NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION UNITED STATES DEPARTMENT OF COMMERCE



NOAA In Your State Wisconsin

<u>NOAA</u> is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep citizens informed of the changing environment around them. From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and 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 <u>congressional districts and cities or towns</u>, and then <u>statewide</u> <u>programs</u>.

Highlights of NOAA in Wisconsin

Cooperative Institute for Meteorological Satellite Studies	Madison	WI-2
Advanced Satellite Products Branch	Madison	WI-2
Cooperative Institute for Meteorological Satellite Studies (CIMSS)	Madison	WI-2
St. Louis River Estuary Habitat Focus Area	St. Louis River Estuary	WI-7
Lake Superior National Estuarine Research Reserve	Superior	WI-7

The state of Wisconsin also has three Weather Forecasting Offices, two Science on af Sphere® exhibitions, a Regional Geodetic Adviser, a Sea Grant Program, and several observation platforms.

Weather Forecast Offices

La Crosse WI-3 Milwaukee WI-4 Green Bay WI-8

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 Wisconsin. There are 122 WFOs nationwide of which three are in Wisconsin. 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 <u>centers</u> 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 Wisconsin weather, visit <u>www.weather.gov</u> and, on the national map, click on the relevant county or district.

Science On a Sphere®

Monona WI-2

Sheboygan WI-6

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

WI-2

Madison

National Environmental Satellite, Data, and Information Service (NESDIS) - <u>Center for Satellite Applications and</u> <u>Research</u> - <u>Cooperative Institute for Meteorological Satellite Studies</u>

The Cooperative Institute for Meteorological Satellite Studies (CIMSS) was established at the University of Wisconsin-Madison. As part of the UW-Madison Space Science and Engineering Center, CIMSS collaborates with NOAA to conduct research in the specification, testing, and evaluation of new satellite instruments. Additional areas of study include the development of techniques to derive and apply meteorological parameters from satellite measurements, and

in the assessment of the impact of new remote sensing data and products on weather analyses, forecasts, and as long-term climate data records.

National Environmental Satellite, Data, and Information Service (NESDIS) - <u>Center for Satellite Applications and</u> <u>Research</u> - <u>Advanced Satellite Products Branch</u>

The Advanced Satellite Products Branch (ASPB), within the Center for Satellite Applications and Research (STAR) in NESDIS, is co-located with the Cooperative Institute for Meteorological Satellite Studies (CIMSS) at the University of Wisconsin-Madison. The ASPB conducts research activities in collaboration with CIMSS on meteorological satellite studies related to weather and climate. This relationship between CIMSS and ASPB enables NOAA to adopt demonstrated research techniques for deriving atmospheric information from remote sensing data for broader distribution to the science community.

Office of Oceanic and Atmospheric Research (OAR) - <u>Cooperative Institute for Meteorological Satellite Studies</u>

The Cooperative Institute for Meteorological Satellite Studies (CIMSS) was awarded to the University of Wisconsin-Madison. CIMSS serves as a mechanism to promote collaborative research between university scientists and those in NOAA. The mission of CIMSS is to (1) foster collaboration among NOAA, NASA, and the University; (2) serve as a center of excellence in weather and climate; and (3) train the scientists and engineers of today and tomorrow. CIMSS' primary NOAA research partner is the National Environmental Satellite, Data, and Information Service (NESDIS), specifically the Center for Satellite Applications and Research (STAR) and Advanced Satellite Products Branch (ASPB). CIMSS conducts research under four themes: (1) satellite research and applications; (2) satellite sensors and techniques; (3) environmental models and satellite data assimilation; and (4) outreach and education.

Monona

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

WI-3

La Crosse

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

WI-4

Milwaukee

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

Office of Oceanic and Atmospheric Research (OAR) - Real-Time Meteorological Observation Network

The Great Lakes Environmental Research Laboratory (GLERL)'s Marine Instrumentation Laboratory has deployed and is maintaining a real-time network of shore-based meteorological instrument packages including a location at Milwaukee. The meteorological observations obtained from the network are being used in GLERL's Great Lakes Coastal Forecasting System to improve nowcasts and forecasts of wind, waves, water levels, and circulation. The Milwaukee station measures/records wind speed, wind gust, wind direction, peak wind, air temperature, and wind chill at two-minute increments, and this information is updated every fifteen minutes..

WI-6

Sheboygan

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

National Ocean Service (NOS) - Wisconsin Shipwreck Coast National Marine Sanctuary

In October 2015, in response to a community-based sanctuary nomination, NOAA announced its intent to designate a new national marine sanctuary in Lake Michigan to conserve a collection of nationally-significant historic shipwrecks, and deliver on NOAA's broader mission of conserving and managing coastal resources. With input from the public, industry stakeholders, and in close consultation with the state of Wisconsin, NOAA designated the Wisconsin Shipwreck Coast National Marine Sanctuary in 2021. The 962-square-mile sanctuary provides stewardship for our national maritime heritage in Lake Michigan, and conducts research, education and outreach to support broader Great Lakes conservation and literacy. The sanctuary is co-managed with the State of Wisconsin, bringing new opportunities for resource protection, educational programming, and community engagement. In partnership with local communities, the sanctuary provides a national stage for promoting heritage tourism and recreation.

WI-7

Necedah National Wildlife Refuge

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.

Park Falls

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

NOAA's Global Monitoring Laboratory (GML) operates trace gas monitoring sites at tall towers in eight states, including Wisconsin. The sites were established to extend GML's monitoring network to provide data to aid estimation of the net carbon balance of the continent. Variations of trace gases, especially carbon dioxide, are largest near the ground, so we utilize existing tall towers as platforms for in situ and flask sampling for atmospheric trace gases. Flask samples are delivered to GML in Boulder, Colorado for analysis. These data improve models and our understanding of the distribution of greenhouse gases, including sources and sinks of carbon in North America. The tower site in Wisconsin is located within the Chequamegon National Forest, near Park Falls. GML also operates a small aircraft-based North American network of sampling sites to measure vertical profiles of important greenhouse gas concentrations. Air is sampled weekly above the surface up to approximately 25,000 feet above sea level using a relatively small, light, and economical automated system developed by GML researchers. These air samples are delivered to GML in Boulder, Colorado for measurements of CO2, CH4, other greenhouse gases, and ozone depleting substances. These data improve our understanding of the distribution of greenhouse gases and models of the global carbon cycle. The measurements of ozone depleting substances help determine the effectiveness of efforts to protect and restore the ozone layer, which protects the surface from the sun's ultraviolet radiation.

St. Louis River Estuary

National Marine Fisheries Service (NMFS), National Ocean Service (NOS), Office of Oceanic and Atmospheric Research (OAR), National Weather Service (NWS), National Centers for Environmental Information/Regional Climate Services (NESDIS) - <u>St. Louis River Estuary Habitat Focus Area</u>

The St. Louis River Estuary was selected as a <u>NOAA Habitat Focus Area</u> (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 <u>Office of Habitat Conservation</u>, 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. The St. Louis River is a major tourism draw and home to the country's busiest and largest bulk inland port. Current and former industries have left a legacy of toxic substances, along with extensive habitat alteration and degradation. NOAA is bringing its expertise in flood and weather forecasting, integrated monitoring, habitat protection and restoration, stakeholder education, and coastal management to the restoration effort. This work will address the loss of fish and wildlife habitat and sport fisheries, assess impacts of climate on aquatic and nearshore vegetation, reduce the risk of flooding through improved planning and water management strategies, and increase coastal tourism, access, and recreational opportunities.

Superior

National Ocean Service (NOS) - Lake Superior 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 16,697 acre Lake Superior Research Reserve was designated in 2010 and is managed by the University of Wisconsin. The reserve is one of two sites representing a freshwater estuary on the Great Lakes.

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 Lake Superior National Estuarine Research Reserve will focus their research on assessing the potential impacts of climate change on water quality in a large, freshwater estuary.

National Ocean Service (NOS) - Navigation Manager

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in Michigan. They help identify the navigational challenges facing marine transportation in Michigan 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 Cleveland, OH, to support mariners and stakeholders in the Great Lakes.

National Ocean Service (NOS) - Navigation Response Team

The Office of Coast Survey (OCS) maintains the nation's nautical charts and publications for U.S. coasts and the Great Lakes. OCS navigation managers are strategically located in U.S. coastal areas to provide regional support to federal and state agencies in order to assist with navigational challenges. The Office of Coast Survey's Navigation Response Branch (NRB) conducts routine and emergency hydrographic surveys; and working with the regional Navigation Managers, navigation response teams (NRT) work around-the-clock after storms to speed the reopening of ports and waterways. During emergency response, the NRTs provide time-sensitive information to the U.S. Coast Guard or port officials, and transmit data to NOAA cartographers for updating the Coast Survey's suite of navigational charts. Mobile integrated survey team (MIST) can be applied to a vessel of opportunity to provide response capability in the Great Lakes.

WI-8

Green Bay

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

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 Great Lakes 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. Great Lakes B-WET responds to regional education and environmental priorities through local implementation of competitive grant funds. Please see regional funding opportunities for priorities and eligibility details.

Statewide

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 three are in Wisconsin

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 18 ASOS sites in Wisconsin.

National Weather Service (NWS) - Cooperative Observer Program Sites

The National Weather Service (NWS) Cooperative Observer Program (COOP) is made up of more than 10,000 volunteers who 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 are also used by other federal, state and local entities, as well as private companies. 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 339 COOP sites in Wisconsin.

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. NWR is provided as a public service and includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There are 28 NWR transmitters in Wisconsin.

Office of Oceanic and Atmospheric Research (OAR) – Wisconsin Sea Grant College Program

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. Headquartered at the University of Wisconsin-Madison, the Wisconsin Sea Grant College Program is statewide in scope, focused on basic and applied research, education and technology transfer dedicated to the sustainable use of the Great Lakes. In its 47-year history, Wisconsin Sea Grant has undertaken numerous research projects, including those that address contaminants in the Great Lakes, have discovered a patentable non-lethal test for viral hemorrhagic septicemia that kills Great Lakes fish and built and populated a Wisconsin coastal atlas to visualize lake features. Its outreach projects have helped prevent the spread of aquatic invasive species, assisted the shipping industry in protecting harbor infrastructure and helped coastal communities adapt to a changing climate. Administrative offices are located in Madison. Extension agents are located in Superior, Milwaukee, Bristol, Green Bay, and Manitowoc. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at <u>seagrant.noaa.gov</u>.

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. See the interactive <u>Restoration Atlas</u> to find habitat restoration projects near you. Site visits to see habitat projects may be available in your state, please inquire if interested. In the Great Lakes and Wisconsin, the Restoration Center focuses on restoring the most degraded environments--designated Areas of Concern (AOCs). Projects address loss of habitat and diminished fish and wildlife populations. For example, completing a shovel ready, large-scale habitat improvement and restoration project on Ulao Creek within the Milwaukee River Watershed in the Village and Town of Grafton. NOAA also works with the <u>Great Lakes Restoration Initiative (GLRI)</u> to implement habitat restoration projects that will help improve AOCs.

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

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) assesses and restores habitat, fisheries, protected species and recreational uses that have been harmed by oil spills, chemical releases, and ship groundings. Working with federal, state, and tribal entities, and responsible parties, we have recovered funding from responsible parties for restoration of critical habitats, fisheries, protected species and recreational uses nationwide. These projects promote recovery of the ecosystem and provide economic benefits from tourism, recreation, green jobs, coastal resiliency, property values and quality of life. Wisconsin is a co-trustee with NOAA for assessment and restoration after pollution incidents in Wisconsin. For more information about our work in Wisconsin, visit: <u>DARRP in Your State</u> (and use the top menu to navigate to "Wisconsin") and this <u>interactive map</u>.

National Ocean Service (NOS) – <u>Bipartisan Infrastructure Law</u>

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. Wisconsin 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) - National Water Level Observation Network

NOS operates five long-term continuously operating water level stations in the state of Wisconsin which provide data and information on Great Lakes and interconnecting waterways data and lake level regulation and are capable of producing real-time data for storm surge warning. These stations are located on Lake Michigan at Milwaukee, Kewaunee, Sturgeon Bay Canal, and Green Bay. 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) - Mussel Watch Program

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

National Ocean Service (NOS) – Regional Geodetic Advisor

The Regional Geodetic Advisor is a National Ocean Service (NOS) employee that resides in a region and serves as a liaison between the National Geodetic Survey (NGS) and its public, academic and private sector constituents within their assigned region. NGS has a Regional Geodetic Advisor stationed in Ann Arbor, Michigan serving the Great Lakes region including Wisconsin. 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 Ocean Service (NOS) - Coastal and Estuarine Land Conservation Program

The Coastal and Estuarine Land Conservation Program (CELCP) 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. In Wisconsin, NOAA awarded three grants with CELCP funding, and another seven projects were funded by the EPA's Great Lakes Restoration Initiative. All ten projects have been successfully completed, protecting these lands in perpetuity. In addition, a land conservation project was funded in FY22 in Wisconsin under the CELCP authority with funding through the Bipartisan Infrastructure Law.

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

Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the Wisconsin Department of Administration, in partnership with the Department of Natural Resources and other state agencies, to implement the National Coastal Zone Management Program in Wisconsin. 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 to support jobs, reduce use conflicts, and sustain natural resources.

National Ocean Service (NOS) – Digital Coast

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

National Ocean Service (NOS) – National Coastal Resilience Fund

The National Coastal Resilience Fund (NCRF) 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 Wisconsin, the NCRF has awarded six projects, one in FY18, three in FY21, and two in FY22.

National Ocean Service (NOS) - U.S. Integrated Ocean Observing System (Great Lakes Observing System) The U.S. Integrated Ocean Observing System, or IOOS®, is a federally and regionally coordinated observing system with 17 interagency and 11 regional partners. The System addresses regional and national needs for coastal, ocean, and Great Lakes data and information. This includes gathering and disseminating regional observations; data management; modeling and analysis; education and outreach; and research and development. Working with government agencies, academic researchers, tribes, first nations and the private sector, the Great Lakes Observing System (GLOS) provides end-to-end services that support science, policy, management and industry in the U.S. and Canada. GLOS provides public access to critical, real-time and historical data and information about the Great Lakes, St. Lawrence River and interconnecting waterways for use in managing, safeguarding and understanding these immensely valuable freshwater resources.

National Ocean Service (NOS) - OR&R Response and Restoration Coordinators

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

- Eleven regionally based Scientific Support Coordinators (SSC) harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental tradeoffs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSCs for Wisconsin are based in Mobile, Alabama at NOAA's Gulf of Mexico Disaster Response Center and Ann Arbor, Michigan at the NOAA Great Lakes Environmental Research Laboratory.
- OR&R identifies and quantifies environmental injury caused by releases of oil and hazardous materials. Our network of **Regional Resource Coordinators** work with multidisciplinary scientific, economic, and legal teams

with the goal of securing the appropriate amount and type of restoration required to restore injured NOAA trust resources and compensate the public for their lost use. We collaborate with NMFS Restoration Center and NOAA General Council through the Damage Assessment, Remediation, and Restoration Program (DARRP) to ensure the process is efficient, legally defensible and restoration focused. The RRC serving the Great Lakes region is based in New York, New York.

National Ocean Service (NOS) - NOAA Marine Debris Program (MDP) in Wisconsin

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 Great Lakes Regional Coordinator supports coordination efforts with regional stakeholders, provides support to grant-funded projects, tracks progress of projects, and conducts regional marine debris outreach to local audiences. The MDP provided support for Wisconsin Sea Grant to use the power of storytelling and performance to engage, educate, and inspire performing artists, students, and community members to be committed stewards of Lake Michigan, and for the Council of the Great Lakes Region to expand the Great Lakes Plastic Cleanup program and launch a new binational Great Lakes Circular Economy Partnership to help the Great Lakes create a circular economy. The Great Lakes Marine Debris Action Plan was published in 2020. This plan, which is facilitated by the MDP and supported by local stakeholders, provides a road map for strategic progress in making the Great Lakes, its coasts, people, and wildlife free from the impacts of marine debris.

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.

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

More information for those offices may be found at NOAA.gov.