NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

# *NOAA In Your State*

# Louisiana

***NOAA** is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep citizens informed of the changing environment around them. From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers and other decision makers with reliable information they need when they need it.*

***The following is a summary of NOAA facilities, staff, programs, or activities based in, or focused on, your state or territory: Starting with highlights, then by congressional districts and cities or towns, coastal programs, and then statewide programs.***

## *Highlights of NOAA in Louisiana*

| | | |
|---|---|---|
| Lower Mississippi River Forecast Center | Slidell | LA-1 |
| Estuarine Habitats and Coastal Fisheries Center | Lafayette | LA-3 |
| Habitat Conservation Division Field Office | Baton Rouge | LA-6 |
| Southern Climate Impacts Planning Program | Baton Rouge | LA-6 |
| Bipartisan Infrastructure Law (BIL) / Inflation Reduction Act (IRA) Projects | Project Specific | LA |

The state of Louisiana also has three Weather Forecasting Offices, one Regional Office, one Regional Climate Center, and one Lab and Field Offices.

## *Weather Forecast Offices*

| | |
|---|---|
| New Orleans/Baton Rouge | LA-1 |
| Lake Charles | LA-3 |
| Shreveport | LA-4 |

**National Weather Service (NWS) Weather Forecast Offices (WFO)** are staffed 24/7/365 and provide weather, water, and climate forecasts and warnings to residents of Louisiana. There are 122 WFOs nationwide of which three are in Louisiana. Highly trained forecasters issue warnings and forecasts for weather events, including severe thunderstorms, tornadoes, hurricanes, winter storms, floods, and heat waves to the general public, media, emergency management and law enforcement officials, the aviation and marine communities, agricultural interests, businesses, and others. Information is disseminated in many ways, including wireless emergency alerts, social media,weather.gov, and NOAA Weather Radio All Hazards. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs that strengthen working relationships with local partners in emergency management, government, the media and academic communities. Forecasters provide Impact-based Decision Support Services (IDSS), both remotely and on-site during critical emergencies such as wildfires, floods, chemical spills, and major recovery efforts. To gather data for forecasting and other purposes, NWS WFO staff monitor, maintain and use Automated Surface Observing Stations and Doppler Weather Radar. In addition to the WFOs, NWS operates specialized national prediction centers and regional headquarters throughout the U.S. for a total of 168 operational units. Over 85% of NWS' workforce is in the field. For current Louisiana weather, visit www.weather.gov and, on the national map, click on the relevant county or district.

### *LA-1*

### *Slidell*

**National Weather Service (NWS) - Lower Mississippi River Forecast Center**

Co-located with the NWS Weather Forecast Office in Slidell, the NWS Lower Mississippi River Forecast Center (RFC) performs continuous river basin modeling and provides hydrologic forecast and guidance products for rivers and streams in has responsibility for all drainage and tributaries of the Mississippi River basin below Chester, Illinois, including most of Louisiana, Arkansas, Tennessee, and Mississippi. These products include forecasts of river stage and flow, probabilistic river forecasts, reservoir inflow forecasts, gridded precipitation estimates and forecasts, spring flood outlooks, and flash flood and headwater guidance. Some of the RFCs in the western and central U.S. also provide water supply forecasts. RFCs work closely with local, state and federal water management agencies , including the U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, and U.S. Geological Survey, to provide water and flood information for critical decisions (aka Impact-based Decision-Support Services or IDSS).

**National Weather Service (NWS) - Weather Forecast Office**-See Page 2 for details.

### *Grand Isle*

**Office of Oceanic and Atmospheric Research (OAR) – Grand Isle Oyster Research Lab**

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. Louisiana Sea Grant operates the Grand Isle Oyster Research Lab and the Michael C. Voisin Oyster Hatchery on Grand Isle, which have both research and commercial-scale larval rearing capabilities. It is the largest oyster research lab along the United States' Gulf of Mexico coast, based on larval rearing capacity.

### *LA-2*
### *New Orleans*

**NOAA Office of Education — Coastal Ecosystem Learning Centers (CELC) network**
In Louisiana, NOAA's Office of Education provides support to the Audubon Aquarium of the Americas in Orleans Parish as part of the Coastal Ecosystem Learning Centers (CELC) network, which is made up of 25 aquariums and marine science education centers located throughout North America. The CELC network collaborates on a variety of initiatives, ranging from youth summits to multi-institution projects, with the goal of better engaging the public in understanding, appreciating, and protecting marine and freshwater ecosystems. Through the CELC network, the Office of Education provides guidance, resources, and scientific expertise to these institutions, which collectively reach an estimated 20 million people annually across North America. By coordinating with the CELC network, NOAA helps to further its mission of engaging the public in protecting and preserving coastal and marine ecosystems.

**National Ocean Service (NOS) - OR&R Preparedness, Response, and Restoration Coordinators**
NOAA's Office of Response and Restoration (OR&R) is a center of expertise in preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, disasters, and marine debris. To fulfill its mission of protecting and restoring NOAA trust resources, OR&R provides scientific and technical support to prepare for and respond to environmental threats that coastal communities face; determines damage to natural resources from those releases; protects and restores marine and coastal ecosystems; and works with coastal communities to address critical local and regional coastal challenges.

Eleven regionally based **Scientific Support Coordinators (SSC)** harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental trade-offs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSC for Louisiana is based in New Orleans at OAA's Gulf of Mexico Disaster Response Center.

### *LA-3*
### *Lake Charles*

**National Weather Service (NWS) - Weather Forecast Office-** See Page 2 for details.

### *Lafayette*

**National Marine Fisheries Service (NMFS) - Estuarine Habitats and Coastal Fisheries Center**
Located within the University of Louisiana at Lafayette Research Park, this state-of-the art facility houses the Marine Mammal Molecular Genetics Lab and supports the research of the Southeast Fisheries Science Center.

**Office of Oceanic and Atmospheric Research (OAR) - U.S. Climate Reference Network**
The US Climate Reference Network (USCRN) is an operationally viable research network of more than 138 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). ARL/ATDD manage the USCRN in partnership with NOAA's NESDIS/NCEI.

### *LA-4*
### *Shreveport*

**National Weather Service (NWS) - Weather Forecast Office-** See Page 2 for details.

### *LA-4, 5*
### *Oakdale, Columbia*

**Office of Oceanic and Atmospheric Research (OAR) - VORTEX-SE and PERiLS**

In support of the VORTEX-SE and PERiLS field projects, the Physical Sciences Laboratory operates and maintains a 915-MHz wind profiler with RASS sources, and surface meteorology tripods at Columbia and Oakdale, Louisiana. At the Columbia site, PSL also installed an ASSIST infrared spectrometer, microwave radiometer, and laser ceilometer. Data collected at these sites will be used to better understand the atmospheric conditions that lead to severe storms and the sources of rotation for tornadic development.

### *LA-5*
### *Monroe*

**Office of Oceanic and Atmospheric Research (OAR) - U.S. Climate Reference Network**

The US Climate Reference Network (USCRN) is an operationally viable research network of more than 138 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). ARL/ATDD manage the USCRN in partnership with NOAA's NESDIS/NCEI.

### *LA-6*
### *Baton Rouge*

**National Marine Fisheries Service (NMFS) - Southeast Regional Office, Habitat Conservation Division Field Office**

The Southeast Regional Office has the Baton Rouge Field Office which is responsible for implementing NMFS's habitat protection program in Louisiana, Mississippi, and Alabama and in the adjacent Gulf of Mexico. In addition to conducting mandated essential fish habitat consultations associated with extensive energy and coastal development activities, the Office participates in state and regional habitat planning groups focusing on streamlining environmental compliance efforts for proposed Gulf restoration projects, provides assistance during hazardous material incidents and hurricane events, and participates in the planning processes for major federal infrastructure and water development projects, such as storm protection levees, locks, flood gates, and port expansions. Additionally, this Office is actively involved in Coastal Wetland Planning, Protection, and Restoration Act (Breaux Act) implementation activities, restoring barrier islands and thousands of acres of wetlands lost in Louisiana.

**National Ocean Service (NOS) - Louisiana Spatial Reference Center**

Partnering with NOAA, the Louisiana Spatial Reference Center (LSRS) serves as a new way of providing a spatial referencing liaison between Federal and local authorities. The Center is affiliated with the Center for GeoInformatics at Louisiana State University. The mission of the Center is to ensure the availability of accurate, consistent, and timely spatial referencing data for Louisiana. LSRC manages a statewide network of high precision Global Positioning System (GPS) receivers, which provide a direct connection to the National Spatial Reference System, pinpoint the location of subsidence, and measure exactly how fast the coast is sinking. Additional activities include: assisting NOAA in conducting aerial photography surveys and elevation surveys of Hurricane Evacuation routes; assisting NOAA in mapping the coastal regions of Louisiana and providing data for navigational charts; assisting NOAA in developing specifications and guidelines for GPS surveys and, educating users about spatial referencing issues.

**Office of Oceanic and Atmospheric Research- Southern Climate Impacts Planning Program**

The Southern Climate Impacts Planning Program (SCIPP) is a cooperative agreement between NOAA's Climate Program Office (CPO) and the University of Oklahoma. It is one of several Climate Adaptation Partnerships (CAP/RISA), formerly Regional Integrated Sciences and Assessments, teams contributing to to the advancement of equitable climate adaptation through sustained regional research and community engagement From severe storms, flooding, drought, hurricanes and

storm surge, heat waves, wildfires, to winter storms, the South experiences among the nation's most extensive collection of climate-related hazards, with many southern states ranking at or near the top of the lists in disaster declarations and billion-dollar disasters. SCIPP examines communities in the South through multiple lenses: climate-informed planning, developing governance and collaborative capacity, extreme events in a changing climate, and climate justice. Core partners of SCIPP include the University of Oklahoma, Oklahoma Climatological Survey , the South Central Climate Adaptation Science Center , the Cooperative Institute for Mesoscale Meteorological Studies , University of Oklahoma, Louisiana State University , the Southern Regional Climate Center , the University of Nebraska - Lincoln, the University of Kansas, and Texas Sea Grant. Contact information and more details about this team can be found here.

### *Coastal*

**National Marine Fisheries Service (NMFS) - Deep-Sea Coral Research and Technology Program**

NOAA's Deep Sea Coral Research is administered by NOAA Fisheries' Office of Habitat Conservation. Mandated by the Magnuson-Stevens Fishery Conservation and Management Act, it is the nation's only federal research program dedicated to increasing scientific understanding of deep-sea coral ecosystems. Deep-sea corals occur off of every coastal state in the country, and create important habitats for countless species, including many fish species. The Program collaborates closely with partners, including other NOAA offices, to study the distribution, abundance, and diversity of deep sea corals and sponges. This work then informs critical management decisions in the waters of the United States and its territories. These decisions enhance the sustainability of deep-sea fisheries and other ocean uses, while conserving deep-sea coral and sponge habitats.

The Program works with partners to complete multi-year regional fieldwork initiatives, as well as smaller projects around the country, centered on integrating new and existing information on these vulnerable and biologically diverse habitats. The first research initiative took place from 2009 to 2011 in the U.S. South Atlantic region and provided valuable information to help decision-makers refine protected area boundaries. To date, the Program has completed one or more initiatives in each region of the United States.

**National Marine Fisheries Service (NMFS) - Cooperation with States Program and Species Recovery Grants**

Under the authority of section 6 of the Endangered Species Act, the Cooperation with States Program brings states, NMFS, and other partners together to recover threatened and endangered species. A total of 25 U.S. territories and coastal states, including Louisiana, currently participate in this program. Competitive grants are awarded to states through the Species Recovery Grants to States Program to support management, monitoring, research and outreach efforts for species that spend all or a portion of their life cycle in state waters. The funded work is designed to prevent extinctions or reverse the decline of species, and restore ecosystems and their related socioeconomic benefits.

**National Marine Fisheries Service (NMFS)** - **National Marine Mammal Stranding Network and John H. Prescott Marine Mammal Rescue Assistance Grant Program**

The National Marine Mammal Stranding Network and its trained professionals respond to dead or live marine mammals in distress that are stranded, entangled, out of habitat or otherwise in peril. Our long-standing partnership with the Network provides valuable environmental intelligence, helping NOAA establish links among the health of marine mammals, coastal ecosystems, and coastal communities as well as develop effective conservation programs for marine mammal populations in the wild. There is one stranding network member in the state. NOAA Fisheries funds eligible members of the Stranding Network through the competitive John H. Prescott Marine Mammal Rescue Assistance Grant Program. In FY20, 43 competitive grants were awarded nationwide for a total of $3.7 million, with one for $99,263 going to Louisiana:  Audubon Nature Institute, Inc..

**National Marine Fisheries Service (NMFS) - Sea Turtle Salvage and Stranding Network**
The Sea Turtle Stranding and Salvage Network (STSSN) was formally established in 1980 to collect information on and document strandings of marine turtles along the U.S. Gulf of Mexico and Atlantic coasts. The network, which includes federal, state and private partners, encompasses the coastal areas of the eighteen-state region from Maine to Texas, and includes portions of the U.S. Caribbean. Data gathered by the Network helps inform bycatch reduction efforts, monitor factors affecting turtle health, and provide other information needed for sea turtle management and population recovery.

**National Ocean Service (NOS) – Bipartisan Infrastructure Law**
The Bipartisan Infrastructure Law is helping coastal communities build the future they want to see. The legislation provides a historic investment in coastal protection and restoration that will increase community resilience to climate change and extreme weather events, and improve how we manage our ocean resources. Projects funded under this law protect and restore ecologically significant habitats, including conserving lands that play a critical role in helping communities become more resilient to natural hazards. Louisiana received funding for one project in FY22, as well as funds in FY22 and FY23 to build the state's capacity to protect its coastal communities and resources.

**National Ocean Service (NOS) – Climate Resilience Regional Challenge**
In July 2024, NOAA announced $575 million in funding for the Climate Resilience Regional Challenge, provided by the Inflation Reduction Act, to invest in holistic, collaborative approaches to coastal resilience at regional scales. This grant program focuses on increasing resilience to extreme weather events, such as hurricanes and storm surge, and longer-term, chronic hazards such as sea level rise, drought, wildfire, extreme heat, and coastal erosion. The program awarded 19 grants that are part of NOAA's larger Climate-Ready Coasts initiative to forge new partnerships, protect coastal habitats, and close equity gaps. They will help scale up proven best practices across 17 states and territories to take resilience and adaptation plans off paper and into coastal communities across the country.

Three Climate Resilience Regional Challenge grants were awarded in Louisiana (LA-01, LA-02, LA-03, LA-06) A grant awarded to the ByWater Institute for $1,998,800 will use a multipronged approach for community-based regional planning and governance to develop a coordinated vision and sustainable, resilience-focused action plan for Louisiana's Southwest and Central Acadiana. Activities include analyzing existing plans; characterizing climate risk; defining best practices; prioritizing potential projects; evaluating policies; and developing engineering reports to move prioritized projects toward implementation. This funding supports foundational building blocks needed for long-term success, including filling in technical and data-related information gaps; helping communities identify and use appropriate data and tools; strengthening coordination between governments at all scales, including tribal; assessing the robustness of existing resilience projects, policies, and programs; and evaluating equity impacts.

A grant to the New Orleans Community Support Foundation for $1,998,800 will build on more than a decade of planning and collaboration across the greater New Orleans region to adopt a holistic, adaptive water management vision that centers the leadership of Black, Indigenous, and people of color communities.This vision will enable greater cohesion in selecting community green infrastructure projects and ensure the investments address multiple climate hazards and realize multiple benefits. This project will result in 1) a regional approach to making key water management and climate adaptation data more accessible to the community; 2) a policy manual for holistic, adaptive management of green infrastructure projects; and 3) a public communications campaign that highlights the collaborative's efforts and findings with media, events, workshops, and facilitated conversations about management efforts across the region.

The United Houma Nation received $56,573,066. In southern Louisiana, the United Houma Nation is pursuing a comprehensive approach to addressing coastal climate change through a multiphase project that views resilience through a cultural, environmental, economic, and emergency-response lens. Phases one and two involve upgrading community resilience hubs across six parishes, all of which serve critical functions, including serving as evacuation and distribution

sites. Phase three focuses on strengthening and expanding the tribe's communications infrastructure, allowing for more effective communication before, during, and after disasters. In the final phase, the tribe will proactively strategize with its citizens about 1) developing a community-led migration strategy; and 2) the potential to facilitate community-led migration while continuing and strengthening land stewardship by implementing community land trusts.

**National Ocean Service (NOS) – NOAA RESTORE Science Program**
The mission of NOAA's RESTORE Science Program is to carry out research, observation, and monitoring to support the long-term sustainability of the Gulf of Mexico ecosystem. The Science Program receives 2.5 percent of the Gulf Coast Restoration Trust Fund, which is funded from penalties associated with the Deepwater Horizon Oil Spill. The Science Program uses stakeholder input to design funding competitions that support teams of resource managers and researchers to work collaboratively to address regional needs. The Science Program has an office at the Stennis Space Center.

**National Ocean Service (NOS) - Morgan City PORTS®**
A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the Port of Morgan City at the entrance and along the Atchafalaya River where real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time data are available for water levels at three stations with meteorological sensors and currents from one station.

**National Ocean Service (NOS) - Lower Mississippi River PORTS®** A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in the Lower Mississippi River at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time data are available for water levels at three stations, bridge air gap data from two stations, meteorological data from two stations, and wave data from one location.

**National Ocean Service (NOS) - Port Fourchon PORTS®**
A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with Port Fourchon along the Gulf Coast where real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time water level (tide) data are available for location in this PORTS®.

**National Ocean Service (NOS) - Lake Charles PORTS®**
A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with Lake Charles along the Gulf Coast where real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time water level (tide) data and meteorological observations are available for three locations, tidal currents for four locations and bridge air gap clearance at one location.

**National Ocean Service (NOS) - National Water Level Observation Network**
The National Ocean Service (NOS) operates ten long-term, continuously operating tide stations in the state of Louisiana that provide data and information on tidal datum and relative sea level trends, and are capable of producing real-time data for storm surge warning. These stations are located at Pilots Station, SW Pass; Shell Beach, Lake Borgne; Grand Isle; USCG New Canal Station;; West Bank, Bayou Gauche; Berwick; LAWMA; Alameda Pass; Freshwater Canal Locks; Lake Charles; and Calcasieu Pass. Many of these stations also include meteorological sensors as well. Each station is associated with a set of tidal benchmarks installed in the ground that is used to reference the height of the water levels and helps connect the water level to land. Station data feeds into many CO-OPS products that are used to support safe navigation, mitigate coastal hazards, and protect communities. Such products include:

- Coastal Inundation Dashboard - view water levels in real-time and during storms
- High Tide Flooding Outlooks
- Sea level trends and maps

- Real-time current measurements
- Hydrodynamic models
- Tidal and water level datums

**National Ocean Service (NOS) - Flower Garden Banks National Marine Sanctuary**
The 17 reefs and banks comprising Flower Garden Banks National Marine Sanctuary lies 80 to 125 miles off the coast of Texas and Louisiana in the Gulf of Mexico and includes thriving shallow water coral reefs, algal-sponge communities, and deeper mesophotic habitat full of black coral and octocoral.. It contains the northernmost coral reefs on the continental shelf of North America, sitting atop salt domes 55 to 450 feet below the water's surface. Unique in this part of the Gulf, the multi-colored corals, plants and sponges at the Flower Garden Banks National Marine Sanctuary resemble reef development typically found over 400 miles due south in Mexico's Gulf of Campeche or 790 miles southeast in the Florida Keys. A popular destination for scuba divers, commercial and sport fishers, the reefs serve as a regional reservoir of shallow water Caribbean reef fishes and invertebrates, as well as mesophotic invertebrates and fishes. The Gardens are significant habitat for lobster, snapper, grouper, manta rays, loggerhead and hawksbill turtles and whale sharks. The sanctuary is managed out of Galveston, Texas.

**National Ocean Service (NOS) - Navigation Manager**
OCS navigation managers are strategically located in U.S. coastal areas to provide regional support to federal and state agencies in order to assist with a variety of navigation related challenges. NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in Louisiana to help identify the navigational challenges facing marine transportation in Louisiana and provide NOAA's resources and services that promote safe and efficient navigation. Navigation managers are on call to provide expertise and NOAA navigation response coordination in case of severe coastal weather events or other marine emergencies. The Office of Coast Survey has a Navigation Manager located in Lafayette, LA to support mariners and stakeholders in Central Gulf Coast waters.

**National Ocean Service (NOS) - Navigation Response Team**
The Office of Coast Survey (OCS) maintains the nation's nautical charts and publications for U.S. coasts and the Great Lakes. OCS navigation managers are strategically located in U.S. coastal areas to provide regional support to federal and state agencies in order to assist with navigational challenges. The Office of Coast Survey's Navigation Response Branch (NRB) conducts routine and emergency hydrographic surveys; and working with the regional Navigation Managers, navigation response teams (NRT) work around-the-clock after storms to speed the reopening of ports and waterways. During emergency response, the NRTs provide time-sensitive information to the U.S. Coast Guard or port officials, and transmit data to NOAA cartographers for updating the Coast Survey's suite of navigational charts. NRT-Gulfport is homeported in Gulfport, MS and is able to respond within 24 to 48 hours.

**National Ocean Service (NOS) - OR&R Gulf of Mexico Environmental Response Management Application and Response Tools for Oil and Chemical Spills, Preparedness Training for Responders**
Assessing important spatial information and designing successful restoration projects rely upon interpreting and mapping geographic information, including the location, duration, and impacts from oil spills, other hazardous materials, or debris released into the environment Gulf of Mexico Environmental Response Management Application (ERMA®) is an online mapping tool that integrates both static and real-time data, such as ship locations, weather, and ocean currents, providing an easy-to-use common operating picture for environmental responders and decision makers. ERMA staff continued to work closely with Federal and State agencies for drills, hurricane response, and incidents. Maintained habitat data for sensitive species. Ensured data was kept up-to-date and data collection methods were kept consistent. In addition to ERMA, the Office of Response and Restoration (OR&R) offers a suite of tools to support emergency responders dealing with oil and chemical spills. From Environmental Sensitivity Index (ESI) maps and data which provide concise summaries of coastal resources including biological resources and sensitive shorelines to GNOME, a trajectory and fate model that

predicts the route and weathering of pollutants spilled on water, and so much more, these tools provide easy-access to critical data that support a wide range of needs for emergency responders, ultimately supporting our coastal communities. In addition, OR&R offers training to help spill responders increase their understanding of oil spill science when analyzing spills and making risk-based decisions. The training classes include the Science of Oil Spills (SOS), the Science of Chemical Releases (SOCR), Shoreline Cleanup Assessment Technique (SCAT), among others. Each year, OR&R teaches these classes around the country, see our calendar for upcoming training.

**National Ocean Service (NOS) - U.S. Integrated Ocean Observing System (Gulf of Mexico Coastal Ocean Observing System)**
The U.S. Integrated Ocean Observing System, or IOOS®, is a federally and regionally coordinated observing system with 17 interagency and 11 regional partners. The System addresses regional and national needs for coastal, ocean, and Great Lakes data and information. This includes gathering and disseminating regional observations; data management; modeling and analysis; education and outreach; and research and development. The Gulf of Mexico Coastal Ocean Observing System (GCOOS), one of the 11 IOOS regional coastal ocean observing systems, seeks to establish a sustained observing system for the Gulf of Mexico that will provide observations and products needed by users in the region for the purposes of detecting and predicting climate variability and consequences, preserving and restoring healthy marine ecosystems, ensuring human health, managing resources, facilitating safe and efficient marine transportation, enhancing national security, and predicting and mitigating against coastal hazards. GCOOS is supporting the repair of two high-frequency radar stations damaged by hurricanes in the barefoot area of the Mississippi River Delta in support of navigation safety and search and rescue operations, and dispersal modeling needs.

**National Ocean Service (NOS) - Marine Debris Projects and Partnerships in Louisiana**
The NOAA Marine Debris Program (MDP) in the Office of Response and Restoration (OR&R) leads national and international efforts to reduce the impacts of marine debris. The program supports marine debris removal, prevention, and research projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. The MDP Gulf of Mexico Regional Coordinator supports coordination efforts with regional stakeholders, provides support to grant-funded projects, tracks progress of projects, and conducts regional marine debris outreach to local audiences. The MDP also works with local communities and organizations to remove marine debris. In Louisiana, the MDP is working with the Gulf of Mexico Alliance, using funding provided under the Bipartisan Infrastructure Law, to help administer a regional competitive grant program for large marine debris removal in Alabama, Florida, Louisiana, Mississippi, and Texas.The MDP is also working with the National Marine Sanctuary Foundation in partnership using funds provided under the Bipartisan Infrastructure Law, to remove large marine debris from five national marine sanctuaries in Washington, California, Texas, and Louisiana, including the Flower Garden Banks National Marine Sanctuary in Louisiana. The Lafourche Parish Government, using funds provided under the National Fish and Wildlife Foundation's Hurricane Supplemental Funding, is removing vegetative and marine debris from Bayou Boeuf, Dixie Canal, and Halpin Canal, restoring waterways to pre-Hurricane Ida conditions, and reestablishing critical functions including drainage, navigation, recreation, and support of surrounding wetland habitats. The MDP is working with Gulf of Mexico stakeholders through the Gulf of Mexico Alliance to implement the Gulf of Mexico Alliance Regional Action Plan, which provides a road map for strategic progress in making the Gulf of Mexico, its coasts, people, and wildlife free from the impacts of marine debris. The MDP is also currently working with state and local governments, and other stakeholders, to maintain and exercise the Louisiana Marine Debris Emergency Response Guide.

**National Ocean Service (NOS) - Coastal and Estuarine Land Conservation Program**
The Coastal and Estuarine Land Conservation Program brings conservation partners together to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic values. Subject to availability of funding, the program provides state and local governments with matching funds to purchase coastal and estuarine lands or obtain conservation easements for important lands threatened by development. Since

2002, the program has protected more than 110,000 acres of coastal land nationally, including over 16,000 acres protected as in-kind matching contributions. NOAA awarded seven grants in Louisiana, and these lands are protected in perpetuity. In addition, a land conservation project was funded in FY22 in Louisiana under the CELCP authority with funding through the Bipartisan Infrastructure Law.

**National Ocean Service (NOS) – National Coastal Zone Management Program**
Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the Louisiana Department of Natural Resources to implement the National Coastal Zone Management Program in Louisiana. NOAA provides the state coastal management program with financial and technical assistance to further the goals of the Coastal Zone Management Act and ensure coastal waters and lands are used in a balanced way to support jobs, reduce use conflicts, and sustain natural resources.

**National Ocean Service (NOS) – Digital Coast**
The Digital Coast is a focused information resource developed to meet the unique needs of coastal communities. Developed and maintained by NOAA's Office for Coastal Management, content comes from hundreds of organizations, including federal, state, and local agencies, plus private sector and non-profit contributors. The Digital Coast website provides not only site-specific coastal data, but also related tools, training, and information needed to make these data useful for coastal decision makers. The Digital Coast Act authorizes the Digital Coast as a standing national program and supports NOAA's efforts to increase access to authoritative data, tools, and training that enable coastal communities to plan for long-term resilience, manage water resources, and respond to emergencies.

**National Ocean Service (NOS) and National Marine Fisheries Service (NMFS)- Regional Ocean Partnerships: Gulf of Mexico Alliance**
Staff members from NOAA's Office for Coastal Management and NMFS SERO's' Habitat Conservation Division are active in the Gulf of Mexico Alliance (GOMA). The Gulf of Mexico Alliance is a Regional Ocean Partnership working to sustain the resources of the Gulf of Mexico. Led by the five Gulf States, the broad partner network includes federal agencies, academic organizations, businesses, and other non-profits in the region. GOMA's goal is to significantly increase regional collaboration to enhance the environmental and economic health of the Gulf of Mexico. With funding provided through the Bipartisan Infrastructure Law, NOAA is investing approximately $56 million over five years to enhance and support the priorities of established regional ocean partnerships, including coordinating interstate and intertribal management of ocean and coastal management issues, and enhancing sharing and integration of data.

**National Ocean Service (NOS) – National Coastal Resilience Fund**
The National Coastal Resilience Fund restores, increases, and strengthens natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. The National Fish and Wildlife Foundation (NFWF) executes this program in partnership with NOAA to invest in conservation projects that restore or expand natural features, such as coastal marshes and wetlands, dune and beach systems, oyster and coral reefs, forests, coastal rivers and floodplains, and barrier islands, which minimize the impacts of storms and other naturally occurring events on nearby communities. In Louisiana, 24 projects have been funded: two in FY18, three in FY19, three in FY20, three in FY21, five in FY22, and eight in FY23.

**National Ocean Service (NOS) – Emergency Coastal Resilience Fund**
The Emergency Coastal Resilience Fund is a partnership effort between NOAA and the National Fish and Wildlife Foundation (NFWF) to increase the resilience of coastal communities within federally-declared disaster areas impacted by hurricanes and wildfires in 2018, 2020, and 2021. In Louisiana, the ECRF awarded three projects in 2021.

**National Ocean Service (NOS) - OR&R Preparedness, Response, and Restoration Coordinators**
NOAA's Office of Response and Restoration (OR&R) is a center of expertise in preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, disasters, and marine debris. To fulfill its mission of protecting and restoring NOAA trust resources, OR&R provides scientific and technical support to prepare for and respond to environmental threats that coastal communities face; determines damage to natural resources from those releases; protects and restores marine and coastal ecosystems; and works with coastal communities to address critical local and regional coastal challenges.

The **Regional Preparedness Coordinator (RPC)** is strategically placed within the region to ensure that NOS and our partners are able to effectively prepare for, respond to, and recover from all hazards, including coastal disasters. The RPC serves as a liaison between NOS and its federal, state, and local disaster preparedness and emergency response partners. A key role of the RPC is to better understand the needs and opportunities within the region and to ensure partners have the tools and resources necessary to inform decision-making. The RPC has expertise across the spectrum of emergency management and provides preparedness, response, and recovery services including planning, training, exercises, response coordination, continuous improvement, and long-term recovery. The RPC, based in Mobile, Alabama, serves the Gulf of Mexico region – Texas, Louisiana, Mississippi, and Alabama.

OR&R identifies and quantifies environmental injury caused by releases of oil and hazardous materials. Our network of **Regional Resource Coordinators** work with multidisciplinary scientific, economic, and legal teams with the goal of securing the appropriate amount and type of restoration required to restore injured NOAA trust resources and compensate the public for their lost use. We collaborate with NMFS Restoration Center and NOAA General Council through the Damage Assessment, Remediation, and Restoration Program (DARRP) to ensure the process is efficient, legally defensible and restoration focused. The RRCs serving the Southeast/ Gulf of Mexico region are based in St. Petersburg, Florida.

**NOAA Commissioned Officer Corps (NOAA Corps) - Regional Response Officer (RRO) Southeast**
The NOAA Commissioned Officer Corps stations an officer with the National Ocean Service Office of Response and Restoration, Emergency Response Division, in support of the Agency’s response to hazardous materials releases in the waters of the Gulf of Mexico and Southeast Atlantic Coast. This officer works within and occasionally leads the NOAA Scientific Support Team during oil spills and releases of hazardous materials, providing critical scientific information and making recommendations for effective clean-up that protects and restores marine natural resources. This officer assists in coordination of the National Weather Service, National Marine Sanctuary Program, Office of Coast Survey, NOAA Fisheries, and other NOAA emergency response assets during an incident response while working within the Incident Command System. In addition, this officer conducts and supports technical training to the USCG and other regional stakeholders; conducts outreach to regional agencies, industry and public stakeholders regarding Office and Division mission; and provides technical guidance and strategic policy addressing issues associated with the high level of oil/gas exploration, extraction, transportation, and refining in the Gulf of Mexico Region.

**National Weather Service (NWS) - National Data Buoy Center Buoys**
The National Weather Service (NWS), through its National Data Buoy Center (NDBC), develops, deploys, operates, and maintains the current national data buoy network of moored and drifting weather buoys and land stations that serve all of the Nation’s coastal states and territories. Within this network, 110 of the buoys and 51 of the land stations are maintained directly by NDBC. Located at NASA's Stennis Space Center in Mississippi, supports weather and marine warning and forecast services in real time by providing deep ocean and coastal meteorological and oceanographic observations. These data provide valuable information used by NWS supercomputers to produce computer-generated model forecasts of the atmosphere and climate. NDBC manages the Volunteer Observing Ship program to acquire additional meteorological and oceanographic observations supporting NWS mission requirements. NDBC also supports operational and research programs of NOAA and other national and international organizations.

**National Ocean Service (NOS) - Annual Gulf of Mexico Hypoxia Forecast**
Perhaps the best known and largest hypoxic zone in the United States is the Gulf of Mexico "dead zone" at the mouth of the Mississippi River. The consequences of such a large dead zone include massive fish kills, loss of critical coastal habitat, and economic losses related to commercially valuable shellfish closures. NOAA's ability to forecast the dead zone's size is critical in managing nutrient loads and understanding the effectiveness of nutrient reduction efforts in the Mississippi River Watershed. (NCCOS, USGS, LUMCON)

**National Ocean Service (NOS) - Aquaculture Phytoplankton Monitoring Network**
The Aquaculture Phytoplankton Monitoring Network (AQPMN) is a volunteer-based network that works with coastal US aquaculture farms and organizations. The network has adapted its protocols to specifically monitor for species known to have adverse effects on shellfish and finfish aquaculture. Participating hatcheries and growers receive training on methods to collect and identify local phytoplankton and potential HAB species. NOAA supplies each network member with plankton nets, thermometers, salt refractometers and digital microscopes free of charge.

**National Ocean Service (NOS) - Mussel Watch Program**
The National Oceanic and Atmospheric Administration (NOAA) Mussel Watch Program (MWP) monitors the status and trends of chemical contaminants and biological stressors in the nation's coastal waters. MWP began in 1986, and is based on the periodic collection and analysis of bivalves (oysters and mussels) and sediment from a network of more than 300 monitoring sites nationwide. Contaminants monitored at each site include the EPA's Priority Pollutant List of toxic substances and a suite of chemicals of emerging concern such as flame retardants, PFAS, pharmaceuticals, and current use pesticides.

**Office of Oceanic and Atmospheric Research (OAR) - Ocean Acidification Observing Network (NOA-ON)**
The NOAA Ocean Acidification Observing Network (NOA-ON) is a sustained investment in ocean chemistry observing networks in U.S. waters and abroad. There are currently 16 buoys sponsored by the NOAA OAR Ocean Acidification Program in coastal, open-ocean and coral reef waters that contribute to this network. The long-term datasets collected from these moorings are key to understanding how ocean chemistry and other ocean conditions are changing over time, and their impacts on marine and coastal ecosystems. These buoys are located in Alaska (Gulf of Alaska, Bering Sea), American Samoa (Fagatele Bay),California (California Current Ecosystem 1 & 2), Chesapeake Bay (MD, VA), Louisiana (Coastal_LA), Florida (Cheeca Rocks), Georgia (Grays Reef), Hawaii (Kāneʻohe Bay and CRIMP-II, both in O'ahu) Oregon (Coos Bay), Maine (Gulf of Maine), Puerto Rico (La Parguera), Washington (Cha'ba), and Lake Huron (Thunder Bay).

***Statewide***

**NOAA Office of Education - Gulf of Mexico Bay Watershed Education and Training Program**
The NOAA Bay Watershed Education and Training (B-WET) program is a competitive grants program that provides funding for locally relevant environmental education projects for K-12 audiences. The Gulf of Mexico B-WET program is managed by NOAA's Office of Education. The Gulf of Mexico B-WET program currently serves Alabama, Florida, Louisiana, Mississippi, and Texas. The Gulf of Mexico B-WET program recognizes that knowledge and commitment built from firsthand experience, especially in the context of one's community and culture, is essential for achieving environmental stewardship. Gulf of Mexico B-WET regional grant competitions are responsive to local education and environmental priorities. Please see the funding opportunities for specifics.

**National Marine Fisheries Service (NMFS) - Southeast Regional Office**
NMFS studies, protects and conserves living marine resources to promote healthy, functioning marine ecosystems, afford economic opportunities and enhance the quality of life for the American public. NMFS' Southeast Regional Office (headquartered in Saint Petersburg, FL) and Southeast Fisheries Science Center (headquartered in Miami, FL) are responsible for living marine resources in federal waters of the Gulf of Mexico, South Atlantic, and U.S. Caribbean. Using the authorities provided by the *Magnuson-Stevens Fishery Conservation and Management Act, Endangered Species Act, Marine Mammal Protection Act* and other federal statutes, the Southeast Regional Office and Southeast Fisheries Science Center partner together to assess and predict the status of fish stocks, marine mammal and sea turtle populations, as well as other protected resources, including coral. The Southeast Regional Office is responsible for over 40% of all federal fishery management plans nationwide which cover hundreds of species ranging from diverse, relatively sedentary and vulnerable coral reef fish - like the popular snappers and groupers - to wide ranging pelagic species like mackerel and mahi mahi. More than 90 marine mammal stocks and 27 threatened or endangered species, including the North Atlantic right whale and smalltooth sawfish, six sea turtle species, and seven coral species also occur in this region. The Office consults on approximately 50% of the nation's coastal development permits, provides fish passage and ecological flow recommendations at dozens of barriers, engages partners in regional collaboration, and supports large-scale conservation and restoration programs aimed at protecting essential fish habitat and coastal communities from development, subsidence, sea level rise, and storms. While 99% of the nation's outer continental shelf oil production is in this region, it is also the focus of new wind energy development off the Carolinas and in the Gulf of Mexico. The Southeast Regional Office also fosters sustainable aquaculture in the region, with two Regional Aquaculture Coordinators that act as a liaison between federal and state agencies to assist in permitting and coordination activities, supporting aquaculture outreach and education, and collaborating with industry, academia and other stakeholders on regional marine aquaculture issues.

**National Marine Fisheries Service (NMFS) - The Southeast Fisheries Science Center**
The Southeast Fisheries Science Center implements a multi-disciplinary science and research program in support of living marine resource management.The Southeast Fisheries Science Center develops the scientific information required for fishery resource conservation; fishery development and utilization; habitat conservation; the protection of marine mammals, sea turtles and other protected species; impact analyses and environmental assessments for management plans and/or international negotiations; and pursues research to answer specific needs in areas of population dynamics, fishery economics, fishery engineering, food science, and fishery biology.provides the scientific advice and data needed to effectively manage the living marine resources of the Southeast region and Atlantic high seas through the following divisions.

Fisheries Assessment, Technology, and Engineering Support division provides essential services and development of new innovative technologies to support the center's mission. The branches of Biology and Life History, Advanced Technology, Gear Research, and Gear and Vessel Support branches provide state-of-the-art life history information and innovative solutions to reduce bycatch and optimize the performance of biological and fishery monitoring programs across the science center.

Fisheries Statistics division provides extensive support to management and science through the collection, management, and dissemination of commercial and recreational fisheries statistics. The branches of Commercial Fisheries Monitoring, Recreational Fisheries Monitoring, Survey Design, Data Management and Dissemination, Catch Validation and Bio-sampling, and Observer Program works extensively with various internal and external partners to collect the fishery dependent information used to support marine resource management in the region. Principal data collection agents are stationed in Gretna, Houma, and Lafayette, LA.

Marine Mammals and Sea Turtles division supports and conducts science that leads to improved knowledge and meaningful conservation of marine mammals and turtles and their habitats in a changing environment, helping to achieve

NOAA Fisheries' mission of implementing the Marine Mammal Protection Act and Endangered Species Act and making a positive impact on society.

Population and Ecosystems Monitoring division provides data, analytical products, research, and expertise to support NOAA Fisheries priorities. The branches of Ocean and Coastal Pelagics, Trawl and Plankton, Gulf and Caribbean Reef Fish, Atlantic and Caribbean Reef Fish and Habitat Ecology carry out fishery-independent surveys and applied research focused on fisheries and habitat ecology, and provides support for ecosystem- and climate-related initiatives in the region.

Sustainable Fisheries division works in partnership with fisheries managers and constituents to provide reliable scientific advice that enhances the stewardship of living marine resources. The branches of Gulf of Mexico Fisheries, Atlantic Fisheries, Highly Migratory Species, Caribbean Fisheries, and Data Analysis and Assessment Support also strive to advance scientific knowledge and promote diverse and sustainable fisheries through innovative research and development activities, and the use of advanced technologies.

Social Science Research Group conducts research and data collections to assess the social and economic performance of fisheries and regulatory impacts.

**National Marine Fisheries Service (NMFS) - Restoration Center**

The NOAA Restoration Center, within the Office of Habitat Conservation, works with partners across the nation to restore habitat to sustain fisheries, recover protected species, and maintain resilient coastal ecosystems and communities. We have over 30 years conducting habitat restoration through competitive funding opportunities and technical assistance. We also work to reverse habitat damage from disasters like oil spills, ship groundings, and severe storms. In Louisiana, the NOAA Restoration Center funds and implements large-scale restoration projects through the Coastal Wetland Planning, Protection and Restoration Act, to ensure healthy and sustainable coastal habitat for Louisiana's fisheries. Many thousands of acres of coastal habitat—primarily wetlands and barrier islands—have been restored and protected by NOAA. See the interactive Restoration Atlas to find habitat restoration projects near you. The Louisiana field office is located in Baton Rouge. Site visits to see habitat projects may be available in your state, please inquire if interested. The *Deepwater Horizon* oil spill in 2010 impacted the entire Gulf ecosystem as well as the communities that rely on the Gulf's natural resources. NOAA and other federal and Gulf state partners are working with the public, partners, and industry to support restoration and recovery of the Gulf of Mexico's natural resources using the $20.8 billion environmental damage settlement. NOAA led the natural resource damage assessment restoration planning for the *Deepwater Horizon* oil spill. The NOAA Fisheries Office of Habitat Conservation's Restoration Center is deeply engaged in the coordination of projects through RESTORE, Natural Resource Damage Assessment, and the Gulf Environmental Benefit Fund as a result of the Deepwater Horizon oil spill. Restoration projects can be found in this interactive mapping atlas.

In addition, the Office of Habitat Conservation is responsible for executing an unprecedented $1.4 billion in funding under Bipartisan Infrastructure Law and Inflation Reduction Act for habitat restoration and fish passage. We are working with our partners to do this through our expert technical assistance and four funding competitions: Fish Passage, Tribal Fish Passage, Transformational Habitat Restoration, and Habitat Restoration for Tribes and Underserved Communities. We have funded 214 awards totaling $985M in rounds one and two with more to come in round 3. We are funding work all over the country, explore them on our interactive map.

**National Marine Fisheries Service (NMFS), National Ocean Service (NOS), and NOAA General Counsel - Damage Assessment, Remediation, and Restoration Program**

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) assesses and restores habitat, fisheries, protected species, and recreational uses that have been harmed by oil spills, chemical releases, and ship groundings. Working with federal, state, and tribal entities, and responsible parties, we have recovered funding from responsible

parties for restoration of critical habitats, fisheries, protected species, and recreational uses nationwide. These projects promote recovery of the ecosystem and provide economic benefits from tourism, recreation, green jobs, coastal resiliency, property values, and quality of life. Louisiana is a co-trustee with NOAA for assessment and restoration after pollution incidents in Louisiana. For more information about our work in Louisiana, visit: DARRP in Your State (and use the top menu to navigate to "Louisiana") and this interactive map.

**National Marine Fisheries Service (NMFS) - Office of Law Enforcement**
NOAA's Office of Law Enforcement is the only conservation enforcement program (Federal or State) that is exclusively dedicated to Federal fisheries and marine resource enforcement. Its mission is to protect global marine resources by enforcing domestic laws and international treaties and obligations dedicated to protecting wildlife and their natural habitat. Our special agents and enforcement officers ensure compliance with these laws and take enforcement action if there are violations. Additionally, the Cooperative Enforcement Program allows NOAA the ability to leverage the resources and assistance of 27 coastal states and U.S. territorial marine conservation law enforcement agencies in direct support of the Federal enforcement mission. Effective fisheries law enforcement is critical to creating a level playing field for U.S. fishermen and enabling sustainable fisheries to support vibrant coastal communities. The Office of Law Enforcement's Southeast Division is headquartered in St. Petersburg, FL, with field offices in Slidell and Houma, LA.

**National Ocean Service (NOS) - Regional Geodetic Advisor**
The Regional Geodetic Advisor is a National Ocean Service (NOS) employee that resides in a region and serves as a liaison between the National Geodetic Survey (NGS) and its public, academic and private sector constituents within their assigned region. NGS has a Regional Geodetic Advisor stationed in Lake City, Florida serving the Gulf Coast region –Alabama, Florida, Louisiana, and Mississippi. The Geodetic Advisor provides training, guidance and assistance to constituents managing geospatial activities that are tied to the National Spatial Reference System (NSRS), the framework and coordinate system for all positioning activities in the Nation. The Geodetic Advisor serves as a subject matter expert in geodesy and regional geodetic issues, collaborating internally across NOS and NOAA to ensure that all regional geospatial activities are properly referenced to the NSRS.

**National Weather Service** - **NEXRAD (WSR-88D) Systems**
NEXRAD is used to warn the people of the United States about dangerous weather and its location. This radar technology allows meteorologists to warn the public to take shelter with more notice than ever before. The NEXRAD network provides significant improvements in severe weather and flash flood warnings, air traffic safety, flow control for air traffic, resource protection at military bases, and management of water, agriculture, forest, and snow removal. NEXRAD radar has a range of up to 250 nautical miles, and can provide information about wind speed and direction, as well as the location, size, and shape of precipitation. There are 159 operational NEXRAD radar systems deployed throughout the United States and overseas, of which four are in Louisiana.

**National Weather Service (NWS) - Automated Surface Observing Systems Stations**
The Automated Surface Observing Systems (ASOS) program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). ASOS serves as the Nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. ASOS works non-stop, updating observations every minute, 24 hours a day, every day of the year observing basic weather elements, such as cloud cover, precipitation, wind, sea level pressure, and conditions, such as rain, snow, freezing rain, thunderstorms, and fog. There are 16 ASOS stations in Louisiana.

**National Weather Service (NWS) - Cooperative Observer Program Sites**
The National Weather Service (NWS) Cooperative Observer Program (COOP) is truly the Nation's weather and climate observing network of, by and for the people. More than 10,000 volunteers take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are representative of where people live, work and play. The COOP was formally created in 1890 under the NWS Organic Act to provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes, and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS. The data are also used by other federal (including the Department of Homeland Security), state and local entities, as well as private companies (such as the energy and insurance industries). In some cases, the data are used to make billions of dollars' worth of decisions. For example, the energy sector uses COOP data to calculate the Heating and Cooling Degree Days which are used to determine individuals' energy bills monthly. There are 103 COOP sites in Louisiana.

**National Weather Service (NWS) - NOAA Weather Radio All Hazards Transmitters**
NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service (NWS) forecast office. NWR broadcasts official NWS warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state, and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 Telephone outages). Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the NWS. NWR includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There are 11 NWR transmitters in Louisiana.

**Office of Oceanic and Atmospheric Research (OAR) – Louisiana Sea Grant College Program**
The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam.  Louisiana Sea Grant promotes the wise use of marine and coastal resources through research, education, advisory services, and technology transfer. Based at Louisiana State University (LSU), Louisiana Sea Grant was instrumental in the establishment and development of LSU's M.S. and Ph.D. programs in the marine sciences and also played a key role in the creation and nurturing of LSU research groups now known as the School of the Coast and Environment. Current research projects address problems or issues in four major categories that have been identified as especially pertinent to state, regional, and national needs: healthy coastal ecosystems, sustainable coastal development, safe and sustainable seafood supply and hazard resilience in coastal communities. Examples include oyster and fish diseases, essential fish habitat, seafood safety and processing, coastal ecosystem management, coastal economic development, and freshwater diversion for coastal restoration. The program provides information and outreach services to a variety of users, including coastal communities, seafood processors, aquaculturists, fishermen, educators, legislators and coastal policy makers, coastal tourism and recreation interests, and a wide cross-section of Gulf of Mexico-region citizens whose livelihoods depend on coastal and marine resources. The program's technology transfer activities bring the results of Sea Grant research to the private sector for commercial application. Administrative offices are located in Baton Rouge. Extension agents are located in Houma, Franklin, Covington, Jefferson, Jeanerette, Lake Charles, and Abbeville. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at seagrant.noaa.gov.

**National Ocean Service (NOS) - Students for Zero Waste Week**
Students are inviting their local communities to "Go Green and Think Blue" by joining them in the annual *Students for Zero Waste Week campaign*. During this campaign led by the Office of National Marine Sanctuaries, students focus on reducing land-based waste in order to protect the health of local marine environments. These young leaders are raising awareness of how single-use plastic and other types of litter affect the health of local watersheds, national marine sanctuaries, and the ocean. In addition, some schools are looking at ways to reduce their energy use on campus with hopes of raising awareness of how the burning of fossil fuels also impacts the health of the ocean.

**National Ocean Service (NOS) - NOAA Ocean Guardian Youth Ambassador Program**
Youth aged 13-18 from across the United States and its territories that are committed to ocean conservation and stewardship of our blue planet can apply to become a NOAA Ocean Guardian Youth Ambassador. This year-long program looks for enthusiastic youth with new ideas and a unique perspective who want to learn more about America's underwater treasures and share their passion with others. Youth learn how to become a leader at their school or in their local community to make a difference in the conservation of the ocean through marine protected areas.

### *Bipartisan Infrastructure Law (BIL) / Inflation Reduction Act (IRA) Projects*
The National Oceanic and Atmospheric Administration (NOAA) was entrusted with billions of supplemental federal funding dollars with passage of the Bipartisan Infrastructure Law on November 15, 2021 and the Inflation Reduction Act on August 16, 2022. This historic infrastructure funding has been invested in communities across the nation to build resilience in the face of climate change. NOAA distributed funding to communities, tribal, state and local governments, higher education programs, businesses, non-profit organizations, and facilities in need. NOAA funded billions of dollars in grants and cooperative agreements across the country to fund projects that enhance climate resilience, restore coastal and marine habitats, improve safety, and create jobs. For an interactive map of NOAA BIL and IRA investments in your state, visit https://www.noaa.gov/bil-ira-awards-explorer.

### *BIL*
**Project Planning and Design for Caad Kuujaaminix/Bayou Sale in St.Mary Parish, Louisiana for Chitimacha Tribal Resource, Land Protection and Fisheries Improvement: Exploring Alternate Construction Methods, $736,637**
This project, through the tribally owned business Wayti Services, LLC, will design a living shoreline to restore and protect areas of Caad Kuujaamnix (Bayou Sale) that are home to tribal cultural sites. Funding will support staff and technical experts in their work to conduct a study and plan a construction method for creating marsh habitat, protecting the shoreline, and supporting traditional fisheries.

**Restoring Resilience Through Central Wetlands Reforestation Collective, $715,256**
This project will restore habitat in the Central Wetlands Unit, a nearly 30,000-acre marsh bordering communities in the Ninth Ward of Orleans Parish and St. Bernard Parish. They will engage local community members in hands-on project work to provide a new generation of coastal stewards with the skills and experience needed to build capacity for coastal restoration.

**Enhancing the Resilience of Southeast Louisiana's Asian American Fisherfolk Communities: Collaborative Development of a Multi-Scalar Climate Change Adaptation Plan to Protect Regional, $821,786**
This project will partner with community liaisons to directly engage southeast Louisianaâ€™s Asian American shrimpers and processors and co-develop a climate change adaptation plan to protect their communities and fishing infrastructure. Through interviews, workshops, and interactive modeling activities, they will work to develop a comprehensive plan that takes into account the specific needs and experiences of Asian American fishing communities.

**Bayou Bienvenue Wetlands Triangle Habitat Restoration - Planning and Design, $489,813**
This project will work toward restoring the Bayou Bienvenue Wetland Triangle, a large and complex wetland next to the Lower Ninth Ward neighborhood. They will work closely with partners to collaborate with the local community in creating a restoration prioritization plan. Based on the results of that plan, they will develop designs to restore a portion of the wetlands.

**LA Habitat Protection and Restoration Capacity Building, $450,000**
This funding will build the capacity of LA's federally-approved coastal management program, managed within the LA Department of Natural Resources, to plan for and implement habitat restoration and conservation projects proposed through funding opportunities connected to the Bipartisan Infrastructure Law. Specifically, the LA CMP will partner with the LA Coastal Protection and Restoration Authority to provide technical assistance to local parishes and tribal communities to support the development of projects intended to compete for infrastructure funding in future fiscal years.

**2023 Knauss Marine Policy Fellowship, $86,500**
The Knauss fellowship provides a one-year educational experience in an executive or legislative branch office which will: 1) Expand the student's experience with, and knowledge of, the policy-making process within federal agencies and Congressional committees dealing with marine and coastal issues; and 2) Allow the student to contribute knowledge gained in academic programs and provide informational feedback to programs, thus assisting in the student's long-term career and educational goals.

**Consider Litter: Data-Driven, Community-Centered Marine Debris Prevention and Mitigation, $295,748**
The Louisiana Sea Grant was awarded $295,748 to empower community members (students, teachers, businesses and local leaders) in dialogue and stewardship on the removal and prevention of marine debris in Louisiana's Barataria, Pontchartrain and Terrebonne Basins, communities that have been disproportionately impacted by pollution and are historically marginalized. By focusing on Title I schools, Consider Litter will build a network of visible and diverse community stewards that can monitor litter in their communities and compile data that can help inform the resulting prevention/mitigation projects.

**Chandeleur Island Restoration Project, $10,000,000**
The Louisiana Coastal Protection and Restoration Authority will restore the Chandeleur Islands to improve the function, resilience, and longevity of the island chain. By working with nature to reintroduce sand lost from the system, they will help extend the islands' lifespan and prevent a tipping point toward complete submergence of the islands. Improvements to the islands will support fish and wildlife in the northern Gulf of Mexico and will provide protection to local communities by reducing the effect of tropical storms.

***IRA***

**Bucktown Marsh Restoration and Living Shoreline, $4,500,000**
This project will construct a living shoreline and restore shoreline habitats along the southern edge of Lake Pontchartrain. This work will rebuild the previously existing natural first-line of defense against storm surge, waves, erosion, and rising sea levels. It will support habitats like marshes and seagrasses, which provide important nurseries and refuge for fish, shrimp, crabs, and more. Protecting the existing levee system from damage will in turn increase the resilience of homes and infrastructure in the local community.

**Restoring Louisiana Marshes: Protecting Sacred Sites, Increasing Tribal Resilience, and Reducing Flood Risk, $1,000,000**
This project will restore coastal wetlands in areas near to where the Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Tribe, the Pointe-au-Chien Indian Tribe, and the Jean Charles Choctaw Nation are located or

have sacred and culturally significant sites. Using local and indigenous knowledge, they will work to refill canals that were previously dug for oil and gas exploration to help reestablish the wetlands.

**Louisiana Coastal Land Acquisition at Rockefeller Wildlife Refuge (Phase I of II) - Cameron Parish, LA, $4,000,000**
This award will support the purchase of 6,800 acres of critical coastal habitat in Cameron Parish, LA, directly adjacent to the Rockefeller Wildlife Refuge, will reduce coastal flood risks, conserve critical ecosystems, and preserve habitats for a variety of coastal resources, as well as provide much needed public recreational opportunities through the expansion of public lands.

**Fostering Community Partnership and Understanding Financial Vulnerabilities to Reduce Marine Debris and Enhance LA's Resilience to Disaster, $299,638**
The Louisiana Sea Grant was awarded $299,638 to improve awareness of the issues surrounding storm-transported litter in Louisiana. Training with the Financial Debris Management Simulation tool will help municipalities with underrepresented populations understand their financial vulnerability to storm events in terms of clean-up costs. Additionally, youth education and community outreach will educate on the consequences of litter/marine debris and promote environmental stewardship through clean-up activities.

**CLIMATEx Phase 1 Concept Proposal: Global Problem Meets Local Opportunity, $250,000**
CLIMATEx will develop a DEIJA-focused accelerator that advances coastal resiliency and climate solutions. By leveraging a unique cross-pollination of industry-leading organizations in each of their respective fields, Phase I of this project will result in the creation of a robust plan and an engaged public and private stakeholders to explore new technologies & business models across all 4 areas: advancing ocean monitoring and nature-based solutions, supporting safe and sustainable renewable energy development, monitoring evolving ecosystems, and building deeper coastal resiliency and climate-ready communities.

**Pointe aux Chenes Wildlife Management Area Bayou Salle Terrace Project Engineering and Design, $875,000**
This funding will build the ability of the federally-approved coastal management program within the Louisiana Department of Energy and Natural Resources to implement projects, initiatives, and programs that increase the climate resilience of coastal communities within coastal counties. Specifically, the Louisiana Department of Energy and Natural Resources will partner with the Coastal Protection and Restoration Authority to support engineering and design of a wetland restoration project in Pointe aux Chenes Wildlife Management Area. This wetland restoration project, once completed, will create earthen terraces to slow down tidal exchange and movement of high saline waters which are contributing to significant land loss. These funds will specifically support the collection of hydrographic, topographic, cultural, and geotechnical surveys in order to properly design and engineer the earthen terrace field.

**Southwest Louisiana and Central Acadiana Resilient Future, $1,998,800**
To develop a coordinated vision and sustainable resilience-focused action plan for Louisiana's Southwest and Central Acadiana, this project will use a multi-pronged approach for community-based regional planning and governance. Activities include analyzing existing plans; characterizing climate risk; defining best practices; prioritizing potential projects; evaluating policies; and developing engineering reports to move prioritized projects toward implementation. To meet future needs, the project will set up a regional collaborative that offers continued coordination, implementation, evaluation, as well as sustained knowledge and resource sharing.*This project was funded through the Climate Resilience Regional Challenge.*

**EMPOWER: Enabling Meaningful Progress for Water Equity and Resilience through the Greater New Orleans Regional Water Plan, $1,208,108**
This project builds on more than a decade of planning and collaboration across the greater New Orleans region to adopt a holistic, adaptive water management vision that centers the leadership of Black, Indigenous, and people of color communities. This vision will enable greater cohesion in selecting community green infrastructure projects and ensure the investments address multiple climate hazards and realize multiple benefits. This project will result in 1) a regional approach to making key water management and climate adaptation data more accessible to the community; 2) a policy manual for holistic, adaptive management of green infrastructure projects; and 3) a public communications campaign that highlights the collaborative?s efforts and findings with media, events, workshops, and facilitated conversations about management efforts across the region. *This project was funded through the Climate Resilience Regional Challenge.*

**Track Two - Implementation of Resilience and Adaptation Actions: Enhancing the United Houma Nations Short-, Mid-, and Long-Term Coastal Resilience, $56,573,066**
In Southern Louisiana, the United Houma Nation is pursuing a comprehensive approach to addressing coastal climate change through a multiphase project that views resilience through a cultural, environmental, economic, and emergency-response lens. Activities include involve upgrading community resilience hubs across six parishes, all of which serve critical functions, including serving as evacuation and distribution sites; strengthening and expanding the tribe's communications infrastructure, allowing for more effective communication before, during, and after disasters; and development of a community-led migration strategy and a community land trust to strengthen land stewardship. *This project was funded through the Climate Resilience Regional Challenge.*

**Quantification of the Risk of Extreme Weather for Wind Energy Systems for Insurance Markets, $174,890**
Gulf Wind Technology will develop a Hurricane Wind Turbine Risk Analysis method for the energy insurance industry. This approach combines the Risk Assessment Framework for Tropical Cyclones with aeroelastic simulations and confidence-weighted ensemble averaging to assess turbine damage. It addresses numerical instabilities using advanced aerodynamic techniques.

**CREST: The Climate Resilient Skills Training Program, $6,926,245**
This program will develop the Green Collar Trades Jobs Training to address the need for coastal community, climate-resilient skilled workers in the flood mitigation industry in Louisiana. Climate science, real-time metrics and current industry knowledge will inform the curriculum.

**Promoting Gulf-wide NOAA and Sea Grant partnerships to advance regional priorities, $71,436**
Through this collaborative effort, we anticipate that NOAA will build and leverage sustainable partnerships across the Gulf of Mexico (GoM) region centered around NOAA-relevant issues that enable resiliency and meet the needs of communities, while also serving to enhance NOAA's culture by supporting diverse audiences through inclusive and intentional engagement. In addition, we expect that this project will help support enhanced cross-NOAA learning and unique professional development experiences for NOAA-affiliated student interns.