



NOAA In Your State

Florida

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](#), and then [statewide programs](#).

Highlights of NOAA in Florida

| | | |
|---|-------------------------------------|---------------|
| Aircraft Operations Center | Lakeland | FL-17 |
| Florida Keys National Marine Sanctuary | Key West, Key Largo | FL-28 |
| National Hurricane Center | Miami | FL-28 |
| Coral Reef Watch Environmental Monitoring | Miami | FL-27 |
| Satellite Assisted Search and Rescue | Miami | FL-27 |
| Southeast Fisheries Science Center | Miami / Virginia Key/Panama City | FL-27 FL-2 |

[Atlantic Oceanographic and Meteorological Lab](#) Miami / Virginia Key FL-27

The state of Florida also has two Cooperative Institutes, six Weather Forecasting Offices, one Regional Office, 6 Labs and Field Offices, one Cooperative Science Center, nineScience on a Sphere® exhibitions, three National Estuarine Research Reserves, one Habitat Focus Area, one coral reef monitoring station, and one communications station.

Weather Forecast Offices

| | |
|--------------|-------|
| Tallahassee | FL-2 |
| Jacksonville | FL-4 |
| Melbourne | FL-8 |
| Tampa Bay | FL-15 |
| Key West | FL-28 |
| Miami | FL-28 |

[**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 Florida. There are 122 [WFOs nationwide](#) of which six are in Florida. 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 Florida weather, visit [www.weather.gov](#) and, on the national map, click on the relevant county or district.

Science On a Sphere®

| | |
|-------------|-------|
| Freeport | FL-1 |
| Tallahassee | FL-2 |
| Titusville | FL-8 |
| Orlando | FL-10 |
| Sarasota | FL-17 |

| | |
|-----------------|-------|
| Ft. Myers | FL-19 |
| Delray Beach | FL-22 |
| West Palm Beach | FL-22 |
| Tavernier | FL-28 |

Science On a Sphere (SOS) 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 the E.O. Wilson Biophilia Center in Freeport, Galaxy E3 Elementary in Delray Beach, Kennedy Space Center in Cape Canaveral, Orlando Science Center in Orlando, Plantation Key School in Tavernier, and South Florida Science Center and Aquarium in West Palm Beach.

FL-1

Freeport

NOAA Office of Education – **[Science on a Sphere \(SOS\)](#)** – See [Page 2](#) for detail.

Gulf Breeze

National Ocean Service (NOS) - [Gulf Regional Field Office](#)

NOAA's Center for Operational Oceanographic Products and Services has opened a regional field office located in the EPA building in Gulf Breeze, FL. This office operates and maintains the Gulf Coast portion of the National Water Level Observation Network (NWLON) for the collection, analysis and dissemination of water level observations and long-term sea level trends. NWLON is nationally composed of 210 primary and long-term control tide stations, which provide basic tidal data for U.S. coastal and marine boundaries and for charting data. Other uses range from storm surge warnings to commercial and recreational vessel navigation to global climate change and tectonic studies.

FL-2

Apalachicola

National Ocean Service (NOS) - [Apalachicola Bay 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 234,715 acre Apalachicola Research Reserve was designated in 1979 and is managed by the Florida Department of Environmental Protection. Located in the Florida panhandle, the Apalachicola Bay basin features 1,300 plant species, 300 species of birds, over 180 species of fresh, estuarine and saltwater fish, and 50 species of mammals, as well as the greatest assortment of amphibians and reptiles in North America above Mexico. The reserve is also a partner in the NOAA Sentinel Site Program.

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 Apalachicola Bay National Estuarine Research Reserve will focus their research on using high resolution aerial imagery to quantify rates of mangrove encroachment into estuarine habitats in the Reserve.

Collier

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

In Florida, NOAA's Office of Education provides support to the National Estuarine Research Reserve (NERR) Rockery Bay in Collier 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.

Panama City

National Marine Fisheries Service (NMFS) - Panama City Laboratory

The Panama City Laboratory conducts research supporting the Southeast Fisheries Science Center.

National Marine Fisheries Service (NMFS) - Shark Fishery Observer Programs

The NMFS Shark Fishery Observer Program, based out of the Panama City Laboratory, covers vessels fishing in the U.S. Atlantic Ocean and Gulf of Mexico; primarily in US waters from North Carolina through Texas. The shark gillnet observer program primarily monitors vessels off east Florida and Georgia, and more recently in the Gulf of Mexico and North Carolina.

NOAA Commissioned Officer Corps (NOAA Corps) - Staff Scientist

The NOAA Commissioned Officer Corps stations an officer with the Southeast Fisheries Science Center Panama City Laboratory in support of the Lab's scientific operations. This officer conducts vessel operations and maintenance; assists in the management of research programs currently administered by the Laboratory; acts as liaison with Naval Support Activity, Panama City; conducts diving operations; participates in outreach and education programs for the Lab; and works with Lab scientists in efforts to publish collected and analyzed data from projects. In addition, they support the Lab in various ancillary roles as needed, such as with property management and supervisory positions.

Tallahassee

NOAA Office of Education - NOAA Center for Coastal and Marine Ecosystems

The NOAA Center for Coastal and Marine Ecosystems (CCME) is led by Florida A&M University in collaboration with its partner institutions: Bethune-Cookman University, California State University Monterey Bay, Jackson State University, Texas A&M University-Corpus Christi, and the University of Texas at Rio Grande Valley. The Center is supported through a cooperative agreement award from NOAA's Educational Partnership Program with Minority Serving Institutions (EPP/MSI) as a future workforce investment to support NOAA's mission enterprise. The purpose of the award is to expand participation in NOAA mission-aligned education, training, capacity building, and collaborative research focusing on expanding participation of groups traditionally underrepresented and historically excluded in NOAA mission aligned careers. The center's education and training focuses on Science, Technology, Engineering and Math (STEM), natural resources management, risk assessment, social justice and policy disciplines in support of resilient coastal communities and economies. The EPP/MSI Graduate Fellowship Program (GFP) supports CSC students pursuing graduate degrees in disciplines aligned with NOAA's mission. Since 2021, CCME Scholars have been awarded 3 GFP scholarships. In joint collaboration with the NOAA's Living Marine Resources Cooperative Science Center (LMRCSC), and NOAA subject

matter experts, CCME has developed, and will implement, a Joint Collaborative Research Project (JCRP) that supports NOAA's strategic goals and missions, while directly aligning with each Center type. Center scientists and students will employ an integrated approach to research and training students focusing on coastal and marine ecosystems approaches to develop products in support of NOAA's resource management and stakeholder priorities. The Center's primary collaborator at NOAA is the National Ocean Service (NOS). This Center's research is also aligned with the needs of NOAA's Office of Oceanic and Atmospheric Research (OAR), and the National Marine Fisheries Service (NMFS).

National Weather Service (NWS) - [Weather Forecast Office \(WFO\)](#) - See [Page 2](#) for detail.

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

FL-3

Gainesville

National Marine Fisheries Service (NMFS) - [Recruiting - Training - Research Program](#)

The Southeast Fisheries Science Center's Recruiting Training Research Program is a joint program between NMFS and the University of Florida. The program recruits top undergraduates into the field of fisheries population dynamics and careers with NMFS; provides training via continuing education courses for NMFS employees; and conducts population dynamics and stock assessment research in support of the NMFS mission in a unique collaboration of undergraduates, graduate students, postdoctoral associates, university faculty, and NMFS biologists.

FL-4

Jacksonville

National Weather Service (NWS) - [Weather Forecast Office](#) - see [page 2](#) for detail.

National Marine Fisheries Service (NMFS) - [Southeast Regional Office, Protected Resources Division Field Office](#)

The Southeast Regional Office has the Fernandina Beach Field Office which is strategically located near the center of the endangered North Atlantic right whale's calving area. This Office coordinates right whale recovery activities in the Southeast Region, as well as outreach and communication on management and recovery activities.

National Ocean Service (NOS) - [Jacksonville PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Jacksonville. Real-time data are quality-controlled and disseminated to local users for safe and efficient navigation and include water level from three stations, currents from five stations, meteorological data from five locations and air gap information for the Dames Point Bridge.

National Ocean Service (NOS) – [Navigation Response Team](#)

NOAA's navigation response team (NRT) operates out of Fernandina Beach, supporting navigation in the ports from North Carolina to Florida. These three-person teams measure depths of a changing seafloor and search for underwater dangers to navigation that can slow down commercial shipping immediately after storm events and other emergencies. The teams provide time-sensitive information to the U.S. Coast Guard or port officials and transmit data to NOAA cartographers for updating navigational charting products.

National Weather Service (NWS) - [Center Weather Service Unit](#)

Housed in the Federal Aviation Administration's Jacksonville Air Route Traffic Control Center (ARTCC) in Hilliard, the NWS Center Weather Service Unit (CWSU) staff provides aviation forecasts and other weather information to ARTCC

personnel for their use in directing the safe, smooth flow of aviation traffic in northern Florida, parts of Alabama, southern Georgia and southern South Carolina.

FL-5

Ponte Vedra Beach

National Ocean Service (NOS) - [Guana Tolomato Matanzas 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 76,760-acre Guana Tolomato Matanzas Research Reserve was designated in 1999 and is managed by the Florida Department of Environmental Protection. The site includes salt marsh and mangrove tidal wetlands, oyster bars, estuarine lagoons, upland habitat, and offshore seas in Northeast Florida. The reserve contains the northernmost extent of mangrove habitat on the east coast, with some of the highest dunes in Florida, some measuring 30-40 feet tall.

FL-8

Titusville

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

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.

Melbourne

National Weather Service (NWS) - [Weather Forecast Office \(WFO\)](#) - See [Page 2](#) for detail.

FL-10

Orlando

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

Office of the Chief Information Officer (OCIO) - [High Performance Computing and Communications](#)

The Office of the Chief Information Officer oversees operational high performance computing in partnership with the National Weather Service. NOAA's operational supercomputers process and analyze earth observations at quadrillions of calculations per second to support weather, water, and climate forecast models. The primary supercomputer, Luna, is located in Reston, Virginia, and the secondary supercomputer, Surge, is located in Orlando, Florida.

FL-14

Hillsborough

NOAA Office of Education - [Coastal Ecosystem Learning Centers \(CELC\) network](#)

In Florida, NOAA's Office of Education provides support to the Florida Aquarium in Hillsborough 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.

St. Petersburg

National Marine Fisheries Service (NMFS) - Southeast Inspection Branch

NOAA's Seafood Inspection Program conducts a voluntary inspection program for fishery products on a fee-for-service basis. The office offers a wide range of services to the area's fishermen and fish processors including process and product inspection, product grading, lot inspection, laboratory analysis, and training. Export health certificates as required by most countries are issued for U.S. exporters. All edible foodstuffs, ranging from whole fish to formulated products, as well as fishmeal used for animal foods, are eligible for inspection and certification.

NOAA Commissioned Officer Corps (NOAA Corps) - Southeast Regional Office Presence

The NOAA Commissioned Officer Corps stations multiple officers with the NOAA Fisheries Southeast Regional Office in support of various programs within the office. These officers' duties include overseeing division records-management and the shift to all-digital records, assisting in the development of division staffing plans and annual funding initiatives, coordinating division facility needs with the regional Operations, Management, and Information Division, and serving as the liaison between the National Marine Fisheries Service and the maritime community. In addition, they coordinate aircraft use and reporting requirements for early warning system surveys, serve as small boat vessel operations coordinators, assist with other large whale related issues such as river incursion responses, and help to plan and execute the various program budgets.

National Ocean Service (NOS) – Office for Coastal Management

The NOAA Office for Coastal Management practices a partner-based, boots on the ground approach to coastal management. The organization currently has staff in the eight regions to provide assistance to local, state, and regional coastal resource management efforts and facilitate customer feedback and assessments. For the Gulf Coast, these NOAA personnel are located in Stennis, Mississippi and St. Petersburg, Florida. They provide a wide range of programs dedicated to improving the management of coastal resources in the Gulf region.

National Ocean Service (NOS) - OR&R Regional 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.

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.

The [NOAA Marine Debris Program \(MDP\)](#) in the Office of Response and Restoration (OR&R) supports national and international efforts to research, prevent, and reduce the impacts of marine debris. The **MDP Florida Regional**

Coordinator, based in St. Petersburg, 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.

National Marine Fisheries Service (NMFS) - [Atlantic Highly Migratory Species Management Division](#)

The Atlantic Highly Migratory Species Management Division manages Atlantic tuna, sharks, swordfish, and billfish under the Magnuson-Stevens Fishery Conservation and Management Act. In cooperation with an external advisory panel, the division develops and implements Fishery Management Plans for these species taking into account all domestic and international requirements under the Atlantic Tunas Convention Act, Marine Mammal Protection Act, the Endangered Species Act, and the Migratory Bird Treaty Act. The St. Petersburg office handles several Atlantic HMS fishery issues including billfish and swordfish fisheries, tournament registration, recreational fisheries, pelagic longline fishing, and recreational non-tournament reporting of billfishes and swordfish.

National Marine Fisheries Service (NMFS) - NOAA Fisheries Seafood [Inspection Office](#)

NOAA's Seafood Inspection Program conducts a voluntary inspection program for fishery products on a fee-for-service basis. The office offers a wide range of services to the area's fishermen and fish processors including process and product inspection, product grading, lot inspection, laboratory analysis, and training. All edible foodstuffs, ranging from whole fish to formulated products, as well as fishmeal used for animal foods, are eligible for inspection and certification.

National Marine Fisheries Service (NMFS) - [Southeast Regional Office](#)

The Southeast Regional Office headquarters are located in St. Petersburg, adjacent to the University of South Florida campus. The Office manages and conserves living marine resources and habitat of the Gulf of Mexico, South Atlantic and U.S. Caribbean to promote healthy, functioning marine ecosystems, afford economic opportunities and enhance the quality of life for the American public. The Office is responsible for over 40 percent 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 percent of the nation's coastal development permits, provides fish passage and ecological flow recommendations at dozens of barriers, supports large-scale conservation and restoration programs aimed at protecting essential fish habitat and coastal communities from development, subsidence, sea level rise, and storms, and engages partners in regional collaboration. 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 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.

**FL-15
Seffner**

National Marine Fisheries Service (NMFS) - [Central Florida Lot Inspection Office](#)

NOAA's Seafood Inspection Program conducts a voluntary inspection program for fishery products on a fee-for-service basis. The office offers a wide range of services to the area's fishermen and fish processors including process and product inspection, product grading, lot inspection, laboratory analysis, and training. All edible foodstuffs, ranging from whole fish to formulated products, as well as fishmeal used for animal foods, are eligible for inspection and certification.

Tampa Bay

National Weather Service (NWS) - [Weather Forecast Office \(WFO\)](#) - See [Page 2](#) for detail.

**Office of Oceanic and Atmospheric Research (OAR) - [Uncrewed Systems Research Transition Office \(UxSRTO\)](#)
Project for HAB Detection and Forecasting**

With support from the UxSRTO, Uncrewed Aircraft Systems (UAS) are used by National Centers for Coastal Ocean Science (NCCOS) and the Center for Operational Oceanographic Products and Services (CO-OPS) to implement an operational forecast system for Karenia brevis blooms (red tides) in the Gulf of Mexico and eastern Florida. Karenia brevis is unusual in that its toxin frequently ends up in aerosols coming off the water, which causes respiratory irritation or health risks. This forecast aids state managers and the public by incorporating satellite imagery with state-led water sampling programs to identify the locations of the HABs and the risk they pose of respiratory risk. Advancing this real-time detection capability enables states (especially Florida) and counties to more effectively deploy and focus their limited sampling resources. Furthermore, this capability enhances NOAA's HAB forecasting capability to be able to provide improved warnings to the public, and thereby increase public safety and reduce economic impact. This capability is currently being transitioned to Manatee County for integration into their HAB monitoring program.

National Ocean Service (NOS) - [Tampa Bay PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Tampa Bay and has been operating since 1991. Real-time data are quality-controlled and disseminated to local users for safe and efficient navigation and include water level from four stations, currents from four stations, and meteorological data from nine locations. Air gap is monitored at the Sunshine Skyway Bridge and a wave buoy is also part of this PORTS®.

National Ocean Service (NOS) - [Tampa Bay Marine Channels Forecast System](#)

NOAA's Tampa Bay Marine Channels Forecast (TBMCF) System is a decision support tool that centralizes critical oceanographic and meteorological forecast data from the National Weather Service and the National Ocean Service into one location. The first of its kind, Tampa Bay's Marine Channels Forecast system provides local mariners with a completely integrated view of forecasts along the area's shipping channels. Vessel operators transiting Tampa Bay can view all NOS water level and tidal current forecasts right alongside NWS 24-hour weather forecasts for winds, wind gusts, rain chance, marine hazard alerts, and visibility less than 1 mile. These forecasts are available at 13 points along the area's shipping channels all the way to Old Tampa Bay and Hillsborough Bay.

FL-17

Sarasota

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

FL-18

Lakeland

Office of Marine and Aviation Operations (OMAO) - [Aircraft Operations Center](#)

The airplanes of the Aircraft Operations Center (AOC) are flown in support of NOAA's mission to promote global environmental assessment, prediction and stewardship of the Earth's environment. NOAA's aircraft operate throughout the United States and around the world; over open oceans, mountains, coastal wetlands, and Arctic pack ice. These versatile aircraft provide scientists with airborne platforms necessary to collect the environmental and geographic data essential to their research. NOAA demonstrates a challenging and multi-disciplinary approach to meeting the responsibilities as the "Earth Systems Agency." The AOC provides capable, mission-ready aircraft and professional crews to the scientific community wherever and whenever they are required. Whether studying global climate change or acid rain, assessing marine mammal populations, surveying coastal erosion, investigating oil spills, flight checking aeronautical

charts, or improving hurricane prediction models, the AOC flight crews continue to operate in some of the world's most demanding flight regimes.

Aircraft based at the AOC include two Lockheed WP-3D Orions and a Gulfstream IV (also known as Hurricane Hunters), four Twin Otters, two King Airs, and a Jet Prop. The Hurricane Hunter Lockheed WP-3D Orion and the Gulfstream IV-SP high-performance long-range aircraft are among the most advanced airborne environmental research planes flying today. These aircraft give scientists a unique platform for the study of tropical cyclones and other severe storms, global climate change, air chemistry and pollution oceanography, Arctic ice formation, and many other environmental issues. The AOC and the aircraft are operated under the direction of officers from the NOAA Commissioned Officer Corps. The NOAA Corps today provides a cadre of professionals trained in engineering, earth sciences, oceanography, meteorology, fisheries science, and other related disciplines. Officers operate ships, fly aircraft, manage research projects, conduct diving operations, and serve in staff positions throughout NOAA.

Sebring

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.

FL-19

Naples

National Ocean Service (NOS) - [Rookery Bay 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 110,000 acre Rookery Bay Reserve was designated in 1978 and is managed by the Florida Department of Environmental Protection. Located south of Naples on the Florida Gulf Coast, the site is situated near one of the fastest growing business and retirement areas in the nation. The reserve protects a nearly pristine subtropical mangrove forested estuary, and contains an estimated 70,000 acres of open waters, representing 64 percent of the reserve. The reserve protects and restores vital habitat, brings diverse stakeholders together to solve complex coastal issues, offers a dynamic visitor experience with land and water trails, and provides extensive education programs.

Ft. Myers

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

FL-22

Delray Beach

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

Palm Beach

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 Florida, ELP funded a project by the Pine Jog Environmental Education Center (FAU Pine Jog) in Palm Beach. 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 [FAU Pine Jog 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 hazards. 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.

West Palm Beach

National Marine Fisheries Service (NMFS) - [Southeast Regional Office, Protected Resources and Habitat Conservation Division Field Office](#)

The Southeast Regional Office has the West Palm Beach Field Office. In addition to conducting mandated essential fish habitat and Endangered Species Act consultations associated with extensive coastal development activities, the Office contributes to implementation of NOAA's Coral Reef Conservation Program in Florida and the U.S. Caribbean, supports efforts combating Stony Coral Tissue Loss Disease, supports the infrastructure planning activities of the Federal Highway Administration and Florida Department of Transportation, participates in the planning processes for major federal water development projects such as port expansions, and works with state government and stakeholders to reduce the impacts of fishing on coral reef habitat.

West Palm Beach

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

FL-23

Fort Lauderdale

National Ocean Service (NOS) - [Port Everglades PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Broward County at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time water level and meteorological data is available at one station.

Office of Oceanic and Atmospheric Research (OAR) - [Near Real-time Environmental Monitoring of Port Everglades](#)

The monitoring network is a series of in situ oceanographic and meteorological mooring stations situated throughout Port Everglades in Fort Lauderdale, Florida. Data from the stations are transmitted to NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and used to predict, monitor, and model incidences of high turbidity events. The data collected from Port Everglades are quality controlled and maintained for distribution at AOML and used by the US Army Corps of Engineers and partners to adaptively manage the Port Everglades Deepening project. Local mariners and recreational fishermen have also found the data to be useful in planning their excursions.

FL-25

Dania Beach

National Marine Fisheries Service (NMFS) - [Southeast Regional Office, Protected Resources Division Field Office](#)

The Southeast Regional Office has the Dania Beach Field Office which analyzes the impacts of projects in southeastern Florida on species and habitat protected by the *Endangered Species Act (ESA)*. These analyses support mandated ESA consultations and ensure important projects can be completed without jeopardizing the sustainability of threatened and endangered species and the habitat critical to their recovery.

Hollywood

National Marine Fisheries Service (NMFS) - [South Florida Lot Inspection Office](#)

NOAA's Seafood Inspection Program conducts a voluntary inspection program for fishery products on a fee-for-service basis. The office offers a wide range of services to the area's fishermen and fish processors including process and product inspection, product grading, lot inspection, laboratory analysis, and training. All edible foodstuffs, ranging from whole fish to formulated products, as well as fishmeal used for animal foods, are eligible for inspection and certification.

FL-26

Everglades City

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.

FL-27

Miami

National Environmental Satellite, Data, and Information Service (NESDIS) - [Office of Satellite and Product Operations](#) - [Satellite Assisted Search and Rescue](#)

The Communications Station Miami is a key member of the Coast Guard's Atlantic Area Communications Systems and one of four Communications Stations on the east coast of the United States. They provide communication services to Coast Guard vessels and aircraft, the Navy, other agencies, and the maritime public. They also house eight NOAA Search and Rescue Satellite Aided Tracking (SARSAT) antennas and associated ground equipment supporting MEOSAR and polar satellite search and rescue operations. These ground systems, referred to as Local User Terminals (LUTs) can receive signals, relayed through polar orbiting satellites, from ships, aircraft or individuals in distress. The location of the distress signal is automatically forwarded to the SARSAT Mission Control Center, which notifies the appropriate Rescue Coordination Center. SARSAT is part of an international humanitarian effort helping to improve the rescue of persons in distress. The system has saved more than 10,153 lives in the United States, and over 50,000 people rescued worldwide since 1982.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Center for Satellite Applications and Research](#) - [Coral Reef Watch Environmental Monitoring](#)

These permanent monitoring stations are part of the Coral Reef Watch program, a collaborative effort between NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and NOAA's NESDIS Center for Satellite Applications and Research (STAR). Remote monitoring stations in the Florida Keys, Port Everglades, and the Caymans, continually observe meteorological and oceanographic parameters. These data are transmitted to AOML and the integrated data are used to predict, monitor, and model incidences of coral bleaching and other coral-related biological events. AOML is also involved in FL Keys environmental monitoring. Since 1992, a network of 7 monitoring stations in the Florida Keys and Florida Bay, called C-Man stations, has been established through a cooperative effort between AOML and the Florida Institute for Oceanography. These stations monitor and report meteorological and oceanographic parameters from their locations. The data is quality controlled and maintained for distribution at AOML and is used by the Florida Keys National Marine Sanctuary and research scientists to monitor and study coral-reef-related issues such as coral bleaching. Local mariners and recreational fishermen have also found the data to be useful in planning their excursions.

National Weather Service (NWS) - [Center Weather Service Unit](#)

Housed in the Federal Aviation Administration's Miami Air Route Traffic Control Center (ARTCC), the NWS Center Weather Service Unit (CWSU) staff provides aviation forecasts and other weather information to ARTCC personnel for their use in directing the safe, smooth flow of aviation traffic in southern Florida.

Office of Oceanic and Atmospheric Research (OAR) and Office of the Chief Information Officer (CIO) - [N-Wave NOAA Science Network](#)

N-Wave is NOAA's science network connecting NOAA, academic, and state research network communities to data and resources needed to advance environmental science.

National Weather Service (NWS) - [National Hurricane Center](#)

Located at Florida International University's University Park campus and co-located with the NWS Weather Forecast Office in Miami, the NWS National Hurricane Center (NHC) is responsible for hurricane forecasts for the Atlantic ocean, the Caribbean, Gulf of Mexico, and the Eastern North Pacific Ocean. While NHC is best known for its hurricane forecast and warning program, its other responsibilities include extensive year-round marine and aviation forecasts, as well as warning programs for tropical and subtropical regions of the North Atlantic, Caribbean, Gulf of Mexico and Eastern North Pacific, including adjacent land areas. To fulfill these responsibilities, the NHC prepares and distributes tropical weather forecasts that employ the latest electronic equipment. It also provides relevant training to meteorologists and emergency response officials from around the world. NHC is one of the nine NWS National Centers for Environmental Prediction and works very closely with the World Meteorological Organization.

National Weather Service (NWS) - [Weather Forecast Office \(WFO\)](#) - See [Page 2](#) for detail.

Miami

National Ocean Service (NOS) - [Miami PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Miami. Real-time data are quality-controlled and disseminated to local users for safe and efficient navigation and include water level and meteorological data from one station and tidal currents from three stations.

Miami/Virginia Key

National Marine Fisheries Service (NMFS) - [Miami Laboratory](#)

The Miami Laboratory supports research and administration of the [Southeast Fisheries Science Center](#).

Office of Oceanic and Atmospheric Research (OAR) - [Experimental Research Laboratory](#)

The Experimental Reef Lab (ERL) at the University of Miami was designed and built by NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and the Cooperative Institute for Marine and Atmospheric Science for the purpose of finely manipulating temperature and pH to mirror projected ocean conditions. Using custom-built technology, conditions can be controlled with a precision up to an order of magnitude higher than other contemporary systems. The lab has 16 completely independent aquarium systems which can each be programmed for changes in pH, temperature, and light. One of the unique features of the lab is the fully automated logging and control system, facilitating real-time manipulation of dynamic levels for temperature, pH, and/or light treatments.

Office of Oceanic and Atmospheric Research (OAR) - [Miami Regional Library and the National Hurricane Center Library](#)

NOAA's Miami Regional Library supports coastal and open ocean programs, tropical and hurricane meteorology, air-sea interaction, ocean physics, chemistry, acoustics, atmospheric chemistry, and marine geology. Special collections include: NOAA Laboratories Technical Report Series for atmospheric sciences, the Harris B. Stewart Collected Papers, foreign and Caribbean meteorological reports, handwritten local weather records, Wood Hole Oceanographic Institution technical reports and dissertations, film loops of weather, and historical weather data of Key West and Miami. The National Hurricane Center Library is a branch of NOAA's Miami Regional Library. The library specializes in hurricanes and tropical meteorology. The collection includes books and journals on hurricanes, cyclones, typhoons, hurricane damage, economic impact, disaster awareness, mitigation, handwritten weather records, anecdotal hurricane experiences, videos, slides, information on coastal storm-related building and construction, wind studies, and newspaper articles of hurricane damage.

Office of Oceanic and Atmospheric Research (OAR) - [Atlantic Oceanographic and Meteorological Laboratory](#)

The Atlantic Oceanographic and Meteorological Laboratory (AOML) is a federal research facility that houses approximately 160 employees on a permanent basis. Research at the AOML improves the understanding and prediction of both hurricane track and intensity, the ocean's role in annual to multi-decadal climate variability, and human impacts on coastal ecosystems. AOML's research encompasses the oceans and climate, the global impacts of increased carbon dioxide and ocean acidification, ocean and human health studies, and the ocean's influence on regional rainfall and hurricanes. AOML is also a major partner in the collection and interpretation of oceanographic data collected via ships, satellites, aircraft, drifting buoys, and floats. AOML is a 6 story building that houses numerous resources, including the Physical Oceanography Engineering Lab, which is used to develop, innovate, and maintain several monitoring platforms that support NOAA's Observing Network for climate and weather studies, including: Argo, global drifters, eXpendable Bathymeterographs (XBTs), hurricane gliders, PIRATA moorings, and repeat hydrographs; the Advanced Manufacturing and Design Lab, which uses state-of-the-art equipment to create novel scientific tools, controlling the process from idea to prototype to proof of concept; and the eDNA and Bioinformatics Lab, which uses genome-based techniques to improve our ability to characterize and monitor ecosystems.

Office of Oceanic and Atmospheric Research (OAR) - [AOML Small Boats Program](#)

The Atlantic Oceanographic and Meteorological Laboratory (AOML) Small Boats Program maintains three small boats (a 23-foot flats boat, a 25-foot Dusky™ cuddy cabin, and a 21-foot Parker™ center-console) allowing AOML to conduct a variety of coastal research, including investigations into coastal ecosystem and various chemical and oceanographic processes, including those on Florida Coral Reefs.

Office of Oceanic and Atmospheric Research (OAR) - [Mobile Carbon Laboratory](#)

The Carbon Dioxide (CO₂) laboratory—based out of the Atlantic Oceanographic and Meteorological Laboratory (AOML)—processes samples from research cruises around the world to determine the CO₂ uptake by the ocean and to monitor the effect of carbon uptake on ocean health. Sampling is performed at sea during open ocean and coastal cruises and processed in the onboard mobile CO₂ laboratory or AOML, depending on the nature of the project. Sampling is done through the whole water column so we can learn more about how the ocean takes up and stores carbon. This collaborative effort between AOML, universities, and other NOAA organizations provides long-term datasets which can be used to measure the changes in carbon content and its effect on the health of the oceans over time.

Office of Oceanic and Atmospheric Research (OAR) - [Uncrewed Systems Research Transition Office \(UxSRTO\)](#) [Project to Improve Tropical Cyclone Forecasts](#)

With support from the Uncrewed Systems Research Transition Office (UxSRTO), AOML is using data from a disposable Uncrewed Aircraft System (UAS) launched from piloted aircraft into hurricanes to produce improved numerical weather forecast model output of tropical cyclone intensity, structure, and track. The new data assimilation methods being developed from these novel observation platforms are being integrated into the latest, cutting edge forecast models, which will improve forecasting of changes in hurricane intensity and better warn the affected general public.

Office of Oceanic and Atmospheric Research (OAR) - [Cooperative Institute for Marine and Atmospheric Studies](#)

The Cooperative Institute for Marine and Atmospheric Studies (CIMAS) was awarded to the University of Miami's Rosenstiel School of Marine and Atmospheric Science (RSMAS). CIMAS serves as a mechanism to promote collaborative research between university scientists and those in NOAA. CIMAS research is largely partnered with the Atlantic Oceanographic and Meteorological Laboratory, the Southeast Fisheries Science Center, and the National Hurricane Center. CIMAS conducts research across four themes: (1) tropical weather observations, analysis, and prediction; (2) ocean and climate observations, analysis, and prediction; (3) ecosystem observations, modeling, forecasting and management; and (4) protection and restoration of marine resources.

Office of Oceanic and Atmospheric Research (OAR) - [Hurricane and Ocean Testbed](#)

The Hurricane and Ocean Testbed (HOT), a collaborative effort between NOAA's National Hurricane Center (NHC) and the Atlantic Oceanographic and Meteorological Laboratory (AOML) and received funding from the Weather Program Office. It has been successfully launched in the newly designed William M. Lapenta Laboratory at NHC. This testbed establishes a physical and virtual collaboration space for researchers and forecasters. It is equipped with state-of-the-art technology to facilitate teamwork, such as cloud-based interfaces, meeting space for both physical and virtual work, and monitors for sharing real-time observations and model forecasts during storm events. The mission of HOT is to transfer more rapidly and smoothly new technology, research results, and observational advances of the United States Weather Research Program, its sponsoring agencies, the academic community and other groups into improved tropical cyclone analysis and prediction at operational centers. HOT will allow researchers and forecasters to explore opportunities and find solutions to common forecast challenges, resulting in better analyses and forecasts of high-impact tropical and marine weather and ocean conditions. The goal is for it to become an environment where the end-to-end process for analyses, forecasts, warnings, and response can be optimized. Using this testbed, AOML and NHC scientists will collaborate on numerous joint projects, including how to integrate data from observing systems into better operational analyses and forecasts of tropical weather and ocean conditions. Developing the capability for forecasters to visualize and use data in real-time from AOML's aircraft-based instruments and uncrewed systems such as flying drones, hurricane gliders, and saildrones is a key focus of AOML's efforts to aid forecasters.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Coral Reef Watch Environmental Monitoring](#)

The Coral Reef Watch program is within NOAA's Center for Satellite Applications and Research (STAR), and permanent monitoring stations are part of the program. In the Florida Keys, Port Everglades, and the Caymans, remote monitoring stations continually observe meteorological and oceanographic parameters. These data are transmitted to AOML and the integrated data are used to predict, monitor, and model incidences of coral bleaching and other coral-related biological events. AOML is also involved in FL Keys environmental monitoring. Since 1992, a network of 7 monitoring stations in the Florida Keys and Florida Bay, called C-Man stations, has been established through a cooperative effort between AOML and the Florida Institute for Oceanography. These stations monitor and report meteorological and oceanographic parameters from their locations. The data is quality controlled and maintained for distribution at AOML and is used by the Florida Keys National Marine Sanctuary and research scientists to monitor and study coral-reef-related issues such as coral bleaching. Local mariners and recreational fishermen have also found the data to be useful in planning their excursions.

NOAA Commissioned Officer Corps (NOAA Corps) - [Southeast Fisheries Science Center and Atlantic Oceanographic and Meteorological Laboratory Support](#)

The NOAA Commissioned Officer Corps stations multiple officers at the Southeast Fisheries Science Center (SEFSC) and Atlantic Oceanographic and Meteorological Laboratory Virginia Key Facilities. These officers perform a mix of operational and administrative duties, including planning and managing annual budgets, assisting in development of

division staffing plans, coordinating division facility needs, participating in Laboratory field seasons aboard NOAA Ships, and managing project logistics. In addition, they serve as certified small boat operators for the programs, lead various teams throughout the field season on smaller operational missions, serve as small boat vessel operations coordinators, NOAA Divemasters, Operations Officers, and Fisheries Research Biologists. In these roles, they maintain and operate the small boats at the facility, coordinate planning of the program's field operations, participate in research aboard NOAA Ships when necessary, manage property for the Fish and Coral unit, coordinate field operations between programs and senior scientists, and perform administrative functions such as contract management and procurement.

Key Biscayne

Office of Oceanic and Atmospheric Research (OAR) - [Global Greenhouse Gases Reference Network](#)

NOAA's Global Monitoring Laboratory (GML) operates the Greenhouse Gas Reference Network to measure the distribution and trends of carbon dioxide (CO₂) and methane (CH₄), the two gases most responsible for human-caused climate change, as well as other greenhouse gases and volatile organic compounds. Samples are collected weekly at fixed locations and on several commercial ships. The air samples are delivered to GML, located in Boulder, CO for analysis. 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. Air samples have been collected at Key Biscayne since 1972. Researchers at NOAA's Atlantic Oceanographic and Meteorological Laboratory collect the samples. Depending on the wind direction, samples collected at Key Biscayne may represent air that has been influenced by carbon sources and sinks in North America, or air that has been over the Atlantic Ocean. These measurements help determine the magnitude of carbon sources and sinks in North America.

National Environmental Satellite, Data, and Information Service (NESDIS) - [The Center for Satellite Applications and Research - CoastWatch Gulf of Mexico and Caribbean node, collocated with NOAA Research, Key Biscayne, Florida](#)

The CoastWatch mission is to provide and ensure timely access to near real-time satellite data to protect, restore, and manage U.S. coastal ocean resources, and understand climate variability and change to further enhance society's quality of life. Our primary users include federal, state, and local marine scientists, coastal resource managers, and the public. There are two components to CoastWatch: Central Operations and Regional Nodes. Central Operations, managed by NOAA's National Environmental Satellite, Data, and Information Service (NESDIS), coordinates the processing, delivery, quality control and storage of data products.

The [Atlantic Oceanographic and Meteorological Laboratory \(AOML\)](#) in Miami (FL) hosts both the CoastWatch Caribbean and Gulf of Mexico Regional node and the [Atlantic OceanWatch node](#). Members of the government, academic, commercial, or public sectors may access data via the Caribbean/Gulf of Mexico Regional Node website free of charge. CoastWatch data is used in a variety of ways to monitor sea-surface-temperature and algal blooms, study fish and marine mammal distributions, and to aid in atmospheric forecasting. The Atlantic OceanWatch node is hosted by the Office of Oceanic and Atmospheric Research and includes the oceans and coastal waters of TX, LA, AL, FL, USVI, and Puerto Rico.

Biscayne Bay

National Marine Fisheries Service (NMFS) - [Biscayne Bay Habitat Focus Area](#)

Biscayne Bay was selected as a [NOAA Habitat Focus Area](#) (HFA). HFAs are targeted places where NOAA addresses high priority habitat issues by collaborating with partners and communities. Over the past several years, NOAA, led by the [Office of Habitat Conservation](#), has selected 11 HFAs across the country which have achieved significant results for ecosystems and communities. While each HFA focuses on individual habitat conservation goals, the overarching goal is to leverage collective expertise and demonstrate results in a short time period. Administered by NOAA Fisheries, Office of Habitat Conservation, NOAA's Southeast Fisheries Science Center, Atlantic Oceanographic and Meteorological Laboratory, Office of National Marine Sanctuaries, Fisheries Southeast Regional Office, National Centers for Coastal and

Ocean Science, National Centers for Environmental Information, Office for Coastal Management, and the National Weather Service Miami are coordinating NOAA and partner programs within the Biscayne Bay Habitat Focus Area (HFA). Scientists and resource managers worry that Biscayne Bay may reach conditions where nutrients cause large blooms of algae that shade seagrass beds and ultimately decay and deplete the shallow waters of oxygen. NOAA and its partners are working together in the HFA to monitor the water quality, and physical and biological parameters in Biscayne Bay to better understand and limit these algal blooms. Ultimately, NOAA's efforts in Biscayne Bay are aimed at understanding algal blooms, promoting healthy nursery grounds for fisheries and protected species, and promoting resilient coastal communities.

FL-28

Islamorada

Office of Oceanic and Atmospheric Research (OAR) - [National Coral Reef Monitoring Program](#)

This site is part of the National Coral Reef Monitoring Program's (NCRMP) network of sentinel climate and ocean acidification monitoring sites. Sentinel sites in the Atlantic are established in La Parguera, Puerto Rico, at Cheeca Rocks in the Florida Keys National Marine Sanctuary, Flower Garden Banks National Marine Sanctuary in the Gulf of Mexico, and the Dry Tortugas in the Florida Keys. These sites provide coral scientists with additional datasets and insight on changing ocean chemistry and the progression of ocean acidification, as well as the ecological impacts of these variables, across the Caribbean basin and the Gulf of Mexico. The NCRMP, co-funded by NOAA's Coral Reef Conservation Program and Ocean Acidification Program, seeks to provide sustained and long-term measurement of key variables to gauge the status and trends of coral reef health.

Key Largo & Key West

National Ocean Service (NOS) - [Florida Keys National Marine Sanctuary and Eco Discovery Center](#)

Designated in 1990, Florida Keys National Marine Sanctuary protects 2,800 square nautical miles of waters, surrounding the Florida Keys, from south of Miami westward to encompass the Dry Tortugas, excluding Dry Tortugas National Park, using an approach that addresses the variety of impacts, pressures, and threats to the Florida Keys ecosystem. The sanctuary is administered by NOAA and is jointly managed with the State of Florida. Within the boundaries of the sanctuary lie spectacular, unique, and nationally significant marine resources including the continental United States' only coral barrier reef, extensive seagrass beds, mangrove fringed islands, and more than 6,000 species of marine life. Together, these habitats support the life cycles of a rich array of tropical marine and estuarine organisms, endangered and protected species. Numerous historic shipwrecks and lighthouses within the sanctuary typify the rich cultural heritage of the Florida Keys, which, in addition, may contain evidence of human activity and the remains of animals from 15,000 years ago.

The Eco-Discovery Center, operated by Florida Keys National Marine Sanctuary, has been reimaged through a million-dollar renovation funded by the local Tourist Development Council. Featuring more than 6,000 square feet of interactive and dynamic exhibits, visitors leave with an increased awareness and appreciation of the need to protect and conserve this irreplaceable, South Florida ecosystem.

National Ocean Service (NOS) and National Marine Fisheries Service - [Mission: Iconic Reefs](#)

In December, 2019, NOAA and partners announced a decades-long coral reef restoration effort, Mission: Iconic Reefs, to restore seven iconic reefs in Florida Keys National Marine Sanctuary. Mission: Iconic Reefs will proactively intervene with natural conditions by restoring a diversity of stony corals, reintroducing algae-grazing species to support coral health, and building community stewardship by engaging stakeholders in the continued maintenance and monitoring of the sites. This ongoing effort is supported by a network of expert scientists, federal and state agencies, and local restoration partners. NOAA offices involved include the Office of Habitat Conservation, Office of National Marine Sanctuaries,

National Centers for Coastal Ocean Science, Coral Reef Conservation Program, Southeast Regional Office - NOAA Fisheries.

National Weather Service (NWS) - [Weather Forecast Office \(WFO\)](#) - See [Page 2](#) for detail.

Tavernier

NOAA Office of Education – [Science on a Sphere \(SOS\)](#) – See [Page 2](#) for detail.

Statewide

Office of Oceanic and Atmospheric Research (OAR) - [Sustained Carbonate Chemistry Observation Moorings](#)

The Carbonate Chemistry Observing Mooring network is a sustained investment in ocean chemistry observing network in U.S. waters and abroad. There are currently 19 buoys in coastal, open-ocean and coral reef waters that contribute to this network. The time series created from these moorings are key to understanding how ocean chemistry is changing over time in these ecosystems by providing continuous and long-term observations of ocean conditions. These buoys are seated in three locations in Alaska (Gulf of Alaska, Papa, Bering Sea), two in California (California Current Ecosystem 1 & 2), one in the Chesapeake Bay (DE, MD, NY, PA, VA, WV), Coastal Mississippi (MS), Florida (Cheeca Rocks), Georgia (Grays Reef), Oregon (Newport Hydrographic Line), Maine (Gulf of Maine), and Washington (Cha'ba in La Push).

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 Florida, the Restoration Center works with private and public partners to restore habitats such as mangrove forests, oyster reefs, coral, and submerged aquatic vegetation beds; remove invasive species; improve storm-water 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 [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](#). See the interactive [Restoration Atlas](#) to find habitat restoration projects near you. Site visits to see habitat projects may be available in your state, please inquire if interested.

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. Florida is a co-trustee with NOAA for assessment and restoration after pollution

incidents in Florida. For more information about our work in Florida, visit: [DARRP in Your State](#) (and use the top menu to navigate to "Florida") 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 coast 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, Fla., with Florida field offices in Jacksonville, Miami/Sunrise, Key West, Niceville, Panama City and Cape Canaveral.

National Marine Fisheries Service (NMFS) - [Southeast Regional Office, Gulf of Mexico Bay 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 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. Florida received funding for two projects in FY22, as well as funds to build the state's capacity to protect its coastal communities and resources.

National Ocean Service (NOS) - [Regional Advisor Program](#)

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 seven are in Florida.

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 39 ASOS stations in Florida.

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 159 COOP sites in Florida.

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 32 NWR transmitters in Florida.

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.

NOAA Office of Education — [Environmental Literacy Program](#)

NOAA's Environmental Literacy Program (ELP), administered by the Office of Education, provides grants and in-kind support to advance NOAA's mission through formal (K-12) and informal education. In Florida, ELP supports the Manatee Bowl and Spoonbill Bowl in Florida, two of 25 regional competitions of the National Ocean Sciences Bowl (NOSB). The NOSB is an academic competition that engages high school students in learning about ocean sciences and related STEM careers while helping them become knowledgeable citizens and environmental stewards. ELP supports the American Meteorological Society's DataStreme courses for K-12 educators through a grant and in-kind support. These courses use weather, climate, and the ocean as contexts for teaching science and improving understanding about the Earth system.

Office of Oceanic and Atmospheric Research (OAR) - [Florida Sea Grant College Program](#)

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension education and outreach. Sea Grant forms a network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, Lake Champlain, and Guam. The Florida Sea Grant College Program, based at the University of Florida, focuses research on climate change and its effects on the coast, fisheries, aquaculture, seafood safety, healthy coastal habitats, sustainable communities, water access and coastal hazards. In conjunction with its research, Florida Sea Grant also provides support to graduate education. Extension and education programs and workforce training are conducted in partnership with UF/IFAS Extension and the 35 coastal counties of Florida through a cadre of more than 35 marine extension agents and specialists. Administrative offices are located in Gainesville. Extension agents are located in Escambia County, Santa Rosa County, Crestview, Bay County, Gulf County, Franklin County, Taylor County, Cedar Key, Hernando County, Pinellas County, Palmetto County, Charlotte County, Collier County, Monroe County, Miami County, Stuart, Fort Pierce, Brevard County, and St. Augustine. 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) [Southeast Fisheries Science Center](#) 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.

[**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) - 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. NOAA Fisheries funds eligible members of the Stranding Network through the competitive John H. Prescott Marine Mammal Rescue Assistance Grant Program.

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 Florida, 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. The Florida Fish and Wildlife Conservation Commission has received multiple awards through this program, including funding to support projects addressing conservation priorities for listed sea turtles, corals, sturgeon, and smalltooth sawfish.

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) - [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. Two Florida projects have been successfully completed and these lands are protected in perpetuity. In addition, a land conservation project was funded in FY22 in Florida under the CELCP authority with funding through the Bipartisan Infrastructure Law.

National Ocean Service (NOS) - [Coral Reef Conservation Program](#)

NOAA's Coral Reef Conservation Program brings together multidisciplinary expertise from over 30 NOAA offices and partners to protect, conserve, and restore coral reef resources. The program focuses on three threats to coral reefs - climate change, unsustainable fishing practices, and land-based sources of pollution - as well as coral reef restoration. In response to identified threats and management priorities developed by coral reef managers in Florida, the program invests in coordinated management approaches for Florida's Coral Reef (extending from the southeast Florida coast through the Keys and out to the Tortugas Banks) and monitoring and assessing pollutant impacts to south Florida coastal waters. In addition, NOAA funds are also allocated to implement conservation programs designed to increase the size, abundance, and protection of coral reef species. Examples of projects include: biogeographic assessments to characterize the distribution of coral reef species, research to understand how corals respond to environmental threats and climate change, benthic sampling, and assessing fish spawning aggregation sites. Support for Mission: Iconic Reefs capacity, science and in water restoration efforts. The program is also working with other NOAA offices and the state of Florida to respond to an outbreak of stony coral tissue loss disease. NOAA's Coral Management Liaison is located in West Palm Beach.

National Ocean Service (NOS) – [National Coral Reef Management Fellowship](#)

The National Coral Reef Management Fellowship Program is a partnership between NOAA's Coral Reef Conservation Program, the U.S. Department of Interior Office of Insular Affairs, Nova Southeastern University's Halmos College of Natural Sciences and Oceanography, and the U.S. Coral Reef All Islands Committee. The program recruits Coral Reef Management Fellows for the seven U.S. coral reef jurisdictions, including Florida. The Fellow for Florida is coordinating the Stony Coral Tissue Loss Disease (SCTLD) Response Team across the Florida Reef Tract. This includes working with federal and state partners, as well as universities and non-governmental organizations to better understand and mitigate this coral threat. The fellow is also supporting restoration efforts by helping to coordinate the implementation of defined priorities within the SCTLD Restoration Team.

National Ocean Service (NOS) - [National Coastal Zone Management Program](#)

Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the Florida Department of Environmental Protection to implement the National Coastal Zone Management Program in Florida. 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)- [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) – [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 Florida, nineteen projects have been funded, two in FY18, one in FY19, nine in FY20, three in FY21, and four in FY22.

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.. Florida received funding for six projects in 2019 and one in 2021.

National Ocean Service (NOS) - [U.S. Integrated Ocean Observing System \(Gulf of Mexico Coastal Ocean Observing System\)](#) and [Southeast Coastal Ocean Observing Regional Association](#)

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 Southeast Coastal Ocean Observing Regional Association (SECOORA) and the Gulf of Mexico Coastal Ocean Observing System (GCOOS) are two of the Regional Associations that partner with the NOAA-led Integrated Ocean Observing System (U.S. IOOS®) to address regional and national needs for coastal and ocean data and information. SECOORA coordinates coastal and ocean observing activities in the southeast. Its mission is to observe, understand, and increase awareness of our coastal ocean; promoting knowledge, economic and environmental health through strong regional partnerships. SECOORA invests in buoys and other technologies to collect information about the ocean to help keep Floridians safe.

The Gulf of Mexico Coastal Ocean Observing System (GCOOS) 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 coastal stations and other ocean observation infrastructure in Florida. Additionally, GCOOS works with NOAA in the development and operation of a daily forecast of human respiratory efforts due to harmful algal blooms along the coast, which is powered by a volunteer network across the west coast.

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 Charleston, South Carolina, serves the Southeast region – North Carolina, South Carolina, Georgia, and Florida.

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 SSC in Florida is based in Miami.

National Ocean Service (NOS) - OR&R [Gulf of Mexico Environmental Response Management Application](#) and [Response Tools for Oil and Chemical Spills](#)

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. 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 Florida](#)

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 Florida Regional Coordinator, based in St. Petersburg, 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 Florida, the MDP has worked with Biscayne Bay National Park and Rookery Bay National Estuarine Research Reserve to develop and install outreach and educational exhibits on marine debris. The MDP also works with local communities and organizations to prevent and remove marine debris. The MDP is partnering with Eckerd College and the University of North Florida to reduce consumption of single-use plastics across the college campuses by increasing individual accountability and commitments to long-term sustainable behaviors. Additionally, the MDP is partnering with the Ocean Conservancy to engage local Miami-Dade County youth and businesses through their Plastic Free Cities campaign to reduce single-use plastics. Across the state, the MDP is working with the Florida Fish and Wildlife Conservation Commission, Florida Department of Environmental Protection, University of Florida, the City of Mexico Beach, and Dog Island Conservation District on several projects to remove Hurricane Irma and Michael-generated debris, such as derelict vessels, aquaculture gear, and fishing gear. The Florida Marine Debris Action Plan was published in 2020. This plan is facilitated by the MDP, and it establishes a road map for strategic progress in making Florida, its coasts, people, and wildlife free from the impacts of marine debris. The MDP continues to work with state and local governments, and other stakeholders, to develop and implement the Florida Marine Debris Emergency Response Guide.

National Ocean Service (NOS) - [National Water Level Observation Network](#)

NOS operates 16 long-term continuously operating tide stations in the state of Florida which 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 Fernandina Beach, Mayport, Trident Pier, Lake Worth Pier, Virginia Key, Vaca Key, Key West, Naples, Fort Myers, St. Petersburg, Clearwater Beach, Cedar Key, Apalachicola, Panama City, Panama City Beach, and Pensacola. 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 Florida. They help identify the navigational challenges facing marine transportation in Florida 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 Miami, FL to support mariners and stakeholders in the Southeast and Caribbean.

National Ocean Service (NOS) - [COMIT Center](#)

The University of South Florida's College of Marine Science has been awarded a five-year, \$9 million cooperative agreement by the National Oceanic and Atmospheric Administration's (NOAA) Office of Coast Survey to launch the Center for Ocean Mapping and Innovative Technologies (COMIT). The center, located on the USF St. Petersburg campus, will develop new technologies and approaches to ocean and coastal zone mapping in line with NOAA's commitment to building resilient coastal ecosystems, communities and economies. USF's center plan also includes a robust education strategy to ensure the research is shared with stakeholder audiences in communities near and far. COMIT will evaluate and demonstrate the cost-effectiveness of innovative technologies including autonomous surface vessels, underwater robots and satellites. COMIT will also build on USF's expertise in ocean engineering, habitat and bathymetric mapping, modeling of coastal storm events, coastal geodesy, sea level rise and safe navigation in ports such as Tampa Bay.

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 west coast of Florida, the east coast of Florida, the Florida panhandle, and Texas. The HAB Forecasting System relies on satellite imagery, real-time and forecast winds, and field samples to provide information on the location, extent, and movement of HABs.

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) – [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) – [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 [Red Tide Respiratory Forecast](#), 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) - 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 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. NDBC also operates NOAA's network of Deep-ocean Assessment and Reporting of Tsunami (DART®) stations, for the early detection and real-time reporting of tsunamis in the open ocean. Data from the DART®s are used by the National Weather Service Tsunami Warning Centers in Alaska and Hawaii to provide tsunami forecasts, warnings, and information.

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) - [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 [NOAA's Office of Legislative and Intergovernmental Affairs](#) 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 [NOAA.gov](#).
