



**THE GULF OF
MEXICO PROGRAM**

**Protecting and Preserving
the Gulf of Mexico**

2018 ANNUAL REPORT



Our Mission

The EPA's Gulf of Mexico Program is focused on the health, productivity and restoration of the Gulf of Mexico and all the communities that rely on this national resource.



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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

GULF OF MEXICO PROGRAM

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Message from the Acting Director

I am pleased to present the Fiscal Year 2018 Annual Report for the Gulf of Mexico Program (GMP), which highlights the GMP's work and accomplishments from Oct. 1, 2017 through Sept. 30, 2018.

This year, the GMP reached major milestones, awarding two projects supportive of nutrient reduction and best management practices, expanding workforce development initiatives in underserved and underrepresented communities promoting smart growth/environmental resiliency practices, and continuing the monitoring of waterways as part of the Regional Applied Research Efforts (RARE). As a testament to our dedicated and hardworking staff, we continue to serve as a "go to" for technical and public engagement expertise on restoration efforts post the Deepwater Horizon oil spill.

The GMP celebrated our partners by hosting a Gulf Guardian Award Ceremony, honoring organizations and individuals making strides to preserve and protect the Gulf of Mexico. As we reflect on the past and embark on the future, we will continue a trajectory steeped in partnerships and centered on sound science. We are thankful for the successes of FY 2018 and look forward to new challenges and novel approaches in FY 2019.

This report is dedicated to the public we serve and the waterways we seek to protect.

Sincerely,

A handwritten signature in black ink that reads "LaKeshia Robertson". The signature is written in a cursive, flowing style.

LaKeshia Robertson

Acting Director

Who We Are

The Gulf of Mexico Program (GMP) is one of the EPA's Great Water Body Programs whose geographic focus is on the major environmental issues of the Gulf of Mexico region and its watershed.

The GMP is committed to voluntary, nonregulatory actions and solutions that are based on sound scientific and technical information as substantiated by our work with partners and the public.

Our program consists of two teams of experienced staff:



Science Integration and Analysis Team

Promoting and implementing science to benefit the Gulf of Mexico and its communities, this team assists Gulf of Mexico stakeholders by participating in activities such as periodically collecting and testing water samples in the watersheds that flow into the Gulf to monitor water quality.



Partnerships Team

Encouraging positive behavioral practices and promoting awareness of resources, technologies and environmental practices or initiatives, this team works closely with Gulf partners to identify environmental concerns and provides up-to-date education on how shifts in behavior among Gulf stakeholders and tourists can effect change.

What We Do

The Science Integration and Analysis Team and the Partnerships Team work with Gulf of Mexico stakeholders to explore methods to:

- Support the assessment, development and implementation of programs, projects and tools that strengthen community resilience
- Protect, enhance and restore coastal and upland habitats within the Gulf of Mexico Watershed
- Promote and support environmental education and outreach to inhabitants of the Gulf of Mexico Watershed
- Restore and/or improve water and habitat quality to meet water quality standards in watersheds throughout the five Gulf states and the Mississippi River Basin

Our Team

Senior Management



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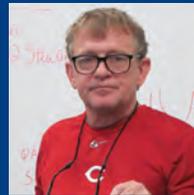


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Partnerships Team



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Senior Environmental Employees (SEE) Enrollees



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Fiscal Year 2018 Investments

LOCATION	DOLLAR AMOUNT	AGREEMENTS
Louisiana	\$2,709,690	8 Cooperative Agreements, 1 EJ Small Grant, 1 Interagency Agreement
Mississippi	\$2,552,058	9 Cooperative Agreements, 1 EJ Small Grant
Alabama	\$1,931,310	8 Cooperative Agreements
Florida	\$1,548,117	6 Cooperative Agreements
Texas	\$1,034,443	5 Cooperative Agreements
Iowa	\$1,000,000	1 Cooperative Agreement
Georgia	\$300,000	1 Cooperative Agreement
Tennessee	\$240,000	1 Interagency Agreement
Oklahoma	\$29,947	1 EJ Small Grant

Traditional Notice of Funding Opportunity

The GMP published a NOFO (EPA-GM-Cooperative-Agreements-2018-1) to address water quality improvement; coastal habitat and ecosystems enhancement, restoration and/or protection; environmental education and outreach; and community resilience in the Gulf of Mexico region and its watersheds. A total of 86 proposals were received. The total amount anticipated to be awarded under this announcement is approximately \$5 million. The GMP anticipates awarding approximately 12 cooperative agreements, subject to availability of funds, the quality of proposals received and other applicable considerations.

Farmer to Farmer Notice of Funding Opportunity

The GMP published a NOFO (EPA-GM-2018-FARMER) to support farmer-led organizations in program/project implementation focused on collaborating with farmers to demonstrate measurable results in improved water quality and/or habitat, in addition to farmer-to-farmer outreach and mentorship. Outputs will include novel or innovative techniques, methods and/or approaches that improve water quality or enhance, restore or protect habitat. Outcomes will include the desired effect of implementation on education and mentorship among farmers as they utilize sustainable practices that successfully improve water quality and habitat, and lead to ancillary improvements of yields and farming costs. The total amount anticipated to be awarded under this announcement is approximately \$4.3 million. The GMP anticipates awarding approximately four cooperative agreements, subject to availability of funds, the quality of proposals received and other applicable considerations.

4 Performance Measures

The GMP works with each of the five Gulf Coast states (Alabama, Florida, Louisiana, Mississippi and Texas) and the six Gulf Coast Mexican states on projects that support the following priority areas:



PERFORMANCE
MEASURE

Water Quality

The GMP continuously works with Gulf Coast states to maximize efficiency and utility of water quality monitoring efforts for local managers. The GMP supports efforts to improve water and habitat quality to meet water quality standards throughout the five Gulf states and Mississippi River Basin.

TARGET: Improve 2 water quality health indicators
RESULTS: Improved indicators in 3 water bodies



PERFORMANCE
MEASURE

Environmental Education and Outreach

These efforts are cornerstones to environmental stewardship. The GMP's goal is to heighten citizens' appreciation of the Gulf, which leads to positive behavior practices. This can be accomplished by developing hands-on environmental initiatives and engaging residents in restoration programs/projects.

TARGET: Reach 6,000 individuals
RESULTS: 15,013 individuals reached



PERFORMANCE
MEASURE

Habitat Restoration

Through funding and partnerships, the GMP is restoring habitat in the Gulf states, especially related to wetlands, coastal prairies and stream banks corridors. This work helps provide for protection from storm damage; supports commercial and recreational fisheries; provides nesting and foraging habitat for birds and other wildlife; protects pollinators; and improves water quality for recreational use and aquatic life.

TARGET: Restore 250 acres
RESULTS: 360 acres restored



PERFORMANCE
MEASURE

Community Resilience

Resilience is the capacity of human and natural systems to adapt to and recover from change. The GMP supports community vulnerability assessments and the actions communities take to better position themselves to recover from coastal storms and adapt to the impacts resulting from changes in our environment.

TARGET: Reach 40 communities
RESULTS: 88 communities reached



Water Quality

Regional Applied Research Effort (RARE) in Turkey Creek

PARTNERS

- Mississippi Department of Environmental Quality
- Turkey Creek Steering Committee
- Land Trust for the Mississippi Coastal Plain
- EPA Region 4
- EPA Office of Research & Development Gulf Ecology Division

SUMMARY

The GMP office is located near Turkey Creek in Gulfport, Miss., and has the expertise and commitment through its staff scientists and partnerships to support this community. This project supplements ongoing monitoring programs with a fecal-source identification component in an effort to identify sources of pollution in the watershed. Known point sources within the watershed include wastewater from subdivisions and mobile home parks, while a few of the nonpoint sources may include urban areas, wildlife, livestock and failing or aged septic systems.

The Turkey Creek Project is evaluating components including nutrient concentrations in water, presence of the pathogen indicator *E. coli*, DNA sequencing and taxonomic analysis of water and sediment, and the presence and genotype of male-specific coliphages (FRNA). The local community, students, residents and other partners frequently participate in hands-on water quality monitoring, which imparts a sense of ownership between residents and their local waterways. This project directly supports the community's desire to protect recreational use of the creek.

RESULTS

The data collected are shared with state and county stakeholders, Citizens' Science partners, EPA Regional Offices and the Turkey Creek Steering Committee—which includes state, federal, local, NGO, business and community partners—as they seek to identify and eliminate sources of water quality impairments in the watershed. These partners work together to help solve issues in the creek from this data. The partnership has already seen some water quality improvement at one site where infrastructure improvements have occurred. Bacterial source tracking that is currently being conducted will help the partnership work on improving other areas of the creek.



Mobile Bay National Estuary Program – Trash Free Waters Project

SUMMARY

In March 2018, the GMP awarded \$488,711 through a cooperative agreement to the Mobile Bay National Estuary Program (MBNEP) to fund the installation of 10 "Litter Gitters," small trash traps located throughout the Three Mile Creek Watershed to promote the wise stewardship of the water quality and living resources of Alabama's estuarine waters. Three of the five stated goals of the Three Mile Creek Watershed Management Plan, published in 2014 by the MBNEP, are addressed in this project: improve water quality; protect and improve the health of residents, fish and wildlife; and restore heritage and cultural connections between the watershed and the community.

RESULTS

Trash was removed from 10 litter traps installed in the Three Mile Creek Watershed in FY18.

Recycled: 81.59 lbs. **Disposed:** 255.94 lbs. **Total:** 337.53 lbs.

MBNEP expects to remove a minimum of 4,800 lbs. of trash by the end of the project.

PARTNERS

- Mobile BayKeeper
- Osprey Inc.
- University of South Alabama
- Cities of Mobile and Prichard



Land Based Sources (LBS) of Pollution Protocol to the Cartagena Convention

PARTNERS

- EPA
- Department of State
- LBS Protocol ratifying countries in the Caribbean and Gulf of Mexico
- United Nations Caribbean Environmental Program
- Regional Activity Centers



SUMMARY

The GMP Chief Scientist has been working as the LBS water quality expert for more than eight years to support the U.S. effort (EPA OITA, NOAA, Department of State) as a signatory to the LBS Protocol. Member countries of the Scientific, Technical and Advisory Committee (STAC) to the LBS Protocol met in July 2018 in Panama City, Panama, to further the completion of the first State of the Convention Area Report (SOCAR) using submitted water quality data by member countries. To date, 20 countries have submitted water quality data in the wider Caribbean/Gulf of Mexico region. The SOCAR is a requirement of the LBS Protocol, and member countries, with the U.S. as the current workgroup chair, are drafting the SOCAR chapters and negotiating water quality parameter range values (good, fair, poor) to be able to better determine the status of the protocol region.

RESULTS

The first State of the Convention Area Report (SOCAR) has been drafted using water quality data from 20 countries. The Scientific, Technical and Advisory Committee (STAC) to the Protocol recommended the Contract of the Parties approve the SOCAR at its next meeting in early 2019.

Bayou Chico Water Quality Improvements Project

PARTNERS

- Florida Fish & Wildlife Conservation Commission
- University of West Florida
- University of Florida Milton
- Woodham Middle School
- EPA Gulf Ecology Division

SUMMARY

The GMP has an ongoing cooperative agreement with Escambia County to improve water quality in portions of Bayou Chico by installing floating treatment wetlands in Jackson Lake, an upstream tributary connected to Jackson Creek, Bayou Chico and Pensacola Bay. The goal of this project is to improve water quality via nutrient uptake from a floating wetlands system, thereby reducing the amount of excess nutrients being conveyed by Jackson Creek to Bayou Chico. In addition, when the grown vegetation is harvested from the floating treatment wetlands, it will be planted at existing living shoreline restoration projects in the Pensacola Bay Watershed, where the vegetation will continue to improve water quality and provide new estuarine habitat, ensuring that this activity will be zero waste and self-sustaining for years to come.

RESULTS

In FY18, 52,000 herbaceous plants were installed for the first growing season in floating platforms to remove N & P from Jackson Creek. Monitoring is ongoing, and initial results are expected in early FY19. Escambia County held education events for approximately 1,133 students.





Habitat Restoration

The Importance of Pollinators – Education and Creation of Habitat

PARTNERS

- Mobile County Cooperative Extension
- Mobile County Public School System
- Dauphin Island Elementary
- Alabama Power
- Town of Dauphin Island
- Dauphin Island Residents
- Other volunteers

SUMMARY

The GMP awarded \$22,162 to the Mobile County Master Gardeners Association to work with volunteers and students at Dauphin Island Elementary to demonstrate to students the value of pollinators and to create a habitat for those pollinators on campus for the school to use to educate students for years to come.

RESULTS

- 0.25 acres of pollinator plants planted
- Over 100 students educated in FY18





Coastal Prairie Stewardship in Southwest Louisiana

PARTNERS

- Louisiana Department of Wildlife and Fisheries
- Cattle ranchers in Southwest Louisiana
- Landowners in Southwest Louisiana

SUMMARY

This project implemented stewardship actions including prescribed fire and chemical and mechanical brush control on coastal prairie remnants. Vegetation monitoring with the use of remote sensing and field surveys documented success of actions. Additionally, this work strengthened partnerships with the cattle ranching community in southwestern Louisiana by expanding the awareness of and appreciation for coastal prairies, fostering a more informed view of this habitat.

RESULTS

- Pre-treatment photo monitoring of prairie compartments was completed
- 2 prescribed burns totaling 554 acres
- 8 acres protected by using herbicide treatment to remove Chinese tallow
- 10 acres enhanced using mechanical mulching

Protection and Restoration of Impaired Seagrass Meadows on Florida's Nature Coast

PARTNERS

- University of Florida
- Florida Sea Grant

SUMMARY

Seagrass propeller scarring occurs when boaters inadvertently motor through water too shallow for their vessel. This project aims to restore thousands of linear feet of scars in order to increase the integrity of damaged seagrass meadows, and to restore vital ecosystem services. In addition, the project aims to reduce scarring through boater outreach and aids to navigation, which is the most cost-effective means of reducing seagrass damage. This combination of boater outreach, new aids to navigation and active restoration of scarring hotspots is a comprehensive approach to protect and restore a vital Gulf of Mexico habitat that provides tremendous return on investment for the regional economy.

RESULTS

Marker buoys have been placed to notify boaters of shallow seagrass areas. The project aims to restore 21,000 linear feet of scars in scarring hotspots.





Environmental Education and Outreach

Partnering with the Alabama Cooperative Extension System to Educate Students

PARTNERS

- Alabama Cooperative Extension Service
- Baldwin County Extension Service
- City of Daphne
- Alabama Water Watch
- Master Environmental Educators volunteers

SUMMARY

During 2017–2018, the GMP partnered with the Alabama Cooperative Extension System (ACES) and the 4H Alabama Water Watch program to promote environmental education and citizen science. Through partnership with the Master Environmental Educators (MEE) Program, the GMP educated more than 1,000 K-12 students on environmental topics such as nonpoint source pollution, groundwater pollution, the water cycle, recycling and wildlife habitat. Each MEE module includes classroom instruction materials, and in most cases, a hands-on display or activity to enhance the students’ participation and comprehension of the topics being taught.

The GMP also partnered with the city of Daphne and ACES to develop two new training modules to include stormwater runoff and citizen science. The stormwater runoff course includes an interactive watershed model, and the citizen science module introduces the students to water chemistry and Alabama Water Watch volunteer monitoring program. These courses will be made available for teachers to request in the 2018–2019 school year. The GMP will also work with Baldwin County Cooperative Extension, the Mobile Bay National Estuary Program and the city of Daphne to expand the MEE Program to Mobile County in 2018–2019.

RESULTS

Throughout the MEE program, GMP educated approximately 1,715 K-12 students on environmental topics ranging from the recycling to watershed basics and stormwater runoff. GMP helped develop two new training modules: Stormwater Pollution and Citizen Science, which will be added to the curriculum for FY19.



Rural Voices Radio: Gulf of Mexico

SUMMARY

Rural Voices Radio (RVR), a partnership between the Mississippi Writing/Thinking Institute and Mississippi Public Broadcasting, has been promoting children’s authorship and reading performance on radio since 2003. The children write, expert teachers of writing respond to the writing, and children bring their latest revisions to the recording studio where they rehearse with a goal of clear articulation and expression. They record, often with proud parents snapping photos, in a state-of-the-art studio under the guidance of a supportive production engineer. They invite their friends and families to listen to RVR for the two-minute segments. The best part: They want to write and read for RVR again and again.

RESULTS

These two-minute segments are heard all over the state of Mississippi via eight RVR stations. Thousands of individuals are potentially reached daily.

PARTNERS

- Mississippi State University
- Mississippi Writing/Thinking Institute
- Stone County Schools
- Bay St. Louis Schools
- Hancock County Historical Society



Coastal Connections – Environmental Education for Underserved Florida Fifth Graders

PARTNERS

- Nature’s Academy
- Manatee County Schools
- Pinellas County Schools



SUMMARY

Nature’s Academy offers free “edventure” programs to underprivileged and underserved fifth grade students in order to motivate their personal involvement in habitat preservation and to advocate sustainable approaches to the use and enjoyment of our natural resources. Title I schools lack the resources to attend optional field trips, so Nature’s Academy provides bus transportation, field instruction, program materials and inspiration—everything essential for a best-in-class environmental education experience.

ANTICIPATED RESULTS

This project will provide free environmental education field trips to 1,700 underserved students from Manatee and Pinellas counties in Florida. As environmental stewards, these children are expected to (i) remove 100 pounds of trash from coastal habitats around Tampa and Sarasota Bays, (ii) create 85+ public service announcements, and (iii) reduce pollution that might enter the Gulf of Mexico by eliminating the use of 3,400 plastic water bottles.

Half-Shell High School – Development of a Sustainable Seafood Community Workforce Using Off-Bottom Oyster Farming



SUMMARY

Through this project, a service learning oyster farm will be developed where high school students can study all aspects of oyster mariculture. Oysters will be grown using off-bottom as well as on-bottom oyster farming gear in an oyster riparian rights area leased from the University of Alabama. Oysters will be grown for both restoration purposes and the half-shell market. The project is designed to allow multiple participants to operate 2-acre growing blocks. Some of the blocks will be operated by commercial half-shell oyster farmers, and the blocks will also provide opportunities for student internships and jobs. Other blocks will be used for training, research and seed production nursery operations.

RESULTS

300 students per year are involved in the process of growing oysters using off-bottom farming.

PARTNERS

- Board of School Commissioners of Mobile County
- Alma Bryant High School
- Auburn University
- Dauphin Island Sea Lab
- Organized Seafood Association of Alabama





Community Resilience

Gulf TREE

PARTNERS

- Gulf of Mexico Alliance
- Northern Gulf of Mexico Sentinel Site Cooperative
- Gulf of Mexico Climate and Resilience Community of Practice

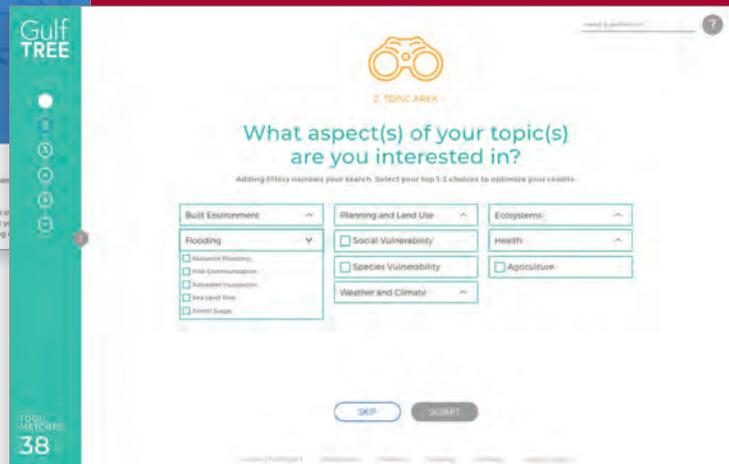
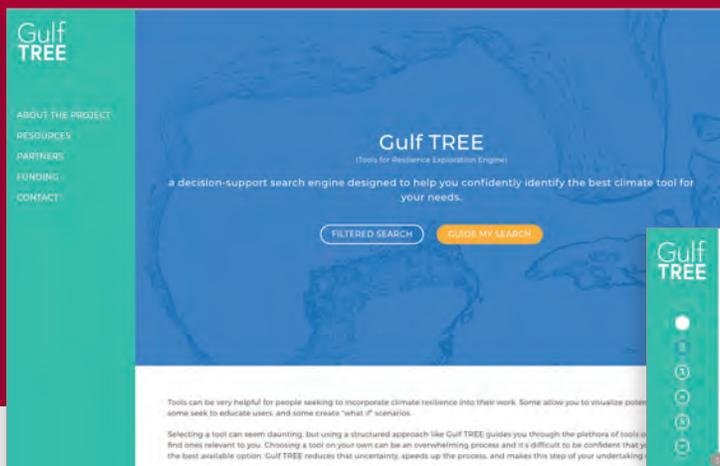
SUMMARY

Gulf TREE (Tools for Resilience Exploration Engine) was created to fulfill the need for guidance in climate tool selection. It is a decision-support search engine designed to help organizations confidently identify the best climate tool for their needs. Stakeholders such as natural resource managers and community planners who understood the importance of incorporating climate resiliency into their projects struggled to find the right tool—the daunting process can be time-consuming, overwhelming and very confusing. Gulf TREE encourages further exploration in the realm of climate resiliency and thus provides a plethora of related resources.

Workshops across the Gulf Coast were held both before and after development of Gulf TREE. During the workshops, potential users gave input on current climate challenges, what they looked for when selecting a tool and specific features they would like in Gulf TREE. When development finished, they tested the website and gave additional feedback, which was integrated before it was publicly rolled out. This feedback was crucial and we appreciate its part in creating this resource.

RESULTS

More than 576 total sessions with over 350 users worked to make their communities more resilient.



A Gulf of Mexico Coastal Training Program Initiative

PARTNERS

- Gulf of Mexico National Estuarine Research Reserve Coastal Training Programs
- The National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center
- The Gulf of Mexico National Estuary Programs (NEPs)
- Gulf Coast Sea Grant Programs
- The Gulf of Mexico Alliance Coastal Community Resilience Priority Issue Team

SUMMARY

The Coastal Training Program (CTP) Coordinators at the five Gulf Coast National Estuarine Research Reserves are offering targeted training and technical assistance to resource managers and decision-makers on the Gulf Coast. These training events and direct assistance will employ proven educational methodologies to increase regional awareness and action on program priorities and strategic goals identified by the region's coastal decision-makers.

RESULTS

Conducted 35 workshops with almost 1,400 participants to improve community resiliency.



Increasing Community Resilience in Coastal Watersheds of Alabama by Risk Assessment of Past, Present and Future Trends in Hydrologic and Hydroclimatic Extremes

PARTNERS

- Geological Survey of Alabama
- University of Alabama Water Policy and Law Institute

SUMMARY

This project will investigate past, present and future hydroclimate variability and extremes in the southeast (SE) region. Results will provide insight into the long-term variability of streamflow and the associated physical, social, economic and ecological impacts this variability has on coastal watersheds that flow into the Gulf of Mexico. This information will benefit the development of water policy in Alabama and the greater SE region by informing a variety of socially and economically relevant areas related to water withdrawals, streamflow forecasts, drought and flood mitigation.

ANTICIPATED RESULTS

This project will provide comprehensive risk assessments and mitigation/adaptation strategies for streamflow in four coastal watersheds and at least six coastal counties in Alabama.





Farmer to Farmer

The EPA awarded \$2 million to fund improvements in water quality, habitat and environmental education in the Mississippi River Basin. These two projects support farmer-led organizations with a proven track record of implementing demonstration projects through outreach with area farmers and obtaining measurable results, including improved water quality and/or an increase in farmer-to-farmer education and outreach.

Iowa Transforming Drainage Demonstration Project

PARTNERS

- Iowa Department of Agriculture and Land Stewardship
- Iowa State University
- Iowa Soybean Association
- Iowa Agriculture Water Alliance
- Iowa Corn Growers Association

SUMMARY

The goal of the Iowa Transforming Drainage Demonstration Project is to advance knowledge and implementation of alternative drainage systems in the Des Moines River Basin to improve downstream water quality while improving crop production and yield stability, sustainably secure and manage irrigation water, and enhance wildlife habitat. This will support the integration of systems utilized to sustainably use and manage water to produce crops and reduce nutrient losses during variable annual/seasonal conditions.

The main outcome of this project will be that agricultural producers, service providers and other decision-makers will be able to access the research-based information they need to make informed decisions integrating these practices into their operations for increased resilience in crop production and improved water quality. A second outcome is for this demonstration project to inform development and incorporation of concepts and methods more prominently into state and federal programming, especially for practices that may have less economic incentive for installation by individual producers or landowners.

The longer-term vision is that the process of designing and implementing agricultural drainage will be adapted so that storing water in the landscape will be economically viable for nearly every operation, transforming the landscape to address the objectives of resilient crop production and water quality benefits.

ANTICIPATED RESULTS

Anticipated outputs of the project include up to 20 saturated buffers, 10 bioreactors, four targeted wetlands, three drainage water recycling systems and two drainage water management systems. These practices are estimated to benefit 2,800 acres and will reduce nitrogen loading by 33–52 percent on average, based on values in the Nutrient Reduction Strategy-Science Assessment. These practices would result in an estimated reduction of 30,855 pounds of nitrogen.



Region 7 Administrator Jim Gulliford and Matt Lechtenberg, IDALS

Cropping Systems for Improving Farm Profitability and Water Quality



Region 4 Administrator Trey Glenn and Delta F.A.R.M. Chairman Dan Branton

PARTNERS

- Delta Farmers Advocating Resource Management (Delta F.A.R.M.)
- Mississippi State University
- Delta Council

SUMMARY

This project will demonstrate successful cover crop – minimal tillage production (CCMT) systems and evaluate the agronomic, economic and environmental benefits. An innovative monitoring system will measure and report field scale water and nutrient dynamics to the farmer in support of informed crop management decisions. Evaluation data will be integrated into outreach and farmer-to-farmer information exchange activities that will support successful development, implementation and adoption of CCMT systems on farms throughout the region. This represents the next implementation phase of the Delta Nutrient Reduction Strategy and leverages more than \$1.3 million in related projects. The project will take place in the Delta region of northwest Mississippi, which falls in the HUC 08 Lower Mississippi River Watershed. Specifically, project activities will occur within the Yazoo River Basin (HUC 08030207), with focus on 12 digit HUC priority watersheds within the Basin.

ANTICIPATED RESULTS

The project will provide data demonstrating greater than 5 percent reductions in sediment, nitrogen or phosphorous through the implementation of cover crop – minimal tillage systems on a minimum of 15 farms and 800 acres annually. Project outreach and farmer-to-farmer information exchange activities will impact at least 423 individuals annually.





Natural Resource Damage Assessment

On April 20, 2010, an explosion on the Deepwater Horizon Macondo oil well drilling platform tragically killed 11 workers, and started the largest marine oil spill in U.S. history, releasing millions of barrels of oil into the Gulf of Mexico. On April 4, 2016, the court approved a settlement with BP for natural resource injuries stemming from the Deepwater Horizon oil spill. This settlement concluded the largest natural resource damage assessment ever undertaken. Under this settlement, BP will pay the Trustees up to \$8.8 billion for restoration to address natural resources injuries and lost recreational uses.

NRDA Mississippi Trustee Implementation Group, Upper Pascagoula Water Quality Enhancement (UPWQE) Project

In May 2018, GMP scientists Calista Mills, Tripp Boone and Dr. Troy Pierce began the baseline water quality sampling for the UPWQE. The UPWQE project is one of three projects funded in the MS TIG first restoration plan as a result of the Deepwater Horizon oil spill. This monitoring is being conducted in Years 1, 3 and 5 of the project in an effort to show the benefits of landowner partner best management practices being implemented during this project in the Upper Pascagoula River Watershed. In true federal-state Implementing Trustee partnership, USDA is working with landowners on BMPs, EPA is conducting the water quality monitoring and MDEQ is analyzing the water quality nutrient samples.



As a Trustee, the EPA identified its Trustee Implementation Group (TIG) Representatives. GMP staff members serve as primary and alternate EPA Trustee representatives on the TIGs for Alabama, Florida, Louisiana, Mississippi and regionwide. The GMP director is also one of two alternates for the EPA on the Trustee Council to support the EPA Designated Natural Resource Trustee Official. GMP staff members also serve as agency experts in the areas of monitoring and adaptive management, and injured species related to oysters and sturgeon. The efforts of the TIGs include developing and implementing restoration plans, as well as strategic planning for coordinated and larger scale restoration activities. As a result of the NRDA restoration efforts, measurable results-oriented projects are being implemented that have direct Gulf benefit, including: acres restored, water quality improved, recreational use improved, and injured species rehabilitated.



Louisiana Trustee Implementation Group (LATIG)

The GMP continues to support EPA's Office of Water and Region 6 on the Louisiana TIG on restoration planning efforts in Louisiana. Fiscal Year (FY) 2018 activities include release of the Final Strategic Restoration Plan and Environmental Assessment #3: Restoration of Wetlands, Coastal and Nearshore Habitats in the Barataria Basin, Louisiana. This plan considers a suite of restoration techniques and approaches to address ecosystem-level injuries in the Barataria Basin and the Gulf of Mexico caused by the Deepwater Horizon oil spill. GMP staff are providing programmatic and technical support in areas such as numerical modeling and monitoring and adaptive management considerations.



Cross-Trustee Monitoring and Management (CTMAM)

The GMP continues to support EPA's Office of Water on the Cross-Trustee Implementation Workgroup in developing monitoring and adaptive management guidance and recommendations. In January 2018, the workgroup finalized the *Monitoring and Adaptive Management Manual Version 1*. This document provides guidance for the Trustees on monitoring needed to evaluate restoration outcomes and benefits to injured resources.





Gulf Coast Ecosystem Restoration Council

Following the catastrophic 2010 Deepwater Horizon oil spill, Congress passed the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast Act of 2012 (RESTORE Act). The RESTORE Act established the Gulf Coast Ecosystem Restoration Council (the Council).

The Council membership includes the governors of the states of Alabama, Florida, Louisiana, Mississippi and Texas, as well as the secretaries of the U.S. Departments of Agriculture, Army, Commerce, Homeland Security and the Interior, and the Administrator for the EPA. The EPA currently serves as the chair of the Council. The Council is responsible for helping to restore the ecosystems and economies of the Gulf Coast region by developing and overseeing implementation of a Comprehensive Plan and carrying out other responsibilities. If you are interested in reading more about the RESTORE Act or the Council, please visit www.RestoreTheGulf.gov.

On Dec. 9, 2015, the RESTORE Council approved the Initial Funded Priorities List (FPL). Under the Initial FPL, the EPA will work with local stakeholder groups on four projects to achieve near-term, on-the-ground ecosystem benefits, while also conducting planning activities designed to build a foundation for future success.

\$2 million

Creating a New Estuary Program for the Pensacola and Perdido Bays

On Sept. 5, 2018, the GMP held a press event announcing an award of \$2 million in funding to the Bay Area Resource Council (BARC) to develop a new place-based estuary program in the panhandle of Florida for the Pensacola Bay and Perdido Bay estuaries.

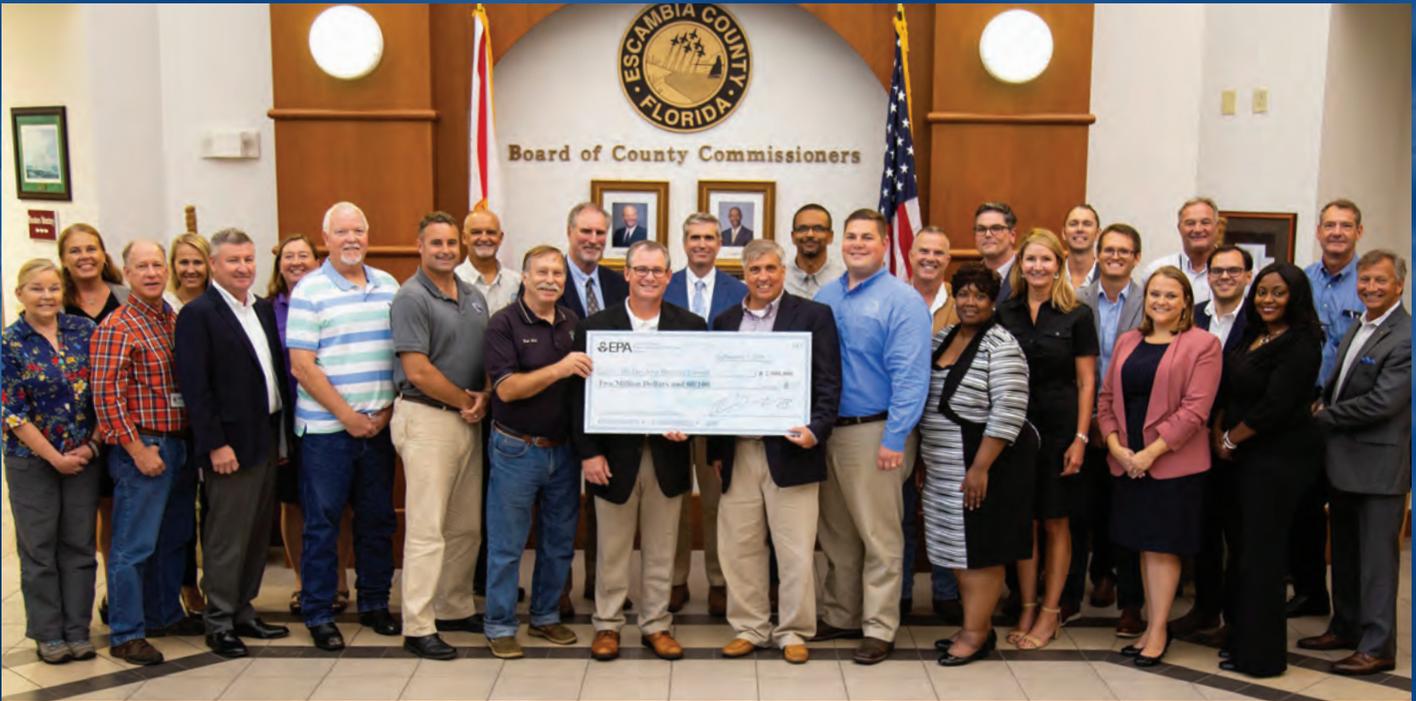
The program will be modeled after the structure and operation of National Estuary Programs (NEPs), but will not be designated as an NEP. History has shown how successful the NEP model has been in bringing stakeholders together to solve environmental problems and protect resources that affect our quality of life. The Pensacola and Perdido Bays Estuary Program (PPBEP) will develop a Comprehensive Conservation and Management Plan (CCMP), supported by community stakeholders and the best available science, that will outline a five-year strategy on how to address the most significant issues affecting these watersheds.

For more than 50 years, partners in these watersheds have conducted extensive monitoring and research studies documenting water quality impairments and their causes. These partnerships were key to the success of their application for this award and will be the foundation of the new estuary program.

\$2.1 million

Mobile Bay National Estuary Program

The EPA awarded a cooperative agreement in FY 2017 to the Mobile Bay National Estuary Program (MBNEP) to design, permit and implement a stream restoration project in Twelve Mile Creek, which has been negatively impacted from excessive stormwater runoff and decaying infrastructure, and to remove invasive species in the Three Mile Creek Watershed. MBNEP continues to work with local stakeholders to complete the design and engineering for this project. The EPA expects to award the implementation funding in FY 2019.



The EPA awarded \$2 million to the Bay Area Resource Council in Florida to establish the RESTORE-funded Pensacola and Perdido Estuary Program.

\$1.83 million

Tampa Bay Estuary Program RESTORE Project

In FY 2018, the EPA awarded a cooperative agreement to the Tampa Bay Estuary Program (TBEP) to support the implementation of five priority water quality and habitat improvement projects throughout the Tampa Bay Watershed.

The five projects are:

- Biosolids to Energy with the city of St. Petersburg
- Copeland Park Stormwater Enhancements with the city of Tampa
- Coastal Invasive Plant Removal with Hillsborough County
- Robinson Preserve Water Quality and Habitat Restoration with Manatee County
- Ft. De Soto Recirculation and Seagrass Recovery with Pinellas County

Each of the project elements will advance protection and restoration of Tampa Bay by addressing issues such as invasive species in Cockroach Bay, Robinson Preserve and Copeland Park; habitat restoration in Fort De Soto and Robinson Preserve; and climate change, by installing a biogas-to-energy unit for the city of St. Petersburg. Each of these projects was identified in the Comprehensive Conservation and Management Plan for Tampa Bay.

\$2.5 million

Gulf of Mexico Conservation Enhancement Grant Program

The Gulf of Mexico Conservation Enhancement Grant Program (GMCEGP) will enhance private/public partnerships that support land protection and conservation across the Gulf Coast region.

The projects and programs funded by the GMCEGP will focus on:

- Enhancing land protection and conservation in priority landscapes
- Improving habitats and water quality on conserved lands
- Enhancing the understanding of the benefit of land protection
- Developing and implementing conservation management plans
- Restoring and managing critical aquatic shoreline and upland habitat
- Implementing other water quality and habitat restoration techniques

The EPA issued a Notice of Funding Opportunity in FY 2018, and expects to issue the awards in FY 2019.





Updates and Events



Celebrate the Gulf

SUMMARY

The Celebrate the Gulf Marine Education Festival, held annually in Pass Christian, Miss., collaborates with 70 organizations and more than 200 volunteers. The festival hosts more than 5,000 visitors from Mississippi, Louisiana, Florida and Alabama. All the exhibitors at the festival have an environmental message and are encouraged to have a kid-friendly, hands-on learning activity to encourage an interactive learning environment.

RESULTS

Approximately 200 children/adults visited exhibit.



Earth Fest

SUMMARY

Earth Fest, presented by Entergy, is held annually at the Audubon Zoo in New Orleans, La., and is a fun way for zoo visitors to learn about saving the environment. Exhibitors include groups from the nonprofit and governmental sectors, as well as businesses involved with environmental issues.

RESULTS

Approximately 150 children/adults visited exhibit.



WaterWorks Festival

SUMMARY

The WaterWorks Festival is held annually in Houston, Texas, and is hosted by the city of Houston as an educational opportunity for students of all ages to learn about regional water resources. Water professionals and environmental exhibitors share information about water supply, water and wastewater systems, and the importance of water conservation.

RESULTS

Approximately 200 children/adults visited the exhibit.

Renew Our Rivers

Mississippi Power's Renew Our Rivers Program is one of the state's premier, national award-winning environmental stewardship programs. These efforts partner corporate, national, regional and community volunteers to help make and keep the waterways in southeast Mississippi healthy. In October 2017, five staff participated in the cleanup in Gulfport Lake and Big Lake.





Environmental Justice Small Grant Awards

Definition of Environmental Justice

The EPA defines “environmental justice” as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.



Groundwork New Orleans

Project title: Building Climate-Resilient Communities

The project focuses on teaching students to design, build and install solar powered charging benches on or near bus stops in underserved communities, providing clean energy sources for public transportation users, educating community members and providing a green power source within the community in case of an emergency.

To date, the project has resulted in the installation of one solar powered bench with educational signage. The community-at-large has participated in learning sessions and understands the significance of the booth to maintaining a healthy environment.

STEPS Coalition

Project title: North Gulfport Water Quality Education and Leadership Development Program

The project entails implementation and development of a leadership and educational program. The goals are to improve the water quality of Turkey Creek and connected waterways and to mitigate effects of changes in climate for nearby communities.

To date, a select number of students from Forest-Heights Boys and Girls Club have participated in environmental education lessons afforded through the project. Students have learned basic water monitoring techniques and the role of riparian buffers and identity/importance of waterways in proximity to their residences. Before the project ends, students will share what they’ve learned with city officials and community members.



Choctaw Nation of Oklahoma

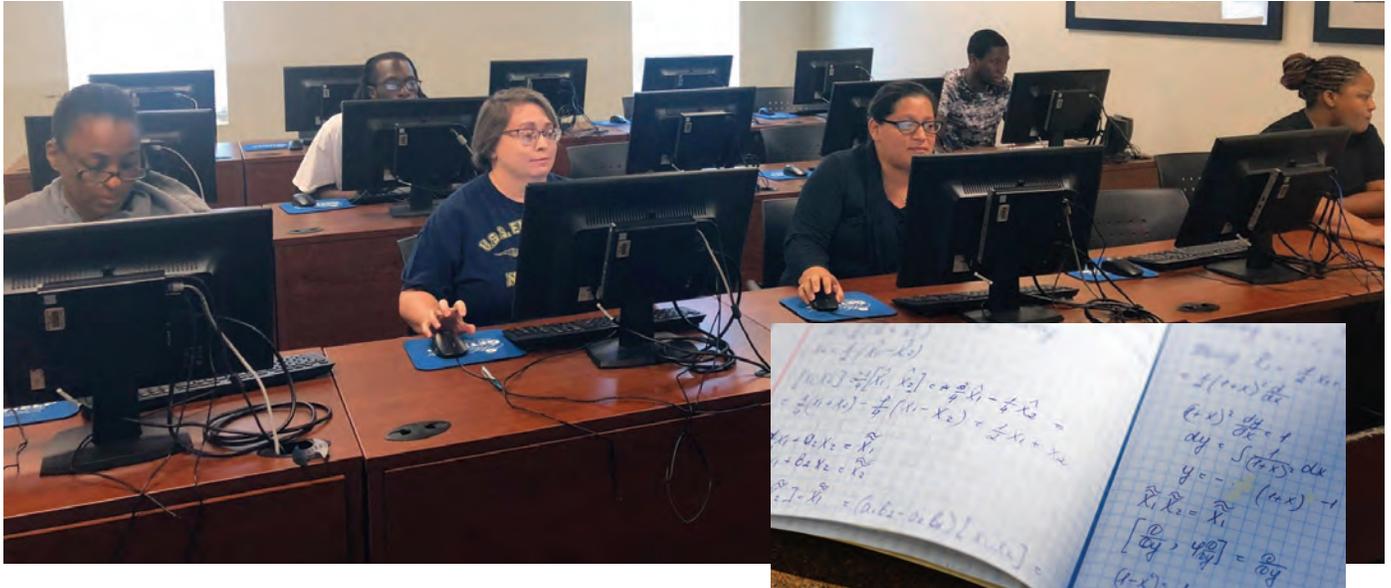
On Oct. 17, 2017, the Choctaw Nation of Oklahoma’s Project Oka (GMP-funded) held a stream cleanup and water monitoring educational event on Mud Creek in Idabel, Okla., with 14 students from Idabel High School. In southeast Oklahoma, the Choctaw Nation is a leader in recycling and litter reduction, which ultimately helps prevent plastics and other trash from entering the Gulf. The students cleaned up approximately 200 pounds of trash from the Mud Creek Watershed.





Senior Environmental Employment (SEE)

Through a cooperative agreement with the National Caucus & Center on Black Aging, Inc., the GMP employs enrollees of the Senior Environmental Employment (SEE) Program. These enrollees have helped and continue to help the GMP with making significant progress in reaching communities and establishing relationships. The work of the enrollees has catapulted education and engagement initiatives leading to resilient communities.



Math Tutoring Yields Opportunities for Participants

Excitement about the Pilot Math Tutoring Program has sparked much interest among various agencies, organizations, communities and prospective participants. The GMP, with the assistance of the Senior Environmental Employment Program (SEE), implemented a math tutoring program to assist participants with mastering the skill and building confidence, self-esteem and success in classrooms, the workforce and life.

The enthusiastic staff at the Gulfport Job Corps Center was the first agency to welcome the program. The center provided an inviting environment for tutors and students. Students were scheduled for sessions weekly, in the afternoon. As students began to learn math skills from the classroom, on various tests and in jobs, they became encouraged to focus on activities of interest and pursue goals. In keeping with the mission of the Job Corps Center, the Educational Department recognized the direct impact the tutoring program had on mastering math skills and increasing students' desire to learn and become successful. The tutoring program has now taken the form of medium-sized group sessions on a daily basis in which students are grouped by skill level and need.

Knowledge and wisdom are gleaned from years of learning from different life experiences. In knowing this, the Pilot Math Tutoring Program has seized the opportunity to engage in their second program for the year. This program is offered twice a week and has open lines of communication with invaluable resources in the community—adults. The program has partnered with a group of agencies and the Gulfport MS Port Authority to form a program called the Gulf Coast Consortium to help adults master math skills relating to the SmartStart Program. This program is the first step toward closing skills gaps and improving workforce quality. It helps employers select and retain quality workers and provide participants career advancement opportunities. The math skills are directly related to the ACT WorkKeys curriculum, which is designed to help participants increase ACT test scores, gain college credits and foster career success. These two programs have assisted more than 20 individuals, with many more on a waiting list.

The math program continues to soar! Plans are being established for a third program aimed at helping veterans and high school dropouts. The program's goal is to increase knowledge and opportunities and make a difference today for those who seek the assistance.



Gulf States Health Policy Coalition/MS Area

The Gulf States Health Policy (GSHP) Coalition fosters exchanges and collaboration between practitioners, researchers and policy experts. The MS Area GSHP Coalition works in conjunction with other coalitions in Bayou La Batre, Ala., Birmingham, Ala., and Hattiesburg, Miss., to collaborate, plan and conduct research to understand the many ways policies affect health in their communities.

The MS Area GSHP Coalition is composed of more than 10 organizations that meet monthly to develop and execute community-based research inclusive of stakeholders from a range of disciplines, organizations, and local, state and federal agencies.



Renaissance Development Corporation Veterans Work Force Development Initiative

The Renaissance Development Corporation (RDC) is a community-based organization that assists veterans from all branches of the Armed Services in re-entering the workforce and in providing safe and affordable housing and wrap-around support services for veterans and their families.

The Veterans Work Force Initiatives, aided by SEE/Educational Specialists and SEE Community Liaison Specialists, help veterans access resources that can help increase their potential for job placement with industries in the region and connect them with other resources that will serve to assist in areas applicable to healthy living. This is done as a part of ongoing Work Force Development Partnerships developed by SEE enrollees that use an educational enhancement and activities model to promote workforce development opportunities for MS Gulf Coast residents.

Outcomes from Works by the MS Area GSHP Coalition

SEE enrollees (coached and assisted by the Gulf States Health Policy Center and the Robert Wood Johnson Foundation) facilitated, guided and led to the success of the coalition in its efforts to provide health literacy focus groups and youth education classes through the Tobacco Free Coalition for residents in Biloxi Housing Authority facilities. Such efforts served to educate residents on the impact and effects of smoking and secondhand smoke in safeguarding their health, safety and well-being. The coalition also pushed and worked with the Biloxi Housing Authority Administration through the Tobacco Free Coalition to develop and deliver nonsmoking brochure for distribution. This brochure was a huge milestone in that it is now allowed to be distributed to all nine of the Biloxi Housing Authority properties, which means that hundreds of residents will have access to information and resources to promote healthy living and can push for smoke-free living quarters.

Gulf States Health Policy Center

The Gulf States Health Policy Center (GS-HPC) is a Transdisciplinary Collaborative Center supported by the National Institutes of Health National Institute on Minority Health and Health Disparities. The ultimate goal is to improve health outcomes in the Gulf states.

The SEE Enrollee and Facilitator of the Gulf States Health Policy Coalition/MS Area was invited to and presented at the National Press Club in Washington, D.C., on "How Health Policy Affects Health Outcomes and Community Determinants of Health." The event engaged leaders from community, academic and policy arenas to explore the diverse ways that health policy affects health outcomes, as well as strategies for working collaboratively to improve health in vulnerable communities across the Gulf.





Oak Ridge Institute for Science and Education (ORISE) Participants

The Internship and Research Participation Programs at the EPA are managed by the Oak Ridge Institute for Science and Education (ORISE) under an interagency agreement between the EPA and the U.S. Department of Energy. The ORISE Internship and Research Participation Programs at EPA are STEM-related educational and training programs designed to provide students, recent graduates and university faculty opportunities to participate in project-specific EPA research and developmental activities.

Kate Doering

Kate Doering has worked on four projects this year: the Turkey Creek RARE project, Quarterly Oyster Project with MS DEQ, Annual Mississippi Coastal Assessment with MS DEQ and the 2018 Shelf-wide project with Dr. Nancy Rabalais. These projects have included collection of hydrographic profile data, collect and filter water for PhyloChip, quantitative polymerase chain reaction, nutrient, viral, chlorophyll, and IDEXX bacterial testing. Kate's responsibilities included reading and recording the most probable number for E. coli and Enterococcus samples, and identifying sediment samples for benthic, organic and metal testing.

Colby McClain

Colby McClain has worked on mind mapping as a tool to identify and assess environmental concerns among children to guide and tailor environmental education (EE) curriculum to individual community needs. In accordance with the goals of the project, to evaluate environmental problems affecting communities, EE resources will be provided to help implement effective EE programs into the curriculum.

Clarence Nichols

Clarence Nichols is a student seeking a marine biology degree at the University of Southern Mississippi. In the summer of 2018, he graduated from Mississippi Gulf Coast Community College as an honor student. During his two years of attendance at MGCCC, he conducted an oyster recycling survey and mentored MGCCC students who will be graduating with both their high school diploma and associate's degree during the summer of 2019. He is currently researching enterococcus (EN) levels along Mississippi Gulf Coast beaches. EN is an indicator bacteria that government entities use to let the public know that their recreational waterways may be contaminated. Each week he obtains water and sediment samples from six beach sites and takes them back to the lab for assessment. His main goal with this research is to discover if wave action is trapping large amounts of EN in the sand of the supralittoral zone and to find out the source of EN with a real-time polymerase chain reaction machine.

Amanda Kincke-Tootle

Amanda Kincke-Tootle has been working toward gaining hands-on knowledge of different sampling techniques through two projects: a collaboration with the Mississippi Department of Environmental Quality, and the RARE Turkey Creek project. These techniques include in situ water collection and environmental condition measurements, and lab analysis of water samples for environmental impacts. This type of on-the-job training will assist in furthering our current and future education to develop scientific careers in the Gulf of Mexico area.

Kathryn Millard

Kathryn Millard's project centers on engagement with East Biloxi area residents, business owners and local organizations on promoting awareness of environmental resources and safe practices to combat environmental concerns, while encouraging positive reinforcement in ways that effect change. In addition, she will partner with the Harrison County Biloxi Public Library System and other local organizations to create two small community gardens, which will be stationed at the Margaret Sherry and Woolmarket locations. These gardens will serve as newly developed educational programs in the form of an outdoor classroom, engaging families and nearby school districts while adding EE to their current course of studies.

Tony Nguyen

Tony Nguyen engages students in EE through their project "The Science Seminar Series" during the academic school year. The seminars are interactive modules for introducing 110 students to environmental topics related to the Gulf of Mexico and its watershed through classroom activities and field trips. The modules leveraged resources offered by local agencies and organizations to improve knowledge of the Gulf of Mexico Watershed, while promoting community stewardship and involvement. Additionally, the seminars provided an opportunity to connect students to these agencies and organizations for ongoing partnership and collaboration. Project partners included Gulfport High School, Gulf Coast Community Design Studio, USDA and NOAA.





National Academy of Sciences (NAS) Fellow

The NAS Gulf Research Program's Science Policy Fellowship program helps scientists hone their skills by putting them to practice for the benefit of Gulf Coast communities and ecosystems. Fellows gain firsthand experience at the interface of science and policy as they spend one year on the staff of federal, state, local or non-governmental environmental, natural resource, oil and gas, and public health agencies in the Gulf of Mexico region.

National Academy of Sciences Gulf Research Program (NAS GRP) Fellow: Philip Lee

Dr. Philip Lee has partnered with Louisiana Rice Institute to examine concentrations of urea, an organic form of nitrogen, in different Louisiana watersheds. This effort was co-led with Calista Mills, who additionally worked with Dr. Lee to successfully set up the ability to conduct environmental source tracking analyses via quantitative polymerase chain reaction (qPCR) in the GMP/USM Gulf Community Environmental Lab, for local partners and communities worried about water contamination. In addition to environmental studies, Philip presented at the Gulf of Mexico Alliance All Hands Meeting Tools Café on developing phone apps to improve science communication. His phone app development ideas began while working with state of Louisiana partners on figuring out ways to better educate a variety of Gulf Coast communities as well as non-native English speakers about heavy metal contamination in fish.





Gulf Guardian Award Winners

About the Gulf Guardian Awards

The Gulf of Mexico Program Partnership developed the Gulf Guardian awards as a way to recognize and honor the businesses, community groups, individuals and agencies that are taking positive steps to keep the Gulf healthy, beautiful and productive. The Gulf Guardian Award exemplifies what the Gulf of Mexico Program is all about: innovative solutions that come about when we pool resources and look for creative ways to positively impact our quality of life and economic well-being. The first Gulf Guardian Award winners were recognized in 2000. Every year since, a first, second and third place award have been given in seven categories:

- Business/Industry
- Civic/Non-Profit Organization
- Partnerships
- Youth Environmental Education
- Individual
- Bi-National
- Environmental Justice/ Cultural Diversity

Since 2009, the Gulf Guardian awards are recognized on a biannual basis.

2017 First Place Gulf Guardian Winners

1st Place Business & Industry

Booyah Clean Marine Cleaners
Booyah Clean, LLC
Harahan, Louisiana

Booyah Clean is an award-winning line of marine cleaning products that are safer for human health and the environment, as designated by EPA's Safer Choice program. Booyah Clean Products give consumers an alternative to conventional marine cleaners that may contain toxic chemicals and should not be released directly into the environment. The innovation within Booyah Clean stems both from the breakthrough patent-pending formula that provides a healthy environment for aquatic life and the revolutionary creative process behind the conception of the products.



Pictured from left to right: Donna Simms, Michael Wisecarver and Ligia Hernandez of Booyah Clean; Bill Honker, EPA Region 6 Water Division Director.

1st Place Youth Environmental Education

Watershed Investigations: Engaging Underserved Youth
The Florida Aquarium
Tampa, Florida

Watershed Investigations (WI) enables underserved students to experience their watershed while conducting scientific investigations. Components include exploring issues, learning and practicing field techniques, collecting data, and analyzing results with teachers and peers. During the lifespan of the project, WI has impacted approximately 2,640 students and 80 teachers.



Pictured from left to right: Sabrina DiNella, Tristin Ware, Katie Fortescue and Debbi Stone of The Florida Aquarium; Anne Heard, EPA Region 4 Deputy Regional Administrator.

1st Place Environmental Justice/Cultural Diversity

Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw Tribal Resettlement
Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw
Houma, Louisiana

The Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw is in the process of resettling their community further inland as a result of tremendous land loss. Once completed, the resettlement will bring together the now-scattered tribal population while also restoring the ecosystem at the new site.

The goal of the resettlement is to maintain and strengthen the tribe's safety, collective identity, social stability and contribution to the region. Traditional ways of life will be rekindled and reinforced with tribal members living in one community.



Pictured from left to right: Deputy Chief Boyo Billiott; Chief Albert Naquin; Bill Honker, EPA Region 6 Water Division Director.





Pictured from left to right: Sandy Parker, Julie Massey, George Kyame, Stennie Meadours and Maureen Nolan-Wilde of Galveston Bay Area Texas Master Naturalist; Bill Honker, EPA Region 6 Water Division Director.

1st Place Civic/Non-Profit
Texas Master Naturalist Confront Plastic Pollution
Texas Master Naturalist - Galveston Bay Area Chapter
La Marque, Texas

Galveston Bay Area Chapter (GBAC) members have monitored nesting sea turtles and shore birds for the last several years. Noticing increasing numbers of birds harmed or killed due to plastic litter, members realized plastic pollution needed to be removed and other organizations and the public needed to learn about the harm plastic litter was doing.

In January 2016, the chapter committed to conducting cleanups and included plastic pollution education in all outreach activities. They held 12 cleanup events throughout the Galveston Bay area, removing more than 3,500 pounds of plastic. They also hosted 178 education events with direct contact to 3,250 community participants, which promoted awareness and shifted behavior to promote proper disposal of plastic.

1st Place Individual
Dana Pounds
Nature's Academy
Bradenton, Florida

Since founding Nature's Academy in 2007, Dana has impacted more than 50,000 students from 41 states and four countries. A true advocate of educational equity, Dana offers programs to underserved students at no cost to their families or schools. In 2016, every fifth grader within Manatee County School District attended a Nature's Academy "edventure." She inspires and empowers students to become environmental stewards of the Florida Gulf Coast, creating a legacy that will endure for generations.



Dana Pounds, Executive Director, Nature's Academy; Anne Heard, EPA Region 4 Deputy Regional Administrator.



Pictured from left to right: Dr. Quenton Dokken, Eric Gustafson and Dr. Cuauhtemoc Leon of the Gulf of Mexico Foundation - Mexico Chapter; Bill Honker, EPA Region 6 Water Division Director.

1st Place Bi-National
Mangrove Restoration in Key Mexican Coastal Lagoons at the Gulf of Mexico
Gulf of Mexico Foundation - Mexico Chapter
Mexico

The Gulf of Mexico Foundation Mexico Chapter works to raise public awareness of wetlands and coastal habitats while working to conserve and restore these ecosystems. During 2015, the Mexico Chapter carried out a major project to restore mangroves in coastal lagoons in the Mexican Gulf States of Veracruz, Campeche and Quintana Roo. Working with unique conditions and threats at each site, the group restored almost 82 acres of mangroves, which benefited an additional 370 acres of habitat. The restoration of coastal lagoons and mangroves will help re-establish habitats that sustain a wide variety of plants and animals, nourishing coastal fisheries and supporting complex food webs.

1st Place Partnerships
Mississippi Derelict Crab Trap Removal Program
Mississippi Department of Marine Resources
Biloxi, Mississippi

The Mississippi Department of Marine Resources collaborated with the Gulf Coast Research Laboratory (GCRL) to establish the derelict crab trap removal program in 1999. The program addresses the problem with derelict crab traps in the Mississippi Sound and adjacent tributaries. Since the start of the project, more than 21,500 derelict traps have been removed from Mississippi waters. Of those, more than 15,000 were recovered by commercial fishermen.



Pictured from left to right: Harron Wise, John Anderson, Rick Burris, Harriet Perry, Darcie Graham and Traci Floyd; Anne Heard, EPA Region 4 Deputy Regional Administrator.



2017 Second Place Gulf Guardian Winners

2nd Place Business & Industry

BIOX Project - ExxonMobil Baton Rouge Refinery Baton Rouge, Louisiana

ExxonMobil Baton Rouge Refinery built new, innovative wastewater treatment tanks specifically designed to reduce the amount of nitrogen pollution in the wastewater, a multimillion-dollar investment. The innovative tank-in-tank design allows for two separate zones of biological treatment, one without oxygen and one with oxygen. These two separate zones allow for greater reduction of nitrogen in the wastewater and overall improved wastewater treatment. Since starting the new system in July 2014, the refinery has reduced nitrogen levels by more than 85 percent, as well as decreased solids and biochemical oxygen demand emissions.



Pictured from left to right: David Gatz, Del Dugas and Robert Bert of ExxonMobil; Bill Honker, EPA Region 6 Water Division Director.



Pictured from left to right: Cade Kistler, Laura Jackson, Jamie Bullock and Casi Callaway of Mobile Baykeeper; Anne Heard, EPA Region 4 Deputy Regional Administrator.

2nd Place Youth Environmental Education

Strategic Watershed Awareness and Monitoring Program (SWAMP) - Mobile Baykeeper Mobile, Alabama

The Strategic Watershed Awareness and Monitoring Program (SWAMP) is an education and monitoring program designed to broaden the understanding of watersheds, water quality, and how citizens impact the two. Mobile Baykeeper personnel educate high school students on watersheds and enlist students to receive training to monitor specific, local waterways. Through participation in SWAMP, students have the opportunity to investigate a water quality or pollution problem and develop a solution that can make a difference in their quality of life, local economy and natural resources.

2nd Place Environmental Justice/Cultural Diversity

The 34th Street Wholistic Gardens & Education Center, Inc. Gulfport, Mississippi

The 34th Street Gardens and Education Center (the Gardens) is a purposefully designed organic and hydroponic garden model and wellness park that allows people of all age groups and cultures to grow healthy foods and participate in activities that promote health, wellness and good stewardship of the Mississippi Gulf Coast Region. To date, the Gardens has recruited more than 25 volunteer master gardeners and provides workshops, training and seminars that promote health, wellness, gardening and environmental education.



Pictured from left to right: James Franklin, Aster Hawthorne and Andreas Franklin of 34th Street Wholistic Gardens and Education Center; Anne Heard, EPA Region 4 Deputy Regional Administrator.



Eric Brazer, Deputy Director, Gulf of Mexico Reef Fish Shareholder's Alliance; Bill Honker, EPA Region 6 Water Division Director.

2nd Place Civic/Non-Profit

Reef Fish Quota Bank - The Gulf of Mexico Reef Fish Shareholders' Alliance Galveston, Texas

The Gulf of Mexico Reef Fish Shareholders' Alliance launched the Quota Bank in 2015 in response to growing concerns about wasteful discarding of red snapper in the Gulf's grouper fishery and transitioning this successful fishery into the hands of the next generation of fishermen. It is the first fishermen-run community quota program in the Gulf of Mexico. In less than two years, the Quota Bank has worked with 20 fishermen in 15 fishing communities to salvage more than 50,000 pounds of red snapper from being wastefully discarded, generated more than \$150,000 in revenue for these businesses and assisted two young commercial fishermen in helping them build stronger business plans.

2nd Place Individual

Sharon Gincauskas - Ocean Hour, Inc. Pensacola, Florida

Sharon Gincauskas has single-handedly created a sustainable weekly beach cleanup involving volunteers spanning the entire Pensacola, Gulf Breeze and Pensacola Beach communities. Each Saturday morning, year round, Sharon presides over a one-hour shore cleanup, directing the volunteers and providing the supplies, and at the end of the hour processing the collected marine debris and disposing of the trash. Sharon's efforts began four years ago when she went out to clean up by herself. Sharon's hard work and accomplishments can be measured in the tons of marine debris removed from northwest Florida's shores and watersheds, more than two tons of trash in 2016.



Sharon Gincauskas, Director, Ocean Hour, Inc.; Anne Heard, EPA Region 4 Deputy Regional Administrator.



Tricia Cortez, Executive Director, Rio Grande International Study Center; Bill Honker, EPA Region 6 Water Division Director.

2nd Place Bi-National
Rio Grande International Study Center
Laredo, Texas

RGISC’s mission is to preserve and protect the Rio Grande-Rio Bravo and its watershed and environment through awareness, advocacy, research, education, stewardship and binational collaboration for the benefit of present and future generations.

Launched in 2010, RGISC’s Rio Research Roundup (RRR) is a binational water testing project that brings greater environmental awareness about the health of several river basins that drain into the Gulf of Mexico.

2nd Place Partnerships

Gulf Citizen Science Data Portal - Gulf of Mexico Coastal Ocean Observing System
College Station, Texas

The Gulf of Mexico Coastal Ocean Observing System’s (GCOOS) Gulf Citizen Science Portal encourages a widespread, diverse Gulf community to contribute knowledge and data about the Gulf. The backbone of the citizen monitoring network is composed of retired citizens and many students from underserved and underrepresented communities. The portal was developed and implemented as a cost-effective way to gather local information over long periods of time, allowing state, federal and academic programs to supplement datasets with important detail.



Pictured: Contributors to the Gulf Citizen Science Data Portal; Anne Heard, EPA Region 4 Deputy Regional Administrator.

2017 Third Place Gulf Guardian Winners



Marissa Llosa, Extension Program Specialist, Texas A&M AgriLife Extension Service; Bill Honker, EPA Region 6 Water Division Director.

3rd Place Civic/Non-Profit
Sheldon Lake State Park Wetland Restoration Partnership
Texas A&M AgriLife Extension Service - Houston, Texas

The Sheldon Lake State Park Wetland Restoration partnership has restored more than 375 acres of critical coastal prairie wetland habitat at Sheldon Lake State Park in the last 13 years. Investing more than 10,500 hours since 2003, the volunteers have been a fundamental component of the restoration. Similarly, student involvement (representing more than 3,500 hours) has been equally critical for the project and the students themselves, increasing their stewardship role in “their” park. The long-term success of the restoration has been further validated with recent funding to complete the fifth phase of restoration with an additional 62 acres.

3rd Place Individual

Susan Testroet-Bergeron - Barataria-Terrebonne National Estuary Program
Thibodaux, Louisiana

After the tragedies of Hurricane Katrina and the Gulf oil spill, Susan realized the best education of our culture, environment and fragile land comes from the people who live here. She worked to tell their stories by curating an exhibit for the Coastal Wetlands Planning, Protection and Restoration Act called “I Remember,” which features oral histories, photographs and original art depicting individuals who work, live and play in Louisiana’s coastal wetlands.



Susan Testroet-Bergeron, Director, Barataria-Terrebonne National Estuary Program; Bill Honker, EPA Region 6 Water Division Director.



Rosario Martinez, Senior Project Manager, Coastal Bend Bays & Estuaries Program; Bill Honker, Region 6 Water Division Director.

3rd Place Partnerships

Nueces Bay Marsh Restoration Project - Coastal Bend Bays & Estuaries Program
Corpus Christi, Texas

The Nueces Bay Marsh is a 160-acre marsh restoration project along the Nueces Bay Causeway between Corpus Christi, Texas, and Portland, Texas. The marsh began to decline in the 1940s when construction began on the Highway 181 Nueces Bay Causeway. The construction and related dredging lasted almost 15 years and resulted in the loss of about 180 acres of highly productive marsh. In the years that followed, an additional 160 acres of marsh was lost due to erosion and subsidence. The loss not only harmed the fish and wildlife in the marsh, but it threatened the Highway 181 corridor and associated infrastructure.





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