
- Property owner of wetlands Aquarium/ Zoo/Discovery Center
- Retired Regent
- Interested citizens

Please select which answer best explains your familiarity with Marine Extension and Georgia Sea Grant.



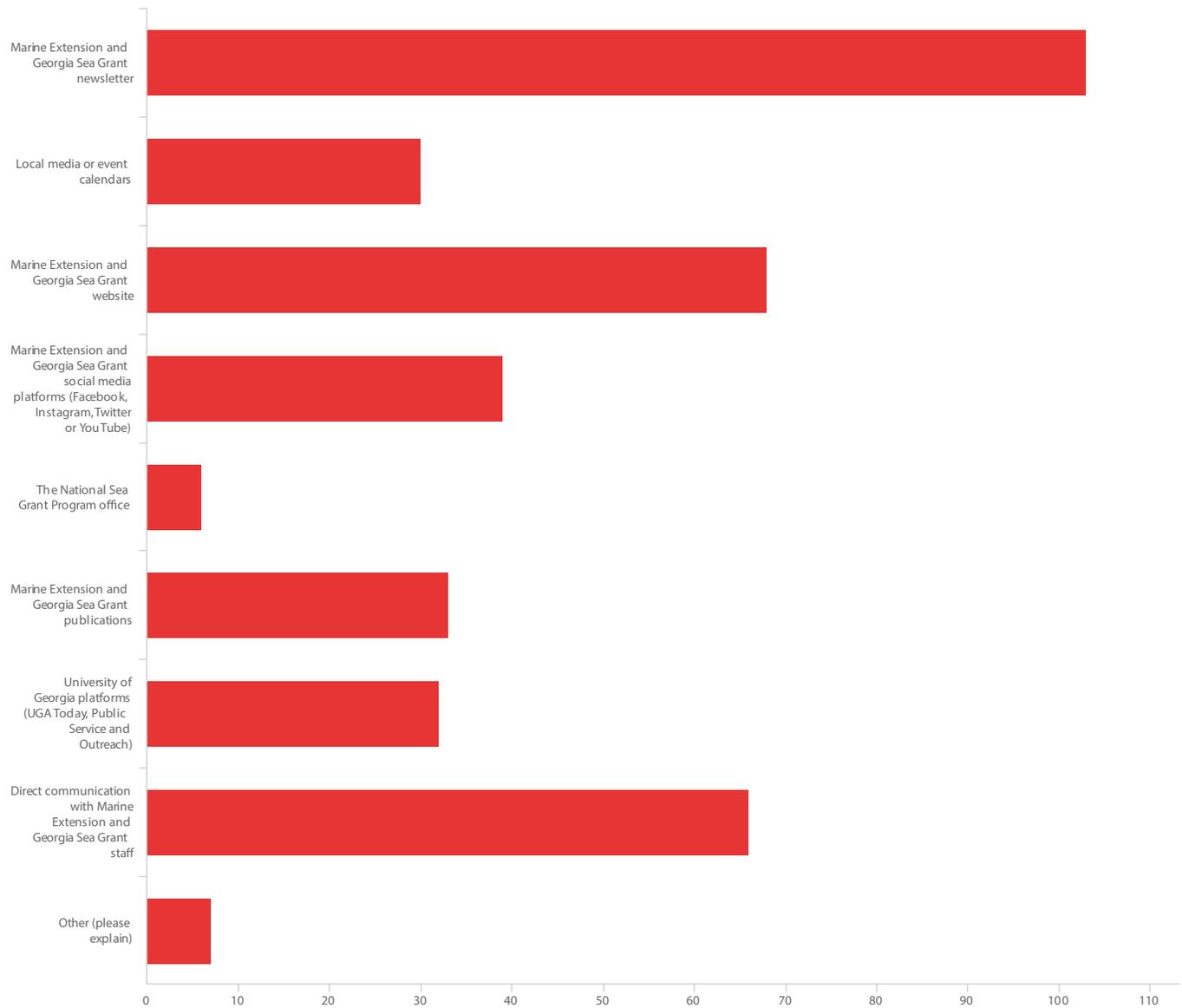
61% of respondents (n=260) “have participated in projects/ events led by program staff or worked directly with program staff to develop, coordinate or implement projects or events.

What do you consider to be the most important issue(s) affecting Georgia's coast?

- 54** Responses about Pollution, pollutants, contaminants, discharge
- 42** Responses about Sea Level Rise
- 42** Responses about Climate Change
- 25** Responses about Land Preservation/Development
- 22** Responses about Fishery Management, Over-fishing, Fishery health
- 20** Responses about Water Quality, Waterway Health
- 11** Responses about Population Growth
- 11** Responses about Erosion
- 8** Responses about Storm Severity/Damage
- 6** Responses about Seafood Industry
(includes aquaculture and wild harvest seafood)
- 6** Responses about Flooding
- 6** Responses about Education
- 5** Responses about Shoreline Protection & Maintenance
- 4** Responses about Saltwater Intrusion
- 4** Responses about Gullah Geechee Land Preservation
- 2** Responses about Legislation

(Some answers touched on more than one subject)

How do you receive information about Marine Extension and Georgia Sea Grant?



OTHER RESPONDENT CATEGORIES

- Social Media (Facebook)
- Email- events
- Through GAME
- I prefer a publication

Are there other communication outlets or products we should consider using to reach more diverse audiences and raise awareness about our research, education and extension projects or events?

OPEN-ENDED RESPONSES:

- ***Interesting and informative articles in local publications throughout the coastal region, naturalist courses at local community centers (advertised in local media outlets), more field opportunities for coastal media, and more citizen scientist programs.*** As I'm out in the community, I'm often stunned at the lack of understanding the average adult resident has about coastal ecology, from tides and marshes to marine life and birds, they THINK they know because they grew up here, but they often don't. Every single week on social media, I see someone post a photo of a fish or a snake or a plant and ask what it is, and there are 50+ wrong answers and maybe one or two that are correct. These aren't school-age kids, these are adults, who live, work, spend money and vote here. We need to educate them so they're sharing correct information with children and newcomers, and so they're not making decisions that negatively impact coastal ecosystems. I STILL hear stories about pelican's becoming blind, alligators jumping into boats, the only good snake is a dead one, we're safe from hurricanes, and more, from otherwise intelligent people. There are 8.1 million people in Georgia, and 6 million of them are over 18. I don't know the exact percentage, but easily the majority of those 6 million adults are NOT attending school where they might learn about coastal ecosystems. I can't stress enough that naturalist programs, preferably geared toward each region's unique environment (coastal, mountains, plains) are absolutely needed to reach those 6 million adults. In understanding something, you're far more likely to care about it, and to protect and conserve it.
- Perhaps join ***different faculty/staff listserv's in other relevant UGA departments in CAES or FCS***
- I think you should ***reach out more to rural coastal communities.*** Maybe build a partnership with the Gullah Geechee Heritage Corridor and other Gullah Geechee organizations so as to be able to expand your outreach to those communities.

- **Update your YouTube information.** I subscribe to everything you have available there. But there's never enough new information. For example watch season 1 of Mike Rose dirty jobs for shrimping. He also highlighted the Darien Georgia jelly ball plant in one of his last seasons. We all want to see new information presented like this. Get your UGA students to create a new "Netflix series" ect... Highlighting the Georgia commercial fisherman. I'll volunteer for the pilot program.
- Consider **seasonal presence at local community events.** For example, having a table at an Earth Day Festival, at a Farmer's Market, or some other event where there would be traffic of people who may not have heard about what you do but have an interest in earth care.
- State parks?
- Savannah Patch , be a regular!
- Perhaps including some of our **aquarium flyers with school programs and community based events** (ie: Trawl2Trash events) in public businesses that advertise community events (ie: downtown coffee shops or Starland Yard) to get the word out about our work, mission, and passion to reach those in our community.
- Listservs Different special interest group listservs, mailing lists, or job boards
- Outreach programs with the 4-H, teacher workshops, summer events mountain to ocean...it begins at the top;)
 - I would love to see outreach efforts in our local community at the Landings, Skidaway Island and at our local schools (although I realize some of the staff is already doing outreach at the local public elementary school.) Sadly, I do not see much outreach in the local private schools in our area.
 - We all get too many emails, so keeping communication succinct with opportunities for a reader to pop out to a more detailed explanation of a topic would be helpful.
- **Using Georgia PBS, Georgia Public Radio, Massachusetts emails**
- Emails...more frequent
- Text message events.
- I have a Sea Grant Fellow on my staff and a MarEx staff on my advisory board.
- Information sent directly to school teachers.
- Television ads

Mean Sustainable Fisheries and Aquaculture Issue Ranking

RANK	ISSUE	MEAN RANK
1	Fish and aquatic habitat protection, enhancement and/or restoration	3.59
2	Sustainable seafood harvesting and processing practices	4.04
3	Shellfish aquaculture (oysters, clams, mussels)	4.20
4	Climate impacts on marine fisheries and aquaculture	4.69
5	Sustainable saltwater fishing practices	4.84
6	Commercial seafood/fishing workforce development	5.79
7	Non-shellfish aquaculture (including aquaponics)	6.03
8	Seafood product development and marketing	6.68
9	Seafood tourism	7.07
10	Seafood safety training	7.16

Other Sustainable Fisheries and Aquaculture Issues Identified

- *Seafood distribution efforts to inland markets*
- *Seafood co-op funding/grants*
- *Connecting County Extension offices to coastal studies*
- *Coastal estuarine health and productivity*
- *Improved water quality and flow in sounds*
- *Shrimp trawl bycatch*
- *Living shorelines to regenerate shellfish and protect land from erosion*
- *Sustainable Saltwater Farming Practices*
- *Strengthened linkages between artisan fishing and sustainable practices; vertical integration into fair trade markets*
- *Boat strikes of sea turtles and manatees.*
- *Light/noise pollution*
- *Use of lead shot and lead weights*
- *Education and stewardship*
- *Runoff*
- *Camps for kids and or camps for adult and kids at the same time*

Mean **Healthy Coastal Ecosystems** Issue Ranking

RANK	ISSUE	MEAN RANK
1	Coastal wetland monitoring	4.70
2	Coastal water quality monitoring	4.74
3	Wildlife conservation and management	4.90
4	Living shorelines	4.98
5	Water and wetland stewardship education	5.37
6	Coastal resilient landscapes	5.42
7	Stormwater green infrastructure	5.91
8	Stormwater maintenance	5.95
9	Native plant sourcing and propagation	6.25
10	Marine debris research and extension	6.39

Other Healthy Coastal Ecosystems Issues Identified

- *More research*
- *Culture*
- *Updating usable wetlands map for future commercial use versus wetlands that should not be developed.*
- *Projects with direct impact and interaction with the individuals and families living in the watershed affecting the coast.*
- *Concrete, small changes they can make to have a positive impact on the quality of the coastal ecosystem. For example, capturing rainwater or slowing it so that it can enter the soil closer to where it falls and lessen the runoff that pollutes.*
- *Disease influences on communities and ecosystems*
- *Migration of southern (e.g., FL) native species into GA coastal marine & estuarine habitats due to climate change, and the effects on native species, habitats & ecosystems (& processes)*
- *Must use better, more eco friendly drainfields for containment before it runs into streams, inlets, marshland, river, etc. Nonpoint pollutants are hard to control individually, so collection points with eco friendly and even curb appeal solutions for city to coast.*

- The amount of permeable surfaces used in new construction in the watersheds of rivers of the Georgia coastline.
- Regional resilience planning
- All areas above are important.
- Tri-state coastal conservation initiatives with Florida and South Carolina emphasizing shared coastal fisheries and their wildlife

Mean Resilient Communities and Economies Issue Ranking

RANK	ISSUE	MEAN RANK
1	Climate change (sea level rise, severe heat, etc.)	3.84
2	Erosion and shoreline change	4.04
3	Extreme weather events (hurricanes, tornadoes, etc.)	4.77
4	Economic and financial impacts of climate change and extreme weather events	4.84
5	Environmental justice of pollution and climate change	5.44
6	Rural community resilience	5.47
7	Environmental law and policy assistance to local governments	5.68
8	Small business and private sector resilience	6.15
9	Flood insurance and the Community Rating System	6.96
10	Climate resilience in defense communities for military readiness	7.32

Other Resilient Communities and Economies Issues Identified

- Strong and clear link needs to be established between HCE and RCE – they shouldn't be considered mutually exclusive.
- A community with healthy ecosystems can be resilient and economically healthy, and vice versa.
- Cultural preservation

- More support for communities that are experiencing these events. more progression on being able to get assistance after the affects of these storms. more done to help educate the general public that live in the communities on environmental law and policy.
- With the possibility of a Carrington event in our near future accessibility to any and all fishing grounds should be reevaluated.
- Pros & cons of the three approaches for addressing sea level rise (e.g., protect, accommodate, retreat), and analyses as to how those vary depending on geography, land us/land cover, socio-economic circumstances, and history of different coastal communities
- As a wetland owner of 20 yrs and a life time islander, I know the changes that have occurred over the decades. Climate change is seen through erosion and shifting of land which is done by wind, water, fire and other climatic changes of intensity. Again, Georgia needs to protect our wetlands. Education.
- Hard to answer as some above are the problems and some are the tools. i'd put the military at the end because DOD has their own money.
- We have already lost this battle...

Mean Environmental Literacy and Workforce Development Issue Ranking

RANK	ISSUE	MEAN RANK
1	Habitat protection	3.31
2	Ocean and coastal stewardship	3.68
3	Human impacts on coastal systems	3.80
4	Coastal ecology	3.85
5	Marine science	4.42
6	Coastal resilience	4.76
7	Fisheries management	5.19
8	Coastal art and culture	6.55

Other Environmental Literacy and Workforce Development Issues Identified

- Paid internships for underrepresented groups in STEM, Marine Science, Management and Policy.
- There are extensive programs in place for students at all education levels and I fully support the importance of these programs. However, reaching those in the community who are no longer involved in active education (Ages 25+, working adults) is sadly lacking, and that's the majority of the population. Naturalist programs for adults are critical to get communities to actively engage in conserving and protecting our coast.

- Pick a coastal high school to begin a oyster spat and oyster germ career tech program in conjunction with GA Marine Oyster Restoration Program. There is a model to follow at Alma Bryant High School In Irvington., Al. Instagram Hurricane oysters
- Programs in other languages – bilingual and/or ASL supported programs; Intersection of types of accessibility– based programs, which could fit into any of the above mentioned but it is necessary to focus on accessibility at some point
- I loved the science bowl for all ages!!!! Fantastic and engaging way to have great minds come together!
- High school lab classes
- All the ELWD could be ranked 1

Mean Program Type Ranking

RANK	PROGRAM TYPE	MEAN RANK
1	Environmental /experiential education	4.06
2	STEM education	4.96
3	Internships for college students	5.02
4	Community science	5.07
5	Internships for high school students	5.16
6	Educator workshops	5.43
7	Youth leadership	5.78
8	Graduate student development	6.21
9	Professional development courses	6.41
10	Pre professional fellowships for college graduates	6.45

Additional Survey Feedback:

- *Include info about protecting marine mammals, especially Bottlenose dolphins*
- *Apologies for beating this poor horse, but both South Carolina and Florida have well-developed naturalist programs, while Georgia, with its unique and diverse environment, does not. I would think this should be a high priority. I also wanted to add that although I've yet been unable to personally delve into the CARE program, I'm a big fan and promote it at every opportunity. I would do the same with any naturalist programs developed as well and would assist in any way possible.*
- *Just further ways that other, different UGA departments and stakeholders can interact and collaborate on various projects and research efforts.*
- *A community platform process in which there are listening sessions in rural coastal communities to directly listen to the many issues they are facing. This may be a way to help UGA Marine Extension and Georgia Sea Grant learn more about areas in which they can support communities through the Sea Grant fellow program.*
- ***More adult education.** A marine science oriented Master Naturalist program would be very popular. I (and many others I know) are considering traveling to Florida to take part in their Naturalist programs since they are not offered much in GA (especially in Coastal counties).*
- *If part of your mission is to educate citizens to be wise stewards of the coastal environment, **make it really easy and really simple for the citizens to know what you are doing and what they can do too.** For example, the News from the Coast email contains a link to a student blog post NonTraditional Solutions to Pollution that mentions workshops for people to create their own rain barrels; when I search your web site for rain barrel workshops, there is a reference to the Green Living Series in 2019. That was three years ago. What are you doing now to educate citizens? Do you have funds allocated for regular stewardship education opportunities for individuals and families?*
- *Connecting with more community partners, especially ones in inland Georgia in order to spread the message and awareness. Having at least one focus on intersectionality and accessibility integrated into programs, planning, laws, and events. It can be necessary in order to broaden your audience and be useful to all aspects of the communities you serve*
- *Staff has been outstanding educators.*
- *Camps for families*

- *Evening programs have been great.*
- *Keep up the good work! And thank you! Thank you for your work*
- *Our shellfish public picking areas are dismal. Please put some thought into expanding these areas and developing them into harvestable, sustainable areas.*
- *More on climate change.*
- *Developing inland partnerships with like-minded organizations.*
- *I am wary of over reach of local, state and federal agencies.*
- ***Concentrate on providing educational and constructive opportunities for individuals to actively participate in conserving Georgia's coastal resources***
- *We have a 2nd home in Savannah and would like to be more involved. Bring all organizations together working in the same direction and same purposes on a timeline.*
- *I do NOT support aquaculture if it restricts Georgians access to any waterways.*
- *I look forward to a time when I am in the area more regularly and can seek volunteer opportunities.*
- *Oyster shoreline restoration- clean water projects & initiatives with city & county, CCA, NWF, GDNR, Georgia Power, IP, Savannah Port Authorities,Invite any and all to biannual meetings to give an overview and have biologist on hand to present the status of the areas mentioned above and other initiatives in action. As leaders make growth decisions GA Sea Grant will be in the back of their minds, they all love oysters, fish, crab and the Savannah way of life and would hate to lose that by not looking ahead while planning future infrastructure.*
- *I can't say enough about the quality of your staff!*
- *Outreach to decision makers is the most difficult end-stage problem. In Georgia, it seems that the freshwater outreach is somewhat better than in coastal waters, thanks to DNR, Corps of Engineers and nonprofit work. Nonprofits on the coast are weak technically and politically and have poor interaction with university system community outreach. UGA extension provides and outstanding but underused resource for understanding and affecting policy and could lead the development of stronger coastal organizations as private partners.*

- *Some of your citizen science, experiential learning, and educational opportunities need to take place on the weekends since those who work during the week are unable to participate and support your efforts.*
- *I did not see any mention of birds in this entire survey. Do you understand how important the Georgia barrier islands and immediate coast are to birds? The mouth of the Altamaha is the most significant bird site in Georgia, and one of the most significant in the eastern US. Jekyll Island has a bird banding station with nearly 40 years of data. The wading bird rookery at Harris Neck is extremely important.*
- *We need to push the oyster industry. We have great potential that is not being realized.*
- *Providing opportunities and support to localized efforts / smaller npo's*
- *I am a current STEM educator at an elementary school. I would love to begin working together with Marine Extension and Georgia Sea Grant to create interesting field trips, guest speakers, etc. I love the idea of more citizen science and it would be interesting to have a marine scientist speak with my class about how the cropland in our area impacts the marine areas downstream.*
- *Offer more adult oriented teachings, a lot of interesting sessions are geared to children*



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