Texas Sea Grant College Program
Strategic Plan 2024-2027

Sea Grant
Texas
AT TEXAS A&M UNIVERSITY

Introduction

Texas Sea Grant is a unique partnership that unites the resources of the federal government, the State of Texas, and universities across the state to create knowledge, tools, products and services that help coastal communities, marine industries, and the people of Texas.

Texas Sea Grant is part of NOAA's National Sea Grant College Program, a network of 34 university-based programs in coastal and Great Lakes states and territories. Texas Sea Grant is headquartered at Texas A&M University.

This plan aligns with the National Sea Grant College Program Strategic Plan 2024-2027 and supports the National Sea Grant College Program's core values, cross-cutting principles, focus areas, goals and actions. The 2024-2027 Texas Sea Grant College Program Strategic Plan is unique to the needs of Texas and was developed in collaboration with the Texas Sea Grant Advisory Committee, Texas Sea Grant staff, Texas coastal stakeholders and the general public.

South Padre Island shoreline. Photo by Texas Sea Grant, Sara Carney.

Texas coastal shoreline. Photo by Seth Patterson.

Mission

Texas Sea Grant's mission is to improve the understanding, wise use and stewardship of Texas coastal and ocean resources.

Vision

Texas Sea Grant envisions a future where people live, work and play along the Texas Gulf Coast in harmony with the natural resources that attract and sustain them, and where we use our natural resources in ways that capture the economic, environmental and cultural benefits they offer, while preserving their quality and abundance for future generations.

Core Values

Texas Sea Grant's core values reflect those of Texas A&M University—Respect, Excellence, Leadership, Loyalty, Integrity and Selfless Service—in addtion to those of the National Sea Grant College Program:

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

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

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

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

Non-Advocacy: Maintaining a commitment to objective research and programming that avoids bias and advocacy in the development and delivery of information, tools and services

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

Extension Agent John O'Connell teaches students about shrimp. Photo by Texas Sea Grant, Corley-Ann Parker.

Texas Sea Grant staff help a shrimper check their nets' turtle excluder devices. Photo by Texas Sea Grant, Corley-Ann Parker

Cross-Cutting Principles

These concepts provide a common foundation for our four focus areas and the work we conduct. Recognizing these cross-cutting principles enhances Texas Sea Grant's capabilities in order to meet future state needs. In the course of implementing the 2024-2027 Strategic Plan, Texas 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 Texas Sea Grant to pursue its vision and mission with, and for, all audiences. We will actively create mechanisms to allow all people to participate in program activities. Bringing a range of perspectives, values and tools together to find solutions that are more innovative, creative, inclusive and responsive will help us be successful in tackling problems facing coastal communities.

Focus Areas, Goals and Actions

A stingray on the ocean floor. Photo by Seth Patterson.

Focus Area: STEM Literacy and Workforce Development

GOAL 1: A diverse, STEM-literate public participates in formal and non-formal learning opportunities.

Action 1.1: Develop and implement formal and non-formal educational resources and opportunities to explore multiple ways of learning and knowing in the areas of science, technology, engineering and mathematics.

Action 1.2: Strengthen the ability of individuals, organizations, businesses and communities to make informed and responsible decisions about Texas' coastal and natural resources by providing opportunities to advance their knowledge, skills and abilities.

GOAL 2: A diverse, skilled and STEM-literate workforce is engaged and able to build prosperous lives and livelihoods in a changing world through traditional and innovative careers.

Action 2.1: Provide opportunities for students at all levels (P-12, undergraduate, graduate, post-graduate, technical and vocational) to gain knowledge and experience addressing issues that are important to the Texas coast and its watersheds.

Extension Agent Nicole Pilson at a wetlands education event. Photo by Texas Sea Grant, Sara Carney.

Crab trap clean-ups near Port O'Connor, Texas. Photo by Texas Sea Grant, Sara Carney.

Focus Area: Healthy Coastal Ecosystems

GOAL 3: Texas coastal habitats, ecosystems and the services they provide are protected, enhanced and/or restored.

Action 3.1: Develop, improve and share knowledge, decision-support tools, and technologies, and implement programs to protect, enhance and restore habitats and ecosystems.

GOAL 4: Natural resources in Texas are sustained by applying science-driven solutions, tools and services to support healthy coastal ecosystems.

Action 4.1: Support a science- and management-driven framework that integrates research and monitoring with community engagement, and traditional and local knowledge, to provide a scientific basis for informed decision-making.

Focus Area: Sustainable Fisheries and Aquaculture

GOAL 5: Texas fisheries, aquaculture, and other coastal and freshwater living resources supply food, jobs and economic and cultural benefits.

Action 5.1: Promote and support harvesting, culturing, and processing techniques that lead to safe, sustainable, high-quality food as well as economic, social and ecosystem benefits.

Action 5.2: Support development of a trained and diverse workforce and enhance technology transfer in a manner that recognizes a variety of methodologies and approaches, including those based on traditional and local knowledge.

GOAL 6: Texas natural resources are sustainably managed to support coastal communities and working waterfronts, including commercial, for-hire, recreational, and subsistence fisheries and aquaculture.

Action 6.1: Provide the best available science, services and tools to resource managers; the fishing, aquaculture and seafood communities and consumers.

Shrimpers processing Texas Gulf shrimp. Photo by Seth Patterson.

Crab boat in Matagorda Bay. Photo by Texas Sea Grant, Corley-Ann Parker.

Focus Area: Resilient Communities and Economies

GOAL 7: Texas coastal communities have the capability and resources to prepare for, adapt to and recover from extreme and chronic weather and coastal hazards, resilience to climate impacts, economic disruptions and other threats.

Action 7.1: Improve and expand exchanges of knowledge to better identify the diverse needs of Texas communities and to increase the public's understanding of changing conditions and related impacts.

Action 7.2: Engage with Texas communities to advance collaborative comprehensive planning, actionable science and adaptive management strategies.

Action 7.3: Engage with Texas communities to share knowledge, tools, technologies and services to adapt and grow resilient coastal economies and pursue a sustainable blue economy.

GOAL 8: Water resources in Texas are sustained, enhanced, and protected to meet existing and emerging needs of the communities and economies that depend on them.

Action 8.1: Use engagement and information exchange to advance the understanding of how actions impact water quality, quantity and availability.

Action 8.2: Collaborate with diverse partners and stakeholders in Texas coastal communities, especially the most vulnerable and/or low capacity, to advance plans and management practices for protecting and managing water resources.

Performance Measures and Metrics

Oyster shells on Magnolia Beach. Photo by Kimber Anderson.

Performance Measures by Focus Area

Healthy Coastal Ecosystems

- 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

A green sea turtle off the Texas coast. Photo by Texas Sea Grant, Pamela Plotkin.

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

Industry members learning about oyster aquaculture. Photo by Texas Sea Grant, Sara Carney.

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

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

Children kayaking at an educational workshop. Photo by Texas Sea Grant, RJ Shelly.

STEM Literacy and Workforce Development

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

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

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

Cross Cutting Focus Area Measures

- Number of Sea Grant 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 sustained)

Cross Cutting Performance Metrics

- Sea Grant Staffing: Number of individuals and full-time equivalents (FTEs) devoted to Sea Grant
- Core Funding Proposals: Number and origination of core funding pre-and full proposal
- Number of volunteer hours
- Number of postsecondary students and degrees financially supported by Sea Grant in higher education programs (undergraduate, graduate)
- Number of P-12 students who participated in Sea Grant-supported formal education programs
- Number of P-12 students reached through Sea Grant-trained educators
- Number of educators who participated in Sea Grant-supported professional development programs
- Number of 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 peer-reviewed publications produced by Sea Grant
- Visitor attendance: Number of people who visit museums, aquariums, and other informal education institutions hosting NOAA-supported exhibits or programs
- Environmental actions: Number of people participating in environmental actions through NOAA education programs

Strategic Planning Process

This strategic plan includes feedback through engagement opportunities including a Texas Sea Grant staff retreat, Texas Sea Grant Advisory Committee meeting and three community surveys targeting the public and specific audiences.

The staff retreat in January 2022 focused on identifying trends that Texas Sea Grant could address within short-, medium-, and long-term timescales; performing a strengths, weaknesses, opportunities and threats (SWOT) analysis of issues that shape the future of Texas Sea Grant; and identifying Texas coastal community needs and program priorities that address those needs. Lastly, staff provided input on focus areas, goals and objectives.

The Texas Sea Grant Advisory Committee meeting held May 2022 solicited input from the 11-member committee. The Committee identified trends; performed a SWOT; identified Texas coastal community needs and program priorities that address those needs; and provided input on focus areas, goals and objectives to align the strategic plan with identified community needs.

Texas Sea Grant launched three open-ended, anonymous online surveys to seek input from diverse stakeholders to identify the most important issues and challenges facing the Texas coast—one for the public, one specific to fisheries and aquaculture and one specific to research needs. Surveys were distributed broadly and resulted in 59 responses.

Painting a blue marlin at the Texas International Fishing Tournament (TIFT). Photo by Seth Patterson.

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