



2023-2024 ANNUAL REPORT



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Texas Sea Grant (TXSG) supports Texas’ natural resources, economy, and communities—from the coast to inland waterways. Our work is organized into four focus areas that reflect how we connect science to solutions and build a more resilient future for Texans.

These icons appear throughout this annual report to highlight the primary focus area of each project. While one focus area may lead, many initiatives span multiple disciplines and connect across areas.



Sustainable Fisheries and Aquaculture

Ensures thriving fisheries and responsible aquaculture through research, and direct support for coastal producers, fishing communities and the seafood industry to promote a safe, sustainable seafood supply.



Healthy Coastal Ecosystems

Supports science and community partnerships that protect, restore, and enhance the resilience of Texas’ coastal habitats and wildlife.



Resilient Communities and Economies

Supports the development of innovative policies, management strategies, and community-based solutions that strengthen resilience and increase preparedness in the face of coastal hazards.



Environmental Literacy and Workforce Development

Invests in education, training, and hands-on opportunities that empower Texans of all ages to become informed coastal stewards and future leaders.

Letter from the Director

As Texas Sea Grant continues its decades-long mission of science and stewardship serving the Texas Coast, this 2024 Annual Report is, above all, a testament to our Texas coastal communities and partners. Our work to bridge the gap between scientific knowledge and meaningful action is guided by your expertise, your needs, and your vision for a resilient Texas coast. Our success is not defined in a vacuum; it is driven by your dreams for vibrant coastal economies and healthy ecosystems. As you explore these pages, I hope you see your own influence reflected in the science, technology, and outreach we support.

Since 1971, when Texas A&M University was designated as one of the nation’s first Sea Grant institutions, we have been committed to serving the Texas coast through transformative science and engagement. Today, as we face a rapidly evolving landscape of emerging coastal issues, that mission is more critical than ever. Texas Sea Grant’s unique partnership—linking the federal government (NOAA), the State of Texas, and our premier Texas universities with local communities—allows us to create the impactful tools and services that Texans rely on.

Throughout our history, Texas Sea Grant has funded university researchers to tackle the most pressing challenges facing our shores, from mitigating environmental hazards like droughts, floods, and hurricanes to advancing ecological health through habitat restoration and wildlife sustainability. By strengthening coastal economies via fisheries and aquaculture while simultaneously addressing emerging concerns such as marine debris and energy transitions, our dedicated research, extension, and education programs translate complex data into actionable strategies that serve both coastal residents and marine industries alike.

Thank you for your steadfast support, collaboration and trust in Texas Sea Grant. We view the challenges of tomorrow with optimism, knowing that together, we will continue to create opportunities that better the lives of all Texans.



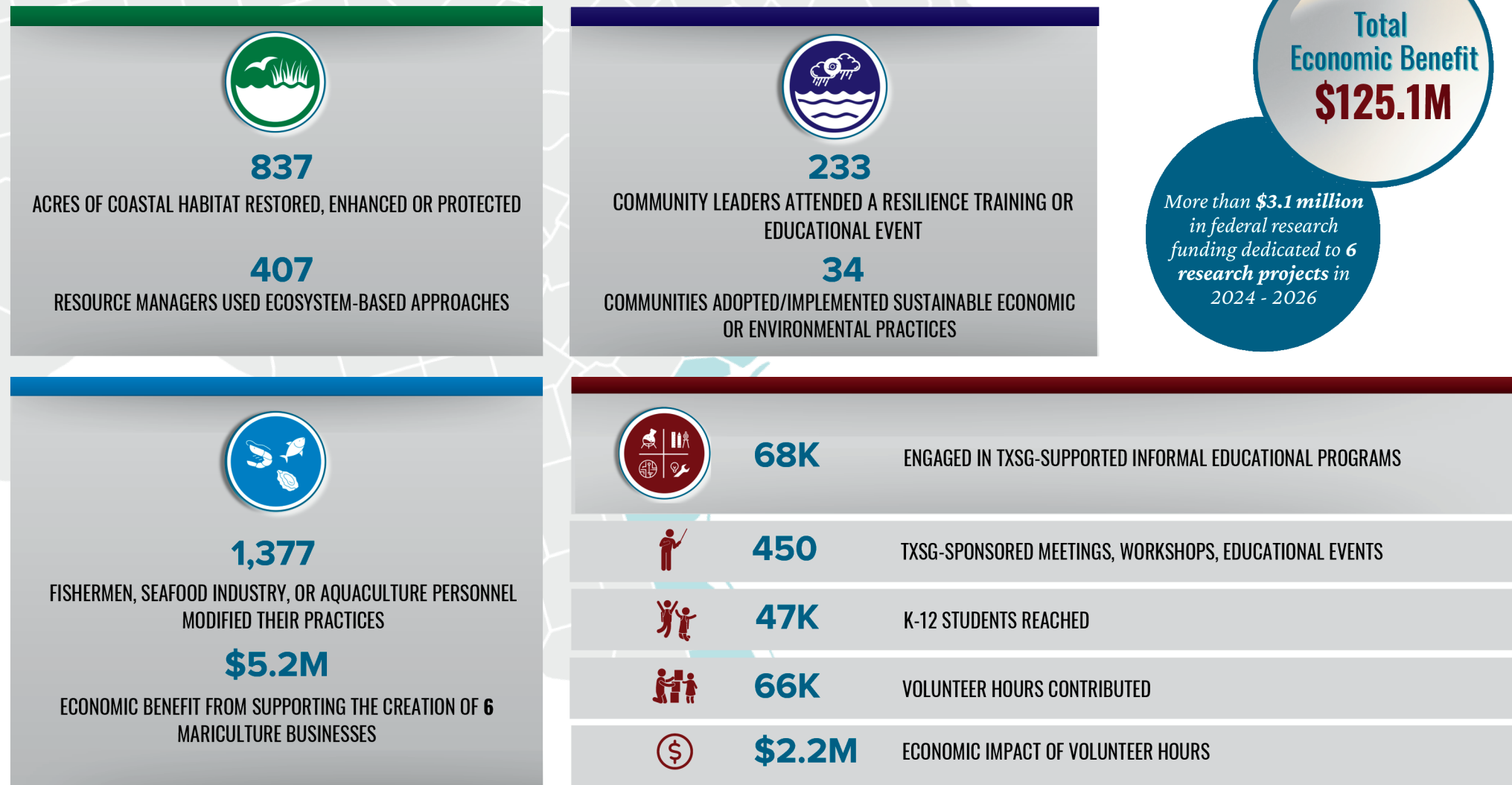
Laura Picariello
Director, Texas Sea Grant College Program



2024 Impact At-A-Glance

Who We Are

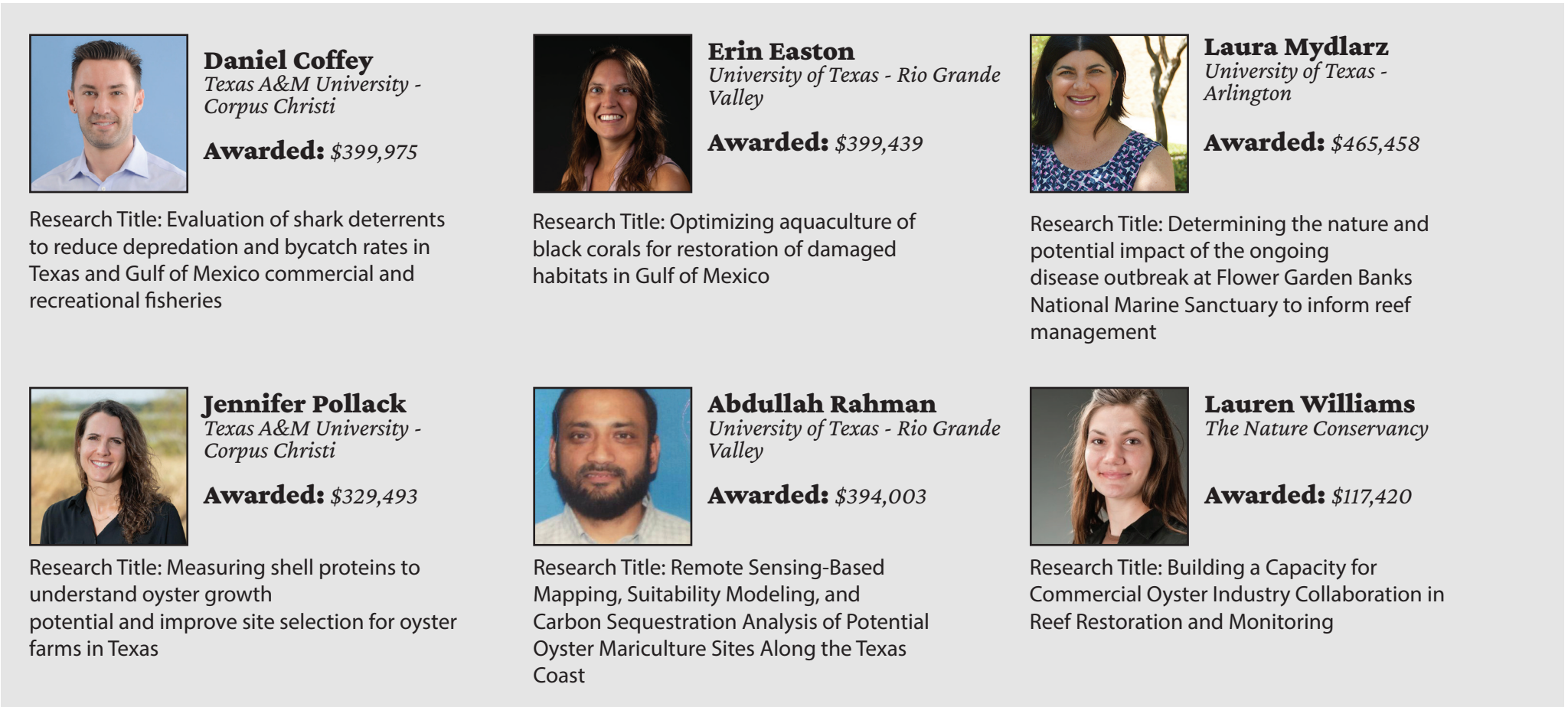
Texas Sea Grant delivers science-based solutions that help coastal communities, industries, and ecosystems thrive. Since 1970, we’ve connected the best available research with the people who depend on a healthy, productive Texas coast.



Research Funding to Support the Texas Coast

Through partnerships with the State of Texas and the National Oceanic and Atmospheric Administration, Texas Sea Grant (TXSG) runs a biennial competitive research program that engages top scientists across the state. Projects are selected through a rigorous peer-review process evaluating their potential societal impact and integration of research and extension.

TXSG awarded six research grants totaling \$2.1 million to support researchers at universities statewide, advancing coastal and marine ecosystems, communities, and economies through two-year research projects from February 2024-January 2026.



Research Funding to Support the Texas Coast



Protecting Coral Reefs from Disease

Roughly 100 miles off the Texas coast, Flower Garden Banks National Marine Sanctuary (FGBNMS) protects more than 160 square miles of pristine coral reef, supporting diverse marine life and vital ecological and economic benefits. However, the sanctuary has increasingly been threatened by disease outbreaks in the Gulf and Caribbean.

To help address these risks, Dr. Laura Mydlarz, University of Texas at Arlington researcher, submitted a proposal to Texas Sea Grant’s Biennial Competition titled “Determining the Nature and Potential Impact of the Ongoing Disease Outbreak at Flower Garden Banks National Marine Sanctuary to Inform Reef Management.”

Funded by Texas Sea Grant (TXSG) in 2024, The project’s objectives are three-pronged: hydrodynamic modeling; determining the transmissibility and susceptibility of affected corals; and capturing photomosaics – more than 11,000 high-resolution images – to identify potential disease reservoirs.

The project’s objectives are threefold: to conduct hydrodynamic modeling, determine the transmissibility and susceptibility of affected corals, and capture photomosaics—comprising more than 11,000 high-resolution images—to identify potential disease reservoirs.

Modeling and data analysis are ongoing, and findings will be used to inform management strategies, educate conservation groups and guide future disease response planning.

TXSG also joined the FGBNMS Stakeholder Advisory Council in January 2024, providing guidance and connecting researchers with key stakeholders. Through this role, TXSG has helped ensure research findings are applied to protect reef health, sustain biodiversity and support Gulf fisheries and coastal communities, reflecting the program’s commitment to strategic partnerships that advance reef conservation across the region.



School of reef fish gathered around coral at Flower Garden Banks.



Members of FGBNMS Advisory Committee meeting at NOAA Galveston Office.

PROJECTED IMPACT

Advancing insight into the diseases affecting Flower Garden Banks through modeling, tools and data will help scientists better assess risks and guide future planning decisions.

STRATEGIC GOAL SUPPORTED

Goal 3: Texas coastal habitats, ecosystems and the services they provide are protected, enhanced and/or restored. (Source: TXSG 2024-2027 Strategic Plan)

Research Funding to Support the Texas Coast



Assessing the Role of Offshore Rigs in Gulf Recreational Fisheries

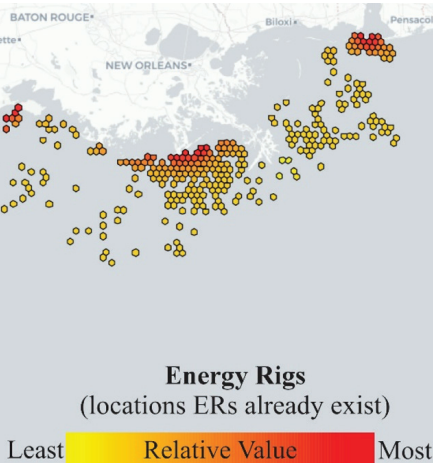
Decommissioned offshore oil and gas platforms, though not traditionally in service, still play an important role as artificial reefs for Gulf species and supporting recreational fishing.

Over the past two decades, the number of offshore rigs in the Gulf has fallen dramatically. To understand how this decline affects fish populations and recreational fishing, Dr. Richard Woodward of Texas A&M University, in partnership with Texas Sea Grant (TXSG), launched a collaborative study supported by over \$795,000 from the National Sea Grant College Program and the Bureau of Safety and Environmental Enforcement.

The project brings together researchers from Texas A&M and LGL Ecological Research Services, combining ecological and economic modeling with angler surveys and location-based data. Field sampling at 58 platforms from Texas to Alabama helped identify factors influencing the abundance of greater amberjack and red snapper, providing insight into where rig removal or placement would have the greatest ecological impact.

The team also examined recreational fishing patterns using passively gathered smartphone data, confirming that oil and gas platforms are among the most valued fishing sites in the Gulf. These findings, aligned with survey data on anglers’ location preferences, provide a clearer picture of the economic and recreational importance of offshore structures.

Together, the research will inform decisions on whether decommissioned platforms should be fully removed or converted into artificial reefs, supporting management strategies that balance ecological health with recreational and economic value.



The figure identifies the locations of rigs that are most valuable based on fish populations and recorded popularity among recreational anglers.

PROJECTED IMPACT

Identifying popular recreational offshore fishing locations and studying species behavior at these sites will inform decision-making related to sustaining these structures.

STRATEGIC GOAL SUPPORTED

Goal 5: Texas fisheries, aquaculture, and other coastal and freshwater living resources supply food, jobs, and economic and cultural benefits. (Source: TXSG 2024-2027 Strategic Plan)

Resources & Publications:

- Ahmadiani, Mona, and Richard T. Woodward. 2025. “Fishing for Anglers in a Sea of Data: Using Mobility Data to Identify and Track Marine Recreational Fishing.” Fish and Fisheries. forthcoming. <https://doi.org/10.1111/faf.70033>.
- Ahmadiani, Mona, and Richard T Woodward. Forthcoming. “Valuing Offshore Habitat to Recreational Anglers Using Cellphone Location Data.” Land Economics.
- Fujiwara, Masami, R. Taylor Beyea, and Nathan F. Putman. 2024. “Association of Reef Fish with Oil and Gas Platforms in the Northern Gulf of Mexico.” Aquaculture, Fish and Fisheries. 4 (4): e186. <https://doi.org/10.1002/aff2.186>. Southern Regional Climate Center (SRCC); Pocacito; Armand Bayou Nature Center; Consulate General of the Federal Republic of Germany (Houston).

Sustainable Seafood



Seafood Education for All

- 1,377 ADOPTED SUSTAINABLE PRACTICES
- 3,400 IMPACTED THROUGH NON-FORMAL EDUCATION

Texas seafood is a living legacy, but many consumers do not know how it’s produced or whether they can trust the origin of what’s on their plate. For more than 50 years, Texas Sea Grant (TXSG) has worked to build that trust by connecting coastal communities, commercial and recreational fishers, aquaculture producers and seafood businesses with the knowledge and resources needed to support a sustainable Gulf seafood industry.

In 2023–2024, flagship programs such as the Texas Seafood Trail—a statewide interactive map of Gulf seafood restaurants, markets, farmers, suppliers and advisors—remained active, and the Sustainable Fisheries and Aquaculture team led and distributed education and resources that helped the public make informed seafood decisions.

Through a variety of initiatives, TXSG’s fisheries and aquaculture team supported 1,377 participants in adopting sustainable practices through technical assistance and training, while engaging an additional 3,400 individuals through informal outreach events. Engagement opportunities included community festivals such as Earth Day Bay Day and Dive Into the Gulf, recreational fishing tournaments, youth camps like Coastal Brigade and Camp Wild, and presentations focused on marine debris, sustainable fishing, and aquaculture practices.

These efforts helped Texans understand the people, practices and ecosystems behind Gulf seafood, encouraged tangible behavior changes, and promoted more sustainable choices.

By bringing seafood and sustainable fisheries and aquaculture education to accessible settings, TXSG ensures that Texas seafood remains a resilient and thriving part of the state’s culture and economy.



Assistant Fisheries Program Director, Alexis Sabine, interacting with public at table during Earth Day Bay Day.

PROJECT IMPACT

Informed consumer and fishing choices strengthened the long-term sustainability and resilience of Texas’ seafood industry.

STRATEGIC GOAL SUPPORTED

Goal 5: Texas fisheries, aquaculture, and other coastal and freshwater living resources supply food, jobs and economic and cultural benefits. (Source: TXSG 2024-2027 Strategic Plan)

Sustainable Seafood



Sustainable Gulf Shrimp on a Global Platform

- \$100 MILLION IN ESTIMATED ECONOMIC BENEFIT
- 3,000+ GULF VESSELS SUPPORTED THROUGH SHRIMP MARKET ACCESS
- FISHERY CERTIFIED IN ALL 5 GULF STATES

The Gulf shrimp industry is one to reckon with, generating millions in economic impact each year. To maintain this edge in an increasingly competitive marketplace, fisheries often seek external sustainability certifications.

In July 2024, with support from Texas Sea Grant (TXSG), U.S. Gulf commercial shrimp fisheries were officially awarded the Certified Seafood Collaborative’s Responsible Fisheries Management (RFM) certification.

Based directly on criteria from the United Nations Food and Agriculture which is known as the world’s most recognized fisheries management guidance, the RFM certification verifies the sustainability practices of wild-capture fisheries by validating sustainable practices. Industries are certified through a rigorous, independent assessment.

The certification covers Gulf brown shrimp (*Farfantepenaeus aztecus*), Gulf white shrimp (*Litopenaeus setiferus*) and Gulf pink shrimp (*Farfantepenaeus duorarum*). It applies to more than 3,000 vessels using otter trawls, skimmer nets and butterfly nets across federal waters of the U.S. Exclusive Economic Zone and state waters in Texas, Louisiana, Mississippi, Alabama and Florida.

Industry representatives estimate at least \$100 million in economic benefit as a result of achieving certification.

By validating the sustainable practices of one of the nation’s largest fisheries, TXSG has helped ensure the long-term viability and competitiveness of the Gulf shrimp industry in an increasingly discerning global marketplace.



Gulf Shrimp in a net.

“This certification years of collaborative work across the Gulf and would not have been possible without the commitment of fishermen, scientists and partners – past and present,” said Matthew Kammann, TXSG Fisheries Specialist.

PROJECT IMPACT

Economically vital Gulf fisheries are certified on an international platform.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Commerical Fisheries



Addressing the Bycatch Challenge

- 58 VESSEL INSPECTIONS CONDUCTED
- 174 INDUSTRY MEMBERS ENGAGED
- \$2,000+ IN FINES AVOIDED

Bycatch – the unintentional capture of non-target species remains an ongoing challenge in shrimp fisheries, affecting both commercial operations and coastal ecosystems.

As part of an ongoing effort, the National Oceanic and Atmospheric Administration (NOAA), Louisiana Sea Grant and Texas Sea Grant (TXSG) continued their partnership to advance the Better BRD for the Shrimp Trawl Fisheries project, focusing on developing and testing bycatch reduction devices (BRDs) for effectiveness. Funding from the 2010 Deepwater Horizon oil spill provided an opportunity to further refine bycatch reduction strategies and support sustainable fishing practices.

In 2024, courtesy BRD inspections were conducted across six Texas ports, visiting 58 vessels and

engaging 174 industry members. These checks corrected improperly installed devices, identified needed modifications and distributed updated guidance – saving fishermen over \$2,000 in potential fines while reinforcing sustainable practices.

PROJECT IMPACT

Through innovation and industry partnerships, bycatch reduction devices are advanced to help Gulf shrimpers fish sustainably, safely and economically.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Jefferson County’s Fisheries Community

Post Program Survey Showed:

- 70% REPORTED SAVING \$10,000+ IN OPERATING COSTS
- \$210,000 IN ESTIMATED ECONOMIC BENEFITS FOR THE LOCAL FLEET

Jefferson County is home to Texas’ second-largest shrimp fleet and robust crabbing, oyster processing and crawfish industries, the region is vital to the coastal economy. Yet these working waterfronts face increasing pressures, including rising operating costs, aging workforces, extreme weather and more.

To help address these challenges, TXSG Jefferson-Chambers Coastal and Marine Extension Agent Nikki Fitzgerald partnered with the Southeast Texas Waterway Advisory Council to strengthen safety practices and deliver targeted training tailored to industry needs.

Fitzgerald led two shrimp-focused programs centered on sustainable fishing technologies, including utilizing advanced webbing (or nets), for Jefferson County’s 150-vessel fleet, alongside a crabbing program and

on-site visits to crawfish farms navigating drought-related impacts.

Through hands-on education, technical assistance and timely guidance on regulations and disaster resources, the initiative reached 189 fishermen across the region.

PROJECT IMPACT

Assistance and training supported the long-term success of fishers in Texas’ coastal counties, including Jefferson County.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Aquaculture



Reflecting on the First Years of Oyster Farming in Texas

- 6 BUSINESSES CREATED & SUPPORTED
- 20 JOBS CREATED
- 28 JOBS SUPPORTED
- \$6.6 MILLION IN ECONOMIC IMPACT GENERATED

Texas legalized oyster mariculture in 2019, and the industry has expanded rapidly since. During the reported period, Texas Sea Grant’s (TXSG) aquaculture program supported this growth by helping six cultivated oyster mariculture (COM) businesses, including five grow-out farms and one nursery, obtain permits in the emerging industry sector.

Led by Aquaculture Program Manager Mario Marquez, these efforts produced more than \$5.2 million in economic impact through training, permitting support, technical assistance and hands-on industry guidance. Marquez also serves on the Cultivated Oyster Mariculture Advisory Board under Governor Greg Abbott. Through this role and continued collaboration with the Texas Aquaculture Association, TXSG helped reduce COM lease fees from \$1,500 to \$500 per acre, saving growers an estimated \$1.04 million over the life of current permits.

Additional support to address limitations in obtaining oyster seed – including TXSG’s assistance in the sale of over eight million R6 seeds oysters and one million triploid seed oysters from the Palacios Marine Agriculture Research Nursery – contributed \$275,822 in economic impact.

Altogether, TXSG’s efforts supported a total economic benefit of \$6.6 million, strengthening the foundation of Texas’ growing oyster mariculture industry.

Marquez continues to support the next generation of oyster farmers through training workshops and technical assistance. Prospective growers can learn more about cultivated oyster mariculture in Texas at oyster.texasseagrant.org.

“The Texas coast offers tremendous opportunity, and oyster farming in Texas is just getting started,” said Marquez.

“Helping an industry that will shape the coast for generations is an incredible responsibility and a thrilling opportunity.”

PROJECT IMPACT

Support for new and emerging farms advanced the growth and sustainability of Texas oyster mariculture.

STRATEGIC GOAL SUPPORTED

Goal 5: Texas fisheries, aquaculture, and other coastal and freshwater living resources supply food, jobs, and economic and cultural benefits. (Source: TXSG 2024-2027 Strategic Plan)



Marquez featured at a Texas oyster nursery, assisting partners.



Oyster cages floating atop a Texas bay at sunset.

Recreational Fisheries



Reeling in a Fleet of Trained Weighmasters

- 16 WEIGHMASTERS TRAINED VIA THE ONLINE COURSE
- 800+ RECREATIONAL ANGLERS EDUCATED ON SUSTAINABLE PRACTICES

With hundreds of sportfishing tournaments held annually in Texas, the demand for qualified weighmasters continues to grow. Proper training equips weighmasters to confidently manage weigh-ins, accurately identify fish, recognize potential alterations, and navigate conflicts such as disqualifications or tie-breakers.

To meet this need, Sustainable Fisheries and Aquaculture Assistant Director Alexis Sabine launched an online, self-paced Weighmaster Training Course covering key responsibilities, including weigh-in protocols, fish identification and freshness, and liability and risk management. The accessible digital format resulted in 16 weighmasters trained during the reported period.

To further support workforce development, Sabine developed a certified weighmaster list used by tournament organizers to fill open positions, helping connect trained individuals with professional opportunities and strengthen tournament integrity along the Texas coast.

In addition, TXSG educated more than 800 recreational anglers on sustainable fishing practices through complementary outreach and educational efforts that reinforced responsible angling and environmental stewardship.

Find the Weighmaster Course here: tx.ag/TXSGWeighmaster

PROJECT IMPACT

Training weighmasters through a new online platform strengthened the Texas sportfishing industry by building confidence and expanding coastal opportunities.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan).



Resource packet created for Weighmaster Training Program participants.



Two participants hooking a king mackerel to a scale at a weighmaster tournament.

Recreational Fisheries



Gulf-Wide Collaborations for Reef Fish

- STRENGTHENED REGIONAL COLLABORATION TO PROTECT GULF REEF FISHERIES
- ADVANCED ANGLER ADOPTION OF RESPONSIBLE FISHING AND HANDLING PRACTICES
- EXPANDED ACCESS TO TOOLS SUPPORTING REEF STEWARDSHIP AND COMPLIANCE

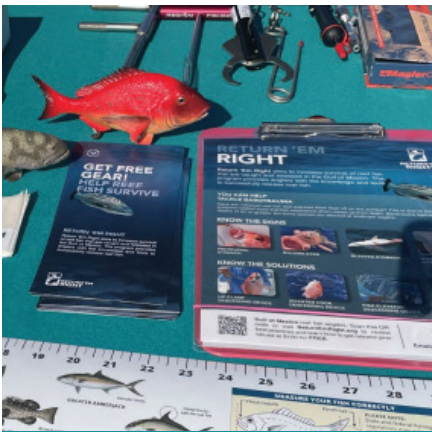
Protecting Gulf reef fish through education requires coordinated, regional collaboration. Texas Sea Grant (TXSG) works alongside Louisiana Sea Grant, Mississippi–Alabama Sea Grant, Florida Sea Grant, Southeastern U.S. Sea Grant, and the Caribbean Reef Fish Extension as part of multi-state teams supporting reef fish fisheries across the Gulf of Mexico and South Atlantic.

Through the Regional Reef Fish Extension Project, led by Mississippi–Alabama Sea Grant, and the Return ‘Em Right program, led by Florida Sea Grant, these partnerships connect Sea Grant fisheries extension specialists, university scientists and fisheries managers to advance reef fish research, outreach and best practices.

Throughout the life of these projects, TXSG engaged 4,393 anglers, captains, deckhands and community members through workshops, trainings and outreach events. Fisheries Assistant Director Alexis Sabine reported that 69 fishermen adopted conservation best practices, including the use of circle hooks, barbless hooks, descending devices and proper handling techniques informed by Return ‘Em Right resources.

Participants received resources designed to promote responsible fishing and reef stewardship, including:

- Angler Ethics and Etiquette
- Sustainable Fishing & Environmental Stewardship Checklist for Recreational Anglers
- Fishing Guide 101
- Rules for Bait Collection & Usage
- “Know Your Texas Reef Fish” Fish Rulers



Collaborative materials, such as Return ‘Em Right brochure and more, atop table at event.



TXSG Amy Nowlin (left) and Sabine (right) presenting resources at Houston Fishing Show.

PROJECT IMPACT

Collaborative resources promoted responsible reef fishing and stewardship, empowering anglers across the Gulf and South Atlantic.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan).

Restoration



Rett Reef: An Exploration in Oyster Restoration

- 383 TONS OF RECYCLED OYSTER SHELL DEPLOYED
- 10-ACRE NON-HARVESTABLE OYSTER REEF ESTABLISHED
- SUSTAINED OYSTER GROWTH DOCUMENTED THROUGHOUT 2024

Rett Reef advanced oyster restoration on the Texas coast by pairing industry leadership with conservation expertise. Located off San Leon, the project marked Texas’ first non-harvestable oyster reef led by a commercial oyster harvester. Co-developed and -led The Nature Conservancy, Prestige Oysters, Pier 6 and San Leon Oyster Fest, with support from Texas Sea Grant (TXSG), established the reef in April 2024 by placing recycled oyster shell into Galveston Bay.

Pier 6 and Prestige Oysters donated and deployed 383 tons of recycled oyster shell, forming the substrate for a 10-acre, non-harvestable reef.

Partners then conducted quarterly monitoring to track reef development. Volunteers from The Nature Conservancy, Prestige Oysters and TXSG used commercial dredges to sample oysters, which were counted, measured and returned to the reef.

Results were positive. Oyster spat appeared within two months and were present in every survey thereafter. Adult oyster densities increased steadily through December 2024, including a rise in mid-size oysters (45–64 mm), indicating strong survival and growth.

Rett Reef demonstrates how commercial harvesters and conservation partners can deliver scalable oyster restoration using industry-familiar methods along the Texas coast.

The Rett Reef project remains ongoing, with continued monitoring planned to further evaluate long-term ecological outcomes and restoration potential.

“We were constantly surprised by the resilience of this reef and how swiftly the oysters recruited and grew on the newly restored area,” said Kathy Sweezey, The Nature Conservancy.

“Non-harvestable reefs like Rett Reef provided oysters the space to grow large and supply greater amounts of larvae to support oyster populations across Galveston Bay, supplementing other non-harvestable reefs to enhance ecological benefits and replenishing harvestable reefs that support our coastal economy.”



Members from The Nature Conservancy, TXSG, Pier 6, and Prestige Oysters viewing oyster samples on a boat in San Leon, Texas.

PROJECT IMPACT

Rett Reef established a scalable model for oyster restoration on the Texas coast, demonstrating how commercial harvester expertise and conservation practices can support healthy, growing oyster populations.

STRATEGIC GOAL SUPPORTED

Goal 4: Natural resources in Texas are sustained by applying science-driven solutions, tools and services to support healthy coastal ecosystems. (Source: TXSG 2024-2027 Strategic Plan)

Restoration



Sustained Coastal Stewardship Across the Rio Grande Valley

- 175 ACRES OF HABITAT RESTORED
- 450+ COUNTED WILDLIFE RESCUED
- 17,181 VOLUNTEER HOURS (\$510,000 IN ECONOMIC VALUE)

Retired Texas Sea Grant (TXSG) Coastal and Marine Extension Agent Tony Reisinger made a lasting impact in Cameron County.

In 2023-24, Reisinger worked with more than 30 resource managers and volunteers from the Rio Grande and South Texas Border Chapters of Texas Master Naturalists across the Lower Laguna Madre region as part of an annual effort to restore riparian and rookery habitats.

Together, they restored:

- 120 acres of vulnerable rookery island habitat
- 55 acres of riparian habitat

His work with these chapters during the reported period extended beyond habitat restoration, including the rescue of 200 pelicans and 250 cold-stunned sea turtles following winter storms. He led 17,181 volunteer hours of restoration, education and wildlife response—valued at \$510,000 in economic value (by the Texas Standard Calculation).

This work reflects both his sustained dedication and the lasting partnerships he has helped build to support long-term coastal resilience in Cameron County.



Rookery habitat in Cameron County.



Reisinger [right] with Texas Master Naturalist [TMN] (left) presenting at TMN. meeting.



Pelicans photographed by Reisinger.

PROJECT IMPACT

County-based expertise and trusted volunteer partnerships restored critical habitats, supported wildlife response and strengthened long-term coastal resilience in Cameron County.

STRATEGIC GOAL SUPPORTED

Goal 3: Texas coastal habitats, ecosystems and the services they provide are protected, enhanced and/or restored. (Source: TXSG 2024-2027 Strategic Plan).

Cleaning the Coast



A Cleaner Coast for Texas

Since 1986, more than 10 million pounds of debris have been removed from Texas beaches and coastal environments. Marine debris remains an ongoing challenge, which is why Texas Sea Grant (TXSG) supports a range of initiatives to keep the coast clean.

During the reported period, TXSG expanded its efforts through both outreach and on-the-ground action. Highlighted contributions from these efforts include:



Volunteer assisting with derelict crab trap removal.

Derelict Crab Trap Removal

Abandoned crab traps pose hazards to wildlife, fisheries and navigation. TXSG Calhoun County Coastal and Marine Extension Agent RJ Shelly conducted aerial surveys using spotter plane to mark crab traps in the USFWS Field Maps App for efficient removal:

- 906 derelict crab traps removed
- 123 volunteers contributed 613 hours
- Coverage included more than 37,000 acres across Lavaca Bay, San Antonio Bay, Copano Bay, Powderhorn Lake and surrounding marshes

Adopt-A-Beach Cleanups

TXSG continued hands-on cleanup efforts in partnership with the Texas General Land Office and local communities.

- 48.4 acres of beach and coastal habitat cleaned in Matagorda County, led by TXSG Matagorda County Coastal and Marine Extension Agent Amy Nowlin with volunteers at Palacios Beach during Spring and Fall 2024
- 392 volunteers cleaned 188 acres between 2023–2024 at Magnolia Beach, coordinated by RJ Shelly. In addition, he helped Magnolia Beach VFD Auxiliary in applying for \$15,000 Matagorda Bay Mitigation Trust Grant to fund Magnolia Beach Adopt-a-Beach Cleanup activities

PROJECT IMPACT

Marine debris prevention and hazard removal kept Texas beaches and coastal waters cleaner and strengthened long-term coastal stewardship.

STRATEGIC GOAL SUPPORTED

Goal 3: Texas coastal habitats, ecosystems and the services they provide are protected, enhanced and/or restored. (Source: TXSG 2024-2027 Strategic Plan)

Monofilament Recovery & Recycling Program (MRRP)

Launched by TXSG's Brazoria County Coastal and Marine Extension Agent John O'Connell in 2004, MRRP reduces the harmful impacts of discarded fishing line, which can persist for centuries and entangle marine wildlife. Partners include Texas Master Naturalists, Fishing's Future, Turtle Island Restoration Network, Mission-Aransas NERR and others.

- ~300 monofilament bins installed since inception
- 84,044 ounces (5,252.75 pounds) recycled to date

In 2024, a new interactive map launched to locate bins statewide (tx.ag/monomap). This made finding MRRP bins accessible and led to increased pounds of recycled monofilament in recent reports.

Partner Spotlight



Serving the Coast with Texas Master Naturalists

Since 1997, the Texas Master Naturalist (TMN) program has built a statewide network of trained volunteers supporting the stewardship of Texas' natural resources through education, outreach and hands-on service.

Today, 48 chapters across 213 counties engage more than 12,000 certified volunteers. To become a TMN, volunteers must complete over 10 weeks of initial training coursework, 40 hours of volunteer service and 8 hours of advanced training. Along the Texas coast, Texas Sea Grant (TXSG) extension agents work closely with TMN chapters to deliver locally driven conservation and community-focused initiatives, helping keep our coastal ecosystems healthy.

In 2024 alone, TMN chapters advised by TXSG agents contributed over 66,000 volunteer hours, representing more than \$2.22 million in economic value to coastal communities. Volunteers supported restoration, wildlife protection and marine debris removal efforts across the coast.

TXSG continued hands-on cleanup efforts in partnership with the Texas General Land Office and local communities.

- Lower Trinity Basin TMN restored 125 acres of coastal prairie and wetland habitat in Liberty and Chambers counties, including Anahuac and Trinity River Wildlife Refuges, contributing 2,100+ volunteer hours for habitat restoration, water quality monitoring, wildlife surveys and monofilament recovery.
- Galveston Bay Area TMN trained 55 new volunteers, created 33 acres of wetland and prairie habitat, and reached 7,000+ youth and adults through coastal stewardship programs, including camps, field trips, community events, and marine debris and sea turtle education.
- Rio Grande Valley TMN restored 151 acres in the Laguna Madre, supported by 17,181 volunteer hours valued at \$500,000+.
- Mid-Coast TMN added 15 new volunteer projects in 2024, including Adopt-A-Beach Palacios, Powderhorn Birding, Sink Your Shucks, Junior Master Naturalists, Texas Mid-Coast Monarch Monitoring and the Formosa–Tejano Wetlands Youth Program.
- TXSG and Mid-Coast TMN cleared invasive tallow trees at Mad Island Marsh Preserve in preparation for a controlled burn on Feb. 3, 2024.



South Chapter TMN talking to public at educational event.

PROJECT IMPACT

Trained TMN volunteers amplified coastal stewardship, restoring habitat, protecting wildlife and reducing marine debris statewide.

STRATEGIC GOAL SUPPORTED

Goal 3: Texas coastal habitats, ecosystems and the services they provide are protected, enhanced and/or restored. (Source: TXSG 2024-2027 Strategic Plan)

Disaster Resiliency



Multi-agency Partnership Trains Coastal Leaders

- 80+ LOCAL HEALTHCARE, POWER, PUBLIC SERVICES AND WATER/WASTEWATER LEADERS TRAINED
- HUNDREDS OF HANDS-ON CONTACT HOURS DELIVERED

Recovering from disasters extends far beyond cleanup—it requires coordinated planning, technical expertise and equipped local responders to restore essential services and protect communities.

TXSG’s Coastal Resilience Team partnered with the Texas A&M Engineering Extension Service (TEEX) to deliver a targeted series of infrastructure-focused disaster management trainings, strengthening preparedness for disruptions to critical services across the Texas coast.

Through four TEEX-hosted courses, emergency managers and sector professionals participated in hands-on, scenario-based instruction aligned with priority sectors identified in the National Infrastructure Protection Plan, including water and wastewater utilities, public services, electric power and healthcare systems. Trainings were delivered both in person and virtually to expand regional access.

The courses included:

- Disaster Management for Healthcare
- Disaster Management for Electric Power Systems
- Disaster Management for Public Services
- Disaster Management for Water and Wastewater Utilities

Collectively, the TEEX courses saw 86 training course enrollments across four events, with some individuals participating in multiple classes, representing 13 counties and numerous coastal communities. By leveraging strong partnerships and locally tailored content, TXSG strengthened regional capacity to protect critical infrastructure and support effective response and recovery from coastal hazards.



County industry leaders in a conference room during a TEEX training lesson.

PROJECT IMPACT

Through strategic partnerships, coordinated disaster training strengthened local capacity to protect critical infrastructure and accelerate recovery from coastal hazards.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Flooding



Real-Time Flood Monitoring

- 4 WATER LEVEL SENSORS INSTALLED ACROSS THREE COUNTIES
- LIVE FLOOD DATA SHARED WITH PUBLIC SAFETY TEAMS

In collaboration with Dr. Philippe Tissot at the Conrad Blucher Institute at Texas A&M University–Corpus Christi, helped implement real-time water level sensors to help coastal communities better anticipate and respond to flooding. Continuing a research project that began in 2023, four new sensors were installed in Matagorda, Aransas and Calhoun counties, providing live flood data to emergency management and public safety teams through a public web dashboard.

The project hopes to build AI-based models that can accurately predict and identify unsafe road conditions by combining sensor data with on-the-ground observations.

Unexpectedly the sensors proved valuable during Hurricane Beryl, when real-time data captured changing storm surge conditions. Together, these efforts support safer travel, faster emergency response and more resilient coastal communities.

PROJECT IMPACT

Coastal communities were equipped with timely, hyper-local flood intelligence that improves safety, supports faster response and strengthens long-term resilience to rising waters.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Research to Action: AI-Roadway Flooding Tool

Challenges to coastal transportation systems during extreme flooding highlight the need for timely information on roadway safety and accessibility.

As part of Texas Sea Grant’s funded research projects addressing priority areas such as coastal flooding, the AI-Based Roadway Flooding Digital Twinning (AIR-FLOOD) project, led by Kunhee Choi of Texas A&M University, developed and deployed an AI-enhanced decision-support system to evaluate roadway vulnerability during flood events.

Validated using Hurricane Harvey data from Houston, AIR-FLOOD integrated large-scale flood simulations, traffic analysis, and digital twinning powered by graph neural networks. The system identified flood-prone roadway segments and provided predictive insights to support evacuation routing, emergency response and infrastructure repair prioritization.



(See story on left) Real-time flood sensor installed in flood-prone region.

PROJECT IMPACT

Efficient emergency response and evacuation during extreme flooding were enabled by providing agencies with real-time, predictive intelligence on roadway vulnerability in coastal cities.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Water Resources



Water Resource Resiliency in Calhoun County

- **LOCAL LEADERSHIP AND PARTNERSHIPS STRENGTHENED CALHOUN COUNTY'S CAPACITY TO REDUCE FLOOD RISK, IMPROVE WATER QUALITY AND BUILD LONG-TERM COASTAL RESILIENCE**

Texas Sea Grant (TXSG) Calhoun County Coastal and Marine Extension Agent RJ Shelly advanced coastal resiliency in his region by helping flood-prone communities improve water quality, strengthen local economies and prepare for future challenges.

Shelly helped facilitate a new Memorandum of Understanding (MOU) between the City of Port Lavaca and the Texas General Land Office's Clean Coast Texas Program, of which TXSG is a member, leading to updated stormwater ordinances that reduce pollution in Lavaca Bay and support long-term resiliency.

He also helped coordinate Green Infrastructure for Texas (GIFT) and Community Health and Resource Management (CHARM) workshops, providing local leaders with practical tools for flood mitigation and community preparedness.

Through these efforts, 72 county participants engaged in these Clean Coast Texas programs, reflecting growing local investment in resilient and thriving coastal communities.



Bay pictured in Port Lavaca.



TXSG Calhoun County Coastal and Marine Resources Agent RJ Shelly.

PROJECT IMPACT

The project empowered flood-prone coastal communities with the partnerships, policies and knowledge needed to protect water quality, strengthen local economies and build lasting resiliency for the future.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Nature-based Solutions



Nature-based Solutions on a Global Scale

As coastal environmental risks grow, nature-based solutions are strengthening resiliency. TXSG hosted the Climate by the Bayou Workshop, a two-day convening that brought together more than 70 experts from the United States and Germany to advance collaboration on nature-based coastal resiliency and biodiversity.

The workshop was led in collaboration with the Southern Regional Climate Center, Pocahontas, the Consulate General of the Federal Republic of Germany in Houston and regional conservation partners, including Armand Bayou Nature Center, where participants conducted site visits. Coastal Resiliency Specialist Madgellen Cleary helped guide discussions focused on actionable, partnership-driven solutions and shared research.

By connecting partners across academia, government, nonprofits and the private sector, the workshop strengthened cross-border collaboration and laid the groundwork

for continued cooperation on nature-based coastal resiliency.



Cleary demonstrating flood-plain model for attendees.

PROJECT IMPACT

Global knowledge exchange furthered conversations in nature-based coastal resiliency solutions.

STRATEGIC GOAL SUPPORTED

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, resiliency to climate impacts, economic disruptions, and other threats. (Source: TXSG 2024-2027 Strategic Plan).

Conversations in Coastal Resiliency

TXSG's Resilient Communities and Economies (RCE) focus area prioritizes expanding conversations on topics such as Coastal Energy Transition, Marine Debris, Nature-Based Solutions and Early Hazard Warning Systems.

The RCE team hosted a two-day Coastal Resiliency and Adaptation Virtual Conference on September 18-19, 2024, featuring six sessions and 20 presentations on topics such as coastal resiliency and adaptation strategies.

Day 1 included 41 attendees, and Day 2 included 31 attendees, contributing a total of 298 contact hours.

Participants represented four counties and five communities, including coastal counties, universities, consulting firms and resource management organizations, and actively shared insights during breakout discussions.

PROJECT IMPACT

Increased awareness of data-driven tools and adaptation strategies strengthened coastal communities' capacity to respond to evolving coastal challenges

STRATEGIC GOAL SUPPORTED

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, resiliency to climate impacts, economic disruptions, and other threats. (Source: TXSG 2024-2027 Strategic Plan)

Partners

- Texas A&M University - Corpus Christi Conrad Blucher Institute (TAMUCC-CBI)
- The Nature Conservancy Texas (TNC)
- Houston Advanced Research Center
- Texas A&M Engineering Experiment Station (TEES)
- Texas A&M University

Non-formal Education



Youth Education Spotlights

Texas Sea Grant's (TXSG) extension team delivers hands-on, place-based environmental education that connects youth and communities to local rivers and coastal ecosystems. Through immersive camps, classroom-on-the-water experiences and strong community partnerships, these programs build STEM (Science, Technology, Engineering, and Mathematics) literacy, foster environmental stewardship and inspire lasting connections to Texas' natural resources.

By prioritizing access, inclusivity and real-world learning, these efforts reach diverse audiences and help ensure the next generation is equipped to care for Texas' coastal and watershed environments.



K-12 students in life jackets complete worksheets during a Neches River floating classroom led by Jefferson-Chambers County

YMCA

The Calhoun County YMCA Environmental Summer Camp expanded access to coastal education for underserved and rural youth through up to 11 weeks of immersive, hands-on learning focused on environmental literacy and stewardship. Supported by a \$750,000 grant and led by TXSG Matagorda County Coastal and Marine Resources Agent Amy Nowlin, the program provided meaningful coastal education experiences to more than 940 children.

Camp Wild

Led by TXSG Galveston County Coastal and Marine Extension Agent Brandi Keller, Camp Wild offered a free, weeklong coastal outdoor experience for 57 fourth-grade students on Galveston Island. In partnership with Friends of Galveston Island State Park and Galveston Bay Area Master Naturalists, the program introduced youth to fishing, seining, kayaking, birding and shoreline exploration while building confidence, leadership skills and appreciation for coastal ecosystems.

Beach Heroes

Through the Beach Heroes program, Keller, in collaboration with the Galveston Master Naturalists, partnered with the Gulf Coast of Sea Turtle Research to deliver sea turtle and marine debris education to 1,297 youth and adults across coastal communities. Outreach efforts included interactive presentations and a community art exhibit featuring 400 pieces of artwork, highlighting plastic pollution prevention and its impacts on marine life.

Neches River Adventures

TXSG Jefferson-Chambers County Coastal and Marine Extension Agent Nikki Fitzgerald partnered with The Big Thicket Association to provide K-12 students with hands-on learning through a floating classroom experience on the Neches River. Students explored river ecology aboard a 40-foot boat and participated in shore-based STEM stations led by Fitzgerald and community volunteers, reaching 698 students and achieving a 94% understanding of watershed concepts.

PROJECT IMPACT

Early hands-on outdoor coastal experiences inspired lifelong environmental stewardship and strengthened youth connection to Texas' coastal and watershed ecosystems.

STRATEGIC GOAL SUPPORTED

Goal 1: A diverse, STEM-literate public participates in formal and non-formal learning opportunities. (Source: TXSG 2024-2027 Strategic Plan)

Non-formal Education



Growing Curriculum & Growing Dunes

- 271 STUDENTS ENGAGED (MIDDLE & HIGH SCHOOL)
- 2 ACRES OF COASTAL HABITAT RESTORED
- 51% INCREASE IN STUDENT KNOWLEDGE
- INCREASED INTEREST IN STEM CAREERS & COASTAL STEWARDSHIP

Strong coastal marshes and dunes are essential to healthy fisheries, thriving tourism and resilient coastal communities. Plan-It Marsh & Plan-It Dunes, an Environmental Protection Agency-funded initiative launched in 2022 by Mississippi State University and the Mississippi-Alabama Sea Grant Consortium, equips high school students with the skills and resources to restore native habitats while exploring real-world STEM careers.

In 2024, with support from the Gulf of America Alliance, the program expanded into Texas for its first pilot year through a collaboration with Texas A&M AgriLife Extension, Texas A&M AgriLife Research, regional high schools and Texas Sea Grant (TXSG).

Guided by Dr. Stacy Hines, Assistant Professor and Extension Range Specialist for Texas A&M Agrilife, and supported by TXSG Coastal Resilience Specialist April Taylor, six Texas high school teachers completed Plan-It training in Fiscal Year 2025, engaging 271 middle and high school students in hands-on propagation and restoration activities.

Students reported a 51% increase in knowledge, a stronger commitment to environmental stewardship and a 32% increase in interest in pursuing STEM careers. Community involvement further amplified impact, with volunteers helping restore two acres of marsh and dune habitat and reaching more than 200 Texans through education and cleanup events.



Taylor observes native marsh plants growing in a propagation container inside a greenhouse during habitat restoration activities.

PROJECT IMPACT

Hands-on habitat restoration inspired and prepared future coastal stewards and STEM professionals while strengthening the resilience of Texas' marsh and dune systems.

STRATEGIC GOAL SUPPORTED

Goal 1: A diverse, STEM-literate public participates in formal and non-formal learning opportunities. (Source: TXSG 2024-2027 Strategic Plan)

Non-formal Education



Exposing Youth to Maritime Careers

- 24 HIGH SCHOOL STUDENTS ENGAGED
- \$12,000 IN SCHOLARSHIPS AWARDED FOR HIGHER EDUCATION

A first experience on the water can shape a lifetime of opportunity. Camp Seaport transforms that exposure into a career pathway by connecting students to maritime industries, port operations and coastal stewardship careers.

Through a 17-year partnership between the Port of Port Arthur and Texas Sea Grant (TXSG), Camp Seaport delivers workforce-focused education through hands-on learning, STEM-based instruction, industry exposure and on-the-water experiences led by TXSG Jefferson-Chambers County Coastal and Marine Extension Agent Nikki Fitzgerald.

In 2024, students built foundational maritime and safety skills, demonstrating substantial learning gains as overall pass rates increased from 52% on the pretest to 93% following program completion.

Program partners also collaborated on fundraising efforts, awarding twelve selected students \$1,000 scholarships to support continued education and career advancement.



High school students sit in small practice vessels in a swimming pool during hands-on boating safety training at Camp Seaport.



Camp Seaport students, instructors and partners stand together outdoors during a workforce development program focused on maritime and coastal careers.



Students participate in a hands-on maritime skills activity at a table with Fitzgerald during Camp Seaport workforce training.

PROJECT IMPACT

Students' first experiences on the water were transformed into pathways toward maritime careers, coastal stewardship and lifelong opportunity.

STRATEGIC GOAL SUPPORTED

Goal 1: A diverse, STEM-literate public participates in formal and non-formal learning opportunities. (Source: TXSG 2024-2027 Strategic Plan)

Workforce Development



Forging a New Class of Commercial Fishermen

- INDUSTRY-LED TRAINING BROUGHT EXPERIENCE, MENTORSHIP AND JOB PATHWAYS TO THE NEXT GENERATION OF GULF FISHERMEN.

For many fishermen, access to in-depth training can be the difference between interest and a career. In the fall of 2024, Texas Sea Grant (TXSG) helped launch the inaugural Gulf Commercial Fisherman Program in Galveston, a weeklong, hands-on training designed to prepare new deckhands for careers in the reef fish and longline fisheries.

Seven participants from Texas and across the Gulf of America completed comprehensive training that included vessel safety, species identification, gear handling, financial fundamentals and on-the-water experience aboard commercial fishing vessels.

The pilot program was developed in collaboration with the Reef Fish Shareholders' Alliance, Florida Sea Grant and experienced Gulf captains and crew who contributed their time, vessels and expertise. Participants gained firsthand insight into the realities of commercial fishing, learning directly from industry professionals who shared practical, experience-based guidance on building successful careers.

The program delivered immediate workforce impact, with three participants offered jobs following completion of the training. This pilot marks an important step forward in strengthening the Gulf's commercial fishing workforce, supporting new entrants to the industry and building regional collaboration to meet growing demand for skilled crew.



Participants conduct a boat inspection and equipment check aboard a docked commercial fishing vessel during hands-on training.



Two individuals stand on a fishing boat holding red snapper during a commercial fishing training trip.

PROJECT IMPACT

Conducting the Gulf Commercial Fisherman Program built a skilled, resilient workforce through hands-on, industry-led training and regional collaboration, connecting new entrants to careers and strengthening Gulf commercial fisheries.

STRATEGIC GOAL SUPPORTED

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. (Source: TXSG 2024-2027 Strategic Plan)

Workforce Development



Safety Training for Texas Parks & Wildlife

- 75+ INDIVIDUALS TRAINED IN BOATING SAFETY & EMERGENCY RESPONSE
- 36 BOATERS CERTIFIED THROUGH TPWD BOATER SAFETY PROGRAM
- TPWD 20 TPWD STAFF TRAINED IN RED CROSS FIRST AID/CPR/AED

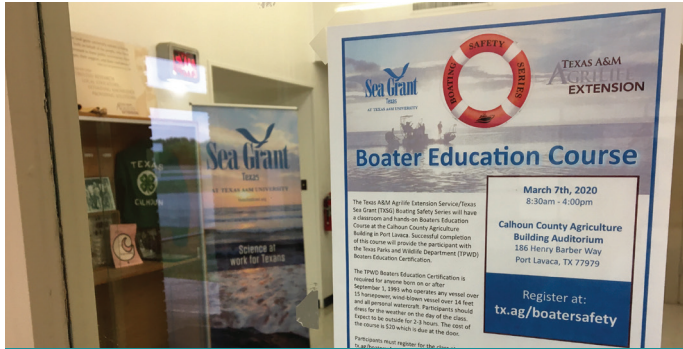
Proper boating safety saves lives, and training is the first line of defense. Between 2023 and 2024, Texas Sea Grant (TXSG) enhanced coastal and on-the-water safety by providing certified boating education and emergency response training to recreational boaters and Texas Parks and Wildlife Department (TPWD) staff across multiple coastal counties.

With assistance from TXSG Calhoun County Coastal and Marine Extension Agent RJ Shelly, 36 participants were certified through the TPWD Boater Education Program and delivered additional courses for 19 participants, expanding safe boating practices along the Texas coast. The program also provided Red Cross First Aid/CPR/AED certification aboard law enforcement vessels for TPWD Game Wardens and 20 Coastal Fisheries staff from Calhoun, Victoria, Jackson, DeWitt, Aransas and Refugio counties.

In total, more than 75 individuals received boating or emergency response training, strengthening preparedness, reducing risk and supporting safer coastal and marine operations across Texas.



RJ Shelly and TPWD warden aboard a moving boat participate in on-the-water emergency response training.



A TXSG boating education course flyer posted inside a public building, displaying course details, location, and registration information.

PROJECT IMPACT
To create a culture of safe, prepared and confident boaters and marine professionals by expanding access to life-saving boating safety and emergency response training across Texas’ coastal waters.

STRATEGIC GOAL SUPPORTED
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. (Source: TXSG 2024-2027 Strategic Plan)

Student Opportunities



TXSG Supports Students

Texas Sea Grant (TXSG) supports graduate students, interns and fellows through programs such as the NOAA–Sea Grant–NMFS Joint Fellowship Program, the Coastal Management Fellowship and the John D. Knauss Marine Policy Fellowship Program, preparing participants for postdoctoral roles and careers across academia, government, nonprofits and the private sector—delivering strong workforce outcomes.

The figures below list students and fellows supported by TXSG during or prior to 2023–2024 who secured employment or continued in Sea Grant-related roles within two years.

Supported Students

Name	Position with TXSG	Position Within Two Years
Kathryn Campbell	2021 TXSG Grants-in-Aid of Graduate Research Program awardee	Postdoctoral Scholar, The Ohio State University
Kiara Carrasco	Student and part-time assistant with TXSG	Staff, American Bird Conservancy
Yangtian Yin	TXSG–supported graduate student	Data & Visualization Specialist, IT sector
Moeid Sharifzar	TXSG–supported graduate student	Staff, California Department of Transportation
Isabelle Cummings	TXSG–supported graduate student	Research Technician, Texas Parks and Wildlife
Joe Kuntz	TXSG–supported graduate student	Lab Technician

Fellowships

Tacey Hicks gained a one-year, paid policy placement at NOAA’s National Ocean Service through the John A. Knauss Marine Policy Fellowship. She worked on offshore wind, tribal engagement and national ocean resource management. Her work supported congressional requests, leadership briefings and initiatives such as the White House Ocean Climate Action Plan. She now continues her career at NOAA as a Policy Analyst with NOAA Fisheries—demonstrating the fellowship’s strong workforce impact.

Name	Fellowship	Position Within Two Years
Eliza Mills	2022 TXSG Grants-in-Aid of Graduate Research Program awardee	2024 TXSG John A. Knauss Marine Policy Fellow
Nick Weber	2020–2023 TXSG NOAA–NMFS Fellow; 2020–2022 TXSG Grants-in-Aid awardee	Postdoctoral Research Associate
Tacey Hicks	2023 TXSG John A. Knauss Fellow	NOAA–NMFS Policy Analyst (Knauss Host Office)



“The Knauss Fellowship allowed me to bridge my scientific background with policy in a meaningful way,” said Hicks.

Student Opportunities

Community Engaged Internship Program

The Texas Sea Grant Community Engaged Internship Program (TXSG-CEI) broadens participation in coastal and marine careers by providing undergraduate students with hands-on training and mentorship through an 8–10 week summer internship.

Guided by TXSG extension staff mentors, interns contribute to fieldwork, extension, outreach and public engagement projects that support environmentally sound and socially responsible coastal communities.

In 2023 and 2024, eight undergraduate students completed competitive TXSG-CEI summer internships designed to prepare the next generation of coastal and marine professionals through experiential learning.

Interns supported community-focused projects across the Texas coast, including marine debris prevention in recreational fisheries, rip current awareness in partnership with the Je’Sani Smith Foundation, coastal and marine education initiatives in the Galveston and Corpus Christi regions, and public outreach campaigns such as Share the Shore, Y’all, which promotes sea turtle awareness.

Through mentorship from TXSG extension staff, interns gained practical experience in science communication, stakeholder engagement and applied coastal stewardship.

- 2023: Marisa Gonzales, Skyler Nix, Amanda Pollakis, Kaitlen Vargas
- 2024: Maria Paula Islas, Reagan Teehan, Harvey Houltyby, Mayrena Lugo

“I believe that reconnecting our communities with their local environments and fostering a love for nature should be at the forefront of everything we do in environmental sciences. It was a pleasure to learn from seasoned experts and work with an array of talented individuals with unique perspectives in this program,” said Vargas, ‘23.



“This experience taught me how to engage with grants, be purposeful with funding, and network across disciplines with peers from around the country, including other Sea Grant interns. The insight I gained was priceless, and I’m incredibly grateful for the opportunity,” said Islas, ‘24.



Staff Map

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- Xiaoping Li**
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Reporting Coordinator
- Joana Rocha**
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- Anna Weis**
Communication Specialist

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- Christine (Chris) Hale**
Director, Extension
- Nicolas Perez**
Communication Specialist
- Matthew Kammann**
Fisheries Specialist
- Dr. Mario Marquez**
Aquaculture Specialist

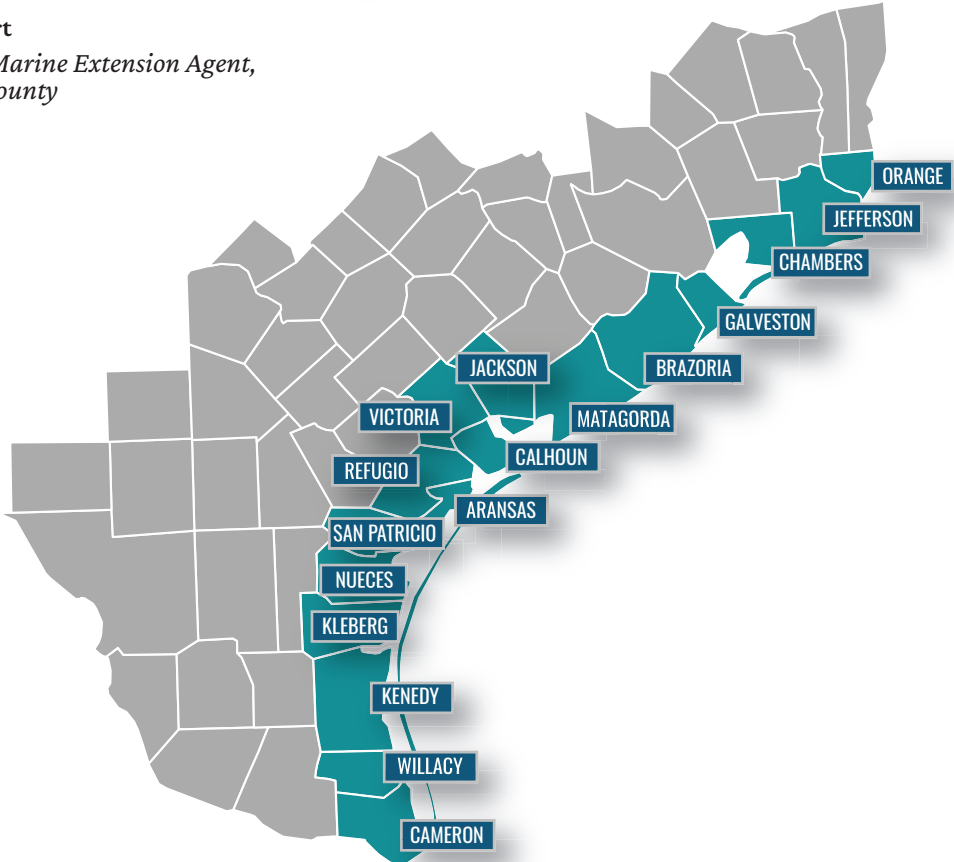
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- Nikki Fitzgerald**
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- John O’Connell**
Coastal & Marine Extension Agent,
Brazoria County
- Sara Stewart**
Coastal & Marine Extension Agent,
Cameron County
- Brandi Keller**
Coastal & Marine Extension Agent,
Galveston County
- Amy Nowlin**
Coastal & Marine Extension Agent,
Matagorda County
- R.J. Shelly**
Coastal & Marine Extension Agent,
Calhoun County





Sea Grant

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