NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION UNITED STATES DEPARTMENT OF COMMERCE



NOAA In Your State

<u>NOAA</u> 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 hightech 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 <u>congressional districts and cities or towns</u>, and then <u>statewide</u> <u>programs</u>.

Highlights of NOAA in Texas

National Weather Service - Southern Region Headquarters	Fort Worth	TX-12
National Environmental Satellite, Data, and Information Service (NESDIS) - Southern Regional Climate Services Director	Fort Worth	TX-12
Southeast Fisheries Science Center	Galveston	TX-14
National Ocean Service - Flower Garden Banks National Marine Sanctuary	Galveston	TX-14
National Ocean Service (NOS) - Mission Aransas National Estuarine Research Reserve	Port Aransas	TX-27

The state of Texas is home to nine Weather Forecast Offices, six Science on a Sphere displays, seafood inspection and law enforcement programs, four Physical Oceanographic Real-Time Systems (PORTS®), Texas Sea Grant, and multiple observing platforms.

Weather Forecast Offices

Midland/Odessa	TX-11
San Angelo	TX-11
Dallas/Fort Worth	TX-12
Amarillo	TX-13
Galveston	TX-14
Houston	TX-18
Lubbock	TX-19
Rockport/Corpus Christi	TX-27
Brownsville	TX-34
San Antonio	TX-35
Austin	TX-37

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 Texas. There are 122 WFOs nationwide of which nine are in Texas. 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 onsite 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 Texas weather, visit www.weather.gov and, on the national map, click on the relevant county or district.

Science On a Sphere®		
Sugar Land	TX-22	
Midland	TX-11	
McAllen	TX-15	
Rockport	TX-27	
Dallas	TX-30	
Ft. Worth	TX-33	

<u>Science On a Sphere (SOS)</u> is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain in a way that is simultaneously intuitive and captivating what are sometimes complex environmental processes. They are located at Houston Museum of Natural Science at Sugarland, International Museum of Art and Science in McAllen, the Bay Education Center (Rockport), and Earth Day Texas.

TX- 6

Palestine

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.

TX-9

Sugar Land

Office of Oceanic and Atmospheric Research (OAR) - <u>Science On a Sphere® at the Houston Museum of Natural History</u> – See <u>Page 2</u> for details

TX-10

College Station

National Environmental Satellite, Data, and Information Service (NESDIS) - <u>National Centers for Environmental</u> <u>Information</u> - <u>Southern Regional Climate Center</u>

NOAA NCEI's six Regional Climate Centers (RCCs) support the development and delivery of a wide range of place-based climate science and information products and services to assist decision makers with making informed decisions. The RCCs are a federal-university cooperative effort that supports the operational production and delivery of climate data and information to decision-makers at regional levels. The RCCs also participate in basic and applied climate research as well as user engagement and outreach activities. The service provided by the RCCs has evolved through time to become an efficient, user-driven program with many of the components that have been cited for effective regional climate services. The Southern RCC is co-located at the Texas A&M Transportation Institute and serves TN, MS, LA, AR, OK, TX.

TX-11

Bronte

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

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

Office of Oceanic and Atmospheric Research (OAR) - Science On a Sphere® - See Page 2 for details

San Angelo

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

TX-12

Fort Worth

National Weather Service (NWS) - West Gulf River Forecast Center

Co-located with the NWS Weather Forecast Office in Dallas/Fort Worth, the NWS West Gulf River Forecast Center (RFC) performs continuous river basin modeling and provides hydrologic forecast and guidance products for rivers and streams in most of Texas and New Mexico. 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) - Southern Region Headquarters

The NWS Southern Region Headquarters is the administrative and support center for 32 NWS Weather Forecast Offices, seven aviation-focused NWS Center Weather Service Units, and four NWS River Forecast Centers located in 10 states (Texas, New Mexico, Oklahoma, Arkansas, Louisiana, Mississippi, Tennessee, Alabama, Georgia and Florida) and Puerto Rico. Services provided by a regional headquarters to local NWS offices within the region include scientific support and development, program management and guidance, field support for new program implementation, budget support, and employee recruitment and assistance. The headquarters is also the home office of the Southern Region Director, who oversees the management and administration of the NWS entities listed above, as well as other region-level officials and program managers.

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

Office of the Chief Information Officer (OCIO) - N-Wave Enterprise Network

Dallas-Fort Worth, TX, is one of five NOAA Trusted Internet Connection Access Points (TICAPs) which monitors the connection of NOAA networks with the greater Internet. This is required by OMB policy to ensure secure communication from NOAA IT systems to untrusted networks. TICAPs are NOAA's first line of defense for protecting NOAA's mission from external cyber-attacks. The information the TICAPs provide is invaluable for determining the nature and scope of cyber threats. NOAA is also able to offer this as a service to other government agencies, eliminating the requirement for them to build and manage their own TICAPs.

Workforce Management Office (WFMO) - Fort Worth Office

The Workforce Management Office in Fort Worth provides nationwide consultative services with respect to talent acquisition and strategic workforce planning to the National Weather Service. The HR Business Partners and HR Business Advisors ensure consistency of service, compliance, best practices and knowledge sharing among the team members. The Office manages the workload and resources to account for peak demand, vacancies and talent acquisitions strategies to meet new mission requirements, and escalates these and other issues as necessary to leadership.

TX-13

Amarillo

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

TX-14

Galveston

National Marine Fisheries Service (NMFS) - Galveston Laboratory

The Galveston Laboratory is located on the site of Fort Crockett, a NOAA Heritage Asset, one block from the Gulf of Mexico on Galveston Island, Texas. Research at the Laboratory supports the Southeast Fisheries Science Center.

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

The Southeast Regional Office has the Galveston Field Office which is located in the Galveston Laboratory of NMFS Southeast Fisheries Science Center. This Office is responsible for overseeing NMFS's habitat protection programs in the Gulf of Mexico and implements NMFS's habitat protection programs in Texas and Alabama and in the adjacent waters of the 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 technical assistance and streamlining Gulf environmental compliance efforts for proposed Gulf restoration projects, and participates in the planning processes for major federal water development projects in Texas and Alabama, such as port expansions and flood damage control structures.

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 Galveston field office is part of the Office of Law Enforcement's Southeast Division.

National Ocean Service (NOS) - Flower Garden Banks National Marine Sanctuary

The 17 reefs and banks comprising Flower Garden Banks National Marine Sanctuary lies 870 to 1215 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 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. They are managed out of Galveston, Texas where a variety of research and education programs, many through partnerships, are key to maintaining these valuable resources.

Staff continue to monitor the health of the reefs through the sanctuary's long-term monitoring programs, and invasive lionfish continue to be the subject of a strong research/education focus at the sanctuary.

NOAA Commissioned Officer Corps (NOAA Corps) - Marine Operations Coordinator

The NOAA Commissioned Officer Corps stations an officer with the National Ocean Service Flower Garden Banks National Marine Sanctuary in support of scientific operations and conservation efforts within the Sanctuary. This officer manages various administrative and operational duties, including the daily and long-term operation of the Sanctuary's research vessel; scheduling, coordinating, and managing small boat operations, personnel training and qualifications, vessel maintenance and dry dock periods, annual inspections, and other site related activities; and assisting in budget formulation and submission of small boat operations. They directly oversee and track spending of operations, personnel, and maintenance while writing specifications for maintenance and repair period contracts. In addition, they train applicable personnel on safety equipment, vessel float plans, standard operating procedures, operational risks, and small boat handling, and act as liaison to the U.S. Coast Guard and other local, state, and federal agencies.

National Ocean Service (NOS) - "REEF ON THE ROAD" traveling exhibit

Those unable to visit these remote reefs in person, can interact with Flower Garden Banks National Marine Sanctuary's Reef on the Road traveling exhibit that moves to a new location every six to twelve months.

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

League City

National Marine Fisheries Service (NMFS) - Office of Law Enforcement

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TX-14, 18

Galveston/Houston

National Ocean Service (NOS) - Houston/Galveston PORTS®

A Physical Oceanographic Real-Time System (PORTS[®]) is operated cooperatively with the local maritime community in Houston/Galveston Bay 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 level and meteorological data from five stations, and for tidal currents from four stations.

Freeport

National Ocean Service (NOS) - Freeport PORTS®

A Physical Oceanographic Real-Time System (PORTS[®]) is operated cooperatively with the local maritime community around Freeport Harbor 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 level and meteorological observations from one station and for tidal currents from two stations.

Edinburg

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

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McAllen

Office of Oceanic and Atmospheric Research (OAR) - <u>Science On a Sphere® at the International Museum of Art and</u> <u>Science</u> – See <u>Page 2</u> for details

TX-17

Moody

Office of Oceanic and Atmospheric Research (OAR) - <u>Global Greenhouse Gas Reference Network; Halocarbon</u> <u>Measurements</u>

NOAA's Global Monitoring Laboratory (GML) operates trace gas monitoring sites at tall towers in eight states, including Texas. The sites were established to extend GML's monitoring network to provide data to aid estimation of the net carbon balance of the continent. Variations of trace gases, especially carbon dioxide, are largest near the ground, so we utilize existing tall towers as platforms for in situ and flask sampling for atmospheric trace gases. Samples are collected weekly and delivered to GML in Boulder, Colorado for measurements of CO2, CH4, other greenhouse gases. Additionally, the flasks are analyzed for the distribution and trends of halocarbons, the gases most responsible for human-caused depletion of the stratospheric ozone layer. These data improve our understanding of the distribution of greenhouse gases, models of the global carbon cycle, and the effectiveness of efforts to protect and restore the ozone layer, which protects the surface from the sun's ultraviolet radiation. The observed geographical patterns and small but persistent spatial gradients are used to better understand the processes, both natural and human induced, that underlie the trends. The tower site in Texas is located near the town of Moody, 20 miles south of Waco.

Travis

NOAA Office of Education - Environmental Literacy Program

The Environmental Literacy Program (ELP), administered by NOAA's Office of Education, provides grants and support for formal (K-12) and informal education to advance the agency's mission. In Texas, ELP funded a project by the EcoRise Youth Innovations in Travis County. The project aims to build the environmental literacy of children, youth, and adults so that they can become knowledgeable about ways to increase their community's resilience to extreme weather, climate change, and other environmental hazards, and be involved in achieving that resilience. To achieve this goal, the project integrates relevant state and local resilience plans and collaborates with stakeholders who are actively implementing these plans. The EcoRise Youth Innovations project employs NOAA resources and educational methods to promote community-level environmental literacy, enabling participants to better comprehend threats and implement solutions that build resilience to extreme weather, climate change, and other environmental literacy includes the knowledge, skills, and confidence to 1) reason about the ways that human and natural systems interact globally and locally; 2) participate in civic processes; and 3) incorporate scientific information, cultural knowledge, and diverse community values when taking action to anticipate, prepare for, respond to, and recover from environmental hazards, including mitigating and adapting to climate change.

TX-18 Houston

National Weather Service (NWS) - Center Weather Service Unit

Housed in the Federal Aviation Administration's Houston Air Route Traffic Control Center (ARTCC), the NWS Center Weather Service Unit (CWSU) provides aviation forecasts and other weather information to ARTCC personnel for use in directing the safe, smooth flow of aviation traffic in southern Texas, southern Louisiana, southern Mississippi and the southwestern tip of Alabama.

Office of Oceanic and Atmospheric Research (OAR) - Ultraviolet (UV) Monitoring Network

NOAA's Global Monitoring Laboratory (GML) operates an instrument at this site as part of the ultraviolet (UV) monitoring network (NEUBrew). These measurements are part of GML's research on the Earth's surface radiation budget and are used in studies of variations in long-term radiation and meteorological parameters. Observations of spectral solar radiation can be used to infer the presence and quantities of atmospheric constituents and to investigate the interaction of ozone and solar radiation.

TX-19

Lubbock

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

TX-19, 21, 23, 37

Austin, Monahans, Muleshoe, Panther Junction

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.

TX-22

Matagorda Bay

National Ocean Service (NOS) - Matagorda Bay PORTS®

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community around Matagorda Bay at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time water level data is available at three stations, meteorological data at three locations, and currents from two stations.

TX-27

Nueces

NOAA Office of Education - Coastal Ecosystem Learning Centers (CELC) network

In Texas, NOAA's Office of Education provides support to the Texas State Aquarium in Nueces County 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.

Rockport, Corpus Christi

National Ocean Service (NOS) – <u>Texas Spatial Reference Center</u>

Partnering with the National Geodetic Survey (NGS), Texas A&M University - Corpus Christi's Conrad Blucher Institute for Surveying and Science created the Texas Spatial Reference Center (TSRC) in 2005. The mission of TSRC is to conduct basic and applied research contributing to NGS's modernization of the National Spatial Reference System (NSRS). TSRC is a repository for information used by researchers to develop improved understanding of elevation data and geodetic datums in the state of Texas. TSRC establishes accurate positioning and elevations throughout Texas in cooperation with qualified geospatial scientists, professional engineers, and professional land surveyors.

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

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 Corpus Christi field office is part of the Office of Law Enforcement's Southeast Division.

National Ocean Service (NOS) - Corpus Christi PORTS®

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Corpus Christi at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time water level (tide) and meteorological data are available at multiple locations, Tidal currents are monitored from several stations. Numerous visibility (fog) observations have also been integrated into this system.

Port Aransas

National Ocean Service (NOS) - Mission Aransas National Estuarine Research Reserve

The National Estuarine Research Reserve System is a network of protected areas focused on long-term research, monitoring, stewardship, education, and training. NOAA's Office for Coastal Management provides funding and national guidance, and each site is managed on a daily basis by a lead state agency or university with input from local partners. The 186,189 acre Mission-Aransas Research Reserve was designated in 2006 and is managed by the University of Texas Marine Science Institute. The reserve is a large contiguous complex of wetland, terrestrial, and marine environments and is named for the two river systems that flow into it. Located on the Texas Coastal Bend, 30 miles northeast of Corpus Christi, the reserve is representative of Western Gulf estuaries.

National Ocean Service (NOS) – Margaret A. Davidson Graduate Fellowship

The Margaret A. Davidson Graduate Fellowship program funds graduate student research and professional development opportunities within the National Estuarine Research Reserve System. The program supports collaborative research addressing local management challenges that may influence future policy and management strategies. The Davidson Fellow at Mission Aransas National Estuarine Research Reserve will focus their research on assessing tidal salt marsh

resilience to global change as a consequence of water quality, drought, and sea level rise impacts on belowground plant productivity.

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.

Rockport

Office of Oceanic and Atmospheric Research (OAR) - <u>Science On a Sphere® at the Bay Education Center</u> – See <u>Page 2</u> for details

Sinton

Office of Oceanic and Atmospheric Research (OAR) - <u>Global Greenhouse Gas Reference Network; Halocarbon</u> <u>Measurements</u>

NOAA's Global Monitoring Laboratory (GML) operates a small aircraft-based North American network of sampling sites to measure vertical profiles of important greenhouse gas concentrations. Air is sampled weekly above the surface up to approximately 25,000 feet above sea level using a relatively small, light, and economical automated system developed by GML researchers. These air samples are delivered to GML in Boulder, Colorado for measurements of CO2, CH4, other greenhouse gases, and ozone depleting substances. These data improve our understanding of the distribution of greenhouse gases and models of the global carbon cycle. The measurements of ozone depleting substances help determine the effectiveness of efforts to protect and restore the ozone layer, which protects the surface from the sun's ultraviolet radiation.

TX-30

Dallas

Office of Oceanic and Atmospheric Research (OAR) - <u>Science On a Sphere® at Earth Day Texas</u>- See <u>Page 2</u> for details.

TX-33

Ft. Worth

Office of Oceanic and Atmospheric Research (OAR) - Science On a Sphere® - See Page 2 for details

National Weather Service (NWS) - Center Weather Service Unit

Housed in the Federal Aviation Administration's Dallas/Fort Worth Air Route Traffic Control Center (ARTCC), the NWS Center Weather Service Unit (CWSU) provide aviation forecasts and other weather information to ARTCC personnel for use in directing the safe, smooth flow of aviation traffic in northern and western Texas, southern Oklahoma, southwestern Arkansas, northwestern Louisiana, and the southeastern tip of New Mexico.

TX-34

Brownsville

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

Austin/San Antonio

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

TX-36

La Porte

National Ocean Service (NOS) - Sabine Neches PORTS

A Physical Oceanographic Real-Time System (PORTS[®]) is operated cooperatively with the local maritime community in Sabine Neches 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 level from four stations, for currents from eight stations, for meteorological data from two locations.

Statewide

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

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. Texas is a co-trustee with NOAA for assessment and restoration after pollution incidents in Texas. For more information about our work in Texas, visit: <u>DARRP in Your State</u> (and use the top menu to navigate to "Texas") and this <u>interactive map</u>.

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. Texas received funding for one project in FY22, as well as funds to build the state's capacity to protect its coastal communities and resources.

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 Corpus Christi, Texas serving the Southern Plains region – Oklahoma and Texas. 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 Marine Fisheries Service (NMFS) - <u>Southeast Regional Office</u> and <u>Southeast Fisheries Science Center</u>

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. Additionally, in collaboration, they develop and ensure compliance with fishery regulations, restore and protect habitat, and recover threatened and endangered species in waters off Texas and throughout the Southeast Region. 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 <u>Southeast Fisheries Science Center</u> 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.

<u>Fisheries Assessment, Technology, and Engineering Support</u> 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.

<u>Fisheries Statistics</u> 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 Biosampling, 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 Galveston and Manvel, TX.

<u>Marine Mammals and Sea Turtles</u> 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.

<u>Population and Ecosystems Monitoring</u> 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.

<u>Sustainable Fisheries</u> 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.

National Marine Fisheries Service (NMFS) - <u>Southeast Regional Office</u>, Gulf of Mexico <u>Gulf of Mexico Bay</u> Watershed Education and Training Program

The NOAA Bay Watershed Education and Training (B-WET) program is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment. The primary delivery of B-WET is through competitive funding that promotes Meaningful Watershed Educational Experiences.. 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 responds to regional education and environmental priorities through local implementation of competitive grant funds. Please see the regional funding opportunity for priorities and eligibility details.

National Marine Fisheries Service (NMFS) - Southeast Regional Office, Ocean Guardian School

An Ocean Guardian School makes a commitment to the protection and conservation of its local watersheds, the world's ocean, and special ocean areas, like national marine sanctuaries. Funds are provided to schools at \$4,000 per year if the school makes this commitment by proposing and then implementing a school- or community-based conservation project. Once the school has completed its project, the school receives official recognition as a NOAA Ocean Guardian School. To date, the Ocean Guardian School Program has partnered with more than 147 schools and has reached more than 80,400 students.

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 12 are in Texas.

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 60 ASOS stations in Texas.

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 645 COOP sites in Texas.

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 oil spills), and public safety. NWR is provided as a public service by the NWS and 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 77 NWR transmitters in Texas.

National Weather Service (NWS) - Incident Meteorologists

The NWS, as mandated by Congress, provides fire weather forecast products and services to the fire and land management community for the protection of life and property, promotion of firefighter safety, and stewardship of America's public wildlands. Since 1928, this effort has included providing critical on-scene support to wildfire managers via specially-trained NWS forecasters called Incident Meteorologists (IMETs). When a fire reaches a large enough size, IMETs are rapidly deployed to the incident and set-up a mobile weather center to provide constant weather updates and forecast briefings to the fire incident commanders. IMETs are very important members of the firefighting team, as changes in the fires are largely due to changes in the weather.

Office of Oceanic and Atmospheric Research (OAR) – Texas 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. Headquartered in the College of Geosciences at Texas A&M University in College Station, the Texas Sea Grant College Program has a statewide mission to support healthy coastal ecosystems and resilient communities and economies, and to develop the Texas workforce. Its extension agents and specialists are located along the coast from Beaumont to Brownsville, where they conduct outreach, education and technology transfer to a wide range of stakeholders in coastal communities and in the industries that depend upon Texas' marine and coastal environment. Texas Sea Grant also funds practical research by scientists at research institutions around the state to create knowledge, tools, products and services that benefit the economy, the environment and people of Texas. Administrative offices are located in College Station. Extension agents are located in Corpus Christi, Brownsville, Beaumont, LaMarque, Angleton, Houston, Bay City, and San Benito. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at seagrant.noaa.gov.

National Marine Fisheries Service (NMFS) - Restoration Center

Restoration Center - The <u>NOAA Restoration Center</u>, within the <u>Office of Habitat Conservation</u>, 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. See the interactive <u>Restoration Atlas</u> to find habitat restoration projects near you. Site visits to see habitat projects may be available in Texas, please inquire if interested. The Restoration Center works with

private and public partners in Texas to restore mangrove forests, oyster bars, and submerged aquatic vegetation beds; remove invasive species; improve stormwater management; establish wetland buffers; and restore historic tidal flow to degraded sites. 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 <u>Office of Habitat Conservation's</u> 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. NOAA led the natural resource damage assessment and the Gulf Environmental method is a result of the Deepwater Horizon oil spill. Restoration projects can be found in this interactive mapping atlas.

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

NOAA's Deep Sea Coral Research is administered by NOAA Fisheries' <u>Office of Habitat Conservation</u>. 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 Texas, 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) - <u>National Marine Mammal Stranding Network</u> and <u>John H. Prescott</u> <u>Marine Mammal Rescue Assistance Grant Program</u>

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 are five stranding network members 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, 43competitive grants were awarded nationwide for a total of \$3.7 million, with two awards totalling \$133,637 going to one recipient in Texas: Texas Marine Mammal Stranding Network.

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) - Operational Forecast of Gulf of Mexico Harmful Algal Blooms

NOAA and partners provide twice-weekly forecasts on harmful algal blooms (HABs) along the southwest coast of Florida, the east coast of Florida, the Florida panhandle, and Texas. The HAB Forecasting System relies on satellite imagery, realtime and forecast winds, and field samples to provide information on the location, extent, and movement of HABs.

National Ocean Service (NOS) - National Water Level Observation Network

NOS operates eight long-term, continuously operating tide stations in Texas located at Texas Point (in Sabine Pass), Galveston Bay Entrance (North Jetty), Galveston Pier 21, Freeport Entrance Channel, Matagorda Bay Entrance Channel, Rockport, Corpus Christi, and Port Isabel. The NWLON is supplemented by more than 20 tide stations that are part of the Texas Coastal Ocean Observation Network (TCOON). 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) - Navigation Manager

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in Texas. They help identify the navigational challenges facing marine transportation in Texas 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 in Galveston, TX to support mariners and stakeholders in the Western Gulf of Mexico region.

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 Coast Survey's suite of navigational charts. NRT-Stennis 1 is assigned to Stennis, MS and is able to respond within 24 to 48 hours.

National Ocean Service (NOS) - Sentinel of the Coast Observing Systems

Two Sentinels in Texas have replaced water level stations that were destroyed or heavily damaged by recent hurricanes. Elevated atop substantial single pile platforms, these stations are specifically designed to withstand Category 4 Hurricanes. Sentinels ensure data is available when most needed, i.e. storm surge from a hurricane is threatening our coastline and their communities. CO-OPS partnered with Texas A&M Division of Nearshore Research and the U.S. Corps of Engineers to establish these new Sentinels. The new Sentinels are located off of <u>Houston-Galveston Bay</u> and <u>Sabine</u> <u>Pass</u>. An additional 4 Sentinels were installed in partnership with the Texas General Land Office. Those stations are at Freeport, Matagorda.

National Ocean Service (NOS) - Phytoplankton Monitoring Network

The Phytoplankton Monitoring Network (PMN) is a nationwide community-based volunteer program of citizen scientists monitoring for the presence of organisms that can lead to Harmful Algal Bloom (HAB) formation. Volunteers serve as data collectors for marine and freshwater blooms at more than 200 coastal and inland sites in the U.S. and Caribbean. Monitoring is conducted year-round and volunteers are trained to measure salinity, air and water temperatures, and how to collect phytoplankton samples using a plankton net. Samples are then analyzed for any HAB organisms via microscopy. Data collected by PMN volunteers enhances the Nation's ability to respond to and manage the growing threat posed by HABs by collecting important data for species composition and distribution in coastal and freshwater environments and creating working relationships between volunteers and professional marine biotoxin researchers. Event monitoring can assist state and federal agencies to issue timely warnings about shellfish consumption and other public health concerns.

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.

National Ocean Service (NOS) – HABScope

HABscope is a portable tool used to count and identify harmful algal blooms (HABs) in the field, including the red tide species *Karenia brevis*. HABscope is routinely used by trained community scientists to monitor HAB cell densities during HAB events. HAB cell concentrations are used to support the <u>Red Tide Respiratory Forecast</u>, which provides an estimate of the risk of respiratory irritation at Florida Gulf Coast beaches. The tool has been transferred to 40 US and international stakeholders, including the fishing industry, community groups, non-profits, and county managers.

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. Four projects in Texas have been completed, and these lands are protected in perpetuity. Many of the Texas projects conserve floodplain parks along Buffalo Bayou and Brays Bayou in Houston, which served their natural floodplain function during Hurricane Harvey.

National Ocean Service (NOS) – National Coastal Zone Management Program

Through a unique Federal-state partnership, NOAA's Office for Coastal Management works with the Texas General Land Office to implement the National Coastal Zone Management Program in Texas. NOAA's Office for Coastal Management provides the state coastal management program with financial and technical assistance to further the goals of the Coastal Zone Management Act and ensure our 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) – National Coastal Resilience Fund

The National Coastal Resilience Fund is a partnership effort between NOAA and the National Fish and Wildlife Foundation (NFWF) to restore, increase, and strengthen natural infrastructure to protect coastal communities, while also enhancing habitat for fish and wildlife. In Texas, nine projects have been funded, one each year in FY18-FY20, two in FY21, and four in FY22.

National Ocean Service (NOS) and National Marine Fisheries Service (NMFS)- 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 will invest 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) - 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.
- 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 tradeoffs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSCs for Texas are based in Houston and New Orleans, Louisiana.
- 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 RRC serving the Southeast/Gulf
 of Mexico region is based in St. Petersburg, Florida.

National Ocean Service (NOS) – OR&R <u>Gulf of Mexico Environmental Response Management Application</u> and <u>Response Tools for Oil and Chemical Spills</u>

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.

National Ocean Service (NOS) - Marine Debris Projects and Partnerships in Texas

The NOAA Marine Debris Program (MDP) in the Office of Response and Restoration 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. In

Texas, the MDP is partnering with the National Parks Service to install an educational marine debris display at Padre Island National Seashore to bring attention to the issue of marine debris along the Texas coast. The MDP also works with local communities and organizations to prevent and remove marine debris. The University of Texas at Austin Marine Science Institute to expand their Nurdle Patrol monitoring project while increasing collaboration among scientists, resource managers, and industry representatives in the Gulf of Mexico. The project will also create Spanish versions of the website, app, and training materials. The MDP is also supporting Texas Sea Grant to install over 60 monofilament fishing line collection bins for recycling and working with charter and recreational fishers to reduce use of single use plastics while fishing. The Coastal Bend Bays & Estuaries Program is organizing volunteers to systematically and comprehensively locate and remove derelict crab traps in coastal waters from Matagorda Bay to Aransas Bay during the annual crab season closure. With support from the MDP, the Texas General Lands Office is working to remove large debris remaining from Hurricane Harvey, including a derelict oil platform, derelict septic tanks, a 184 foot long pier, among other items. 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 stakeholders, to maintain and exercise the Texas Marine Debris Emergency Response Guide.

National Ocean Service (NOS) - <u>U.S. Integrated Ocean Observing System</u> (<u>Gulf of Mexico Coastal Ocean</u> <u>Observing System</u>)

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 supports the maintenance and modernization of the high frequency radar stations along the Texas coast. GCOOS headquarters are located in the Department of Oceanography at Texas A&M University.

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) - Ocean Guardian School Program

An Ocean Guardian School makes a commitment to the protection and conservation of its local watersheds, the world's ocean, and special ocean areas, like national marine sanctuaries. Funds are provided to schools at \$4,000 per year if the school makes this commitment by proposing and then implementing a school- or community-based conservation project. Once the school has completed its project, the school receives official recognition as a NOAA Ocean Guardian School. To date, the Ocean Guardian School Program has reached more than 88,700 students and 3,500 teachers.

NOAA In Your State is managed by <u>NOAA's Office of Legislative and Intergovernmental Affairs</u> and maintained with information provided by NOAA's Line, Corporate, and Staff Offices. Questions about specific programs or offices should be directed to the NOAA Line, Corporate, or Staff Office listed.

More information for those offices may be found at <u>NOAA.gov</u>.