



NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION  
UNITED STATES DEPARTMENT OF COMMERCE



## *NOAA In Your State*

# Vermont

**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 Vermont

[Lake Champlain Sea Grant Program](#) Burlington

[Bipartisan Infrastructure Law \(BIL\) / Inflation Reduction Act \(IRA\) Projects](#) Project Specific

### Weather Forecast Office

Burlington VT

**NWS Weather Forecast Office (WFO)** are staffed around-the-clock every day and provide the best possible weather, water, and climate forecasts and warnings to residents of Vermont. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided 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 through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards. Forecasters also provide Impact-based Decision-Support Services (IDSS), both remotely and on-site, during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.

#### ***Burlington***

**National Weather Service (NWS) - [Weather Forecast Office](#)** – See [Page 1](#) for details.

#### ***Montpelier***

**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 Barre, Vermont serving the Northeast region – Vermont, Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, and Rhode Island. 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.

#### ***Statewide***

**Office of Oceanic and Atmospheric Research (OAR) - [Lake Champlain Sea Grant Program](#)**

NOAA's National Sea Grant College Program is a federal-university partnership 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. The Lake Champlain Sea Grant Program, based at the University of Vermont, is the newest member of the national Sea Grant network and supports the improved understanding, use and management of Lake Champlain, Lake George, the Basin's inland waters and the Great Lakes in general. The Lake Champlain Sea Grant Program focuses the program's outreach and research priorities on coastal communities and economies, coastal ecosystem health and public safety, and education and human resources development. Administered by the University of Vermont, the Lake Champlain Sea Grant Program collaborates with Plattsburgh State University in New York. Current projects focus on healthy coastal ecosystems, sustainable fisheries and aquaculture, resilient communities and economies, and environmental literacy and workforce development. Administrative offices and extension agents are

located in Burlington, VT. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at [seagrant.noaa.gov](http://seagrant.noaa.gov).

#### **National Marine Fisheries Service (NMFS) - [New England Bay Watershed Education and Training Program](#)**

The NOAA Bay Watershed Education and Training (B-WET) program is a competitive grants program that provides funding for locally relevant environmental education projects for K-12 audiences. The New England B-WET program is administered by the Greater Atlantic Regional Fisheries Office on behalf of the NOAA Office of Education. New England B-WET currently serves Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. The New England 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. New England B-WET regional grant competitions are responsive to local education and environmental priorities. Please see the funding opportunities for specifics.

#### **National Ocean Service (NOS) - [Navigation Manager](#)**

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations. 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. They help identify the navigational challenges facing marine transportation in the Northeast region 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 Narragansett, RI to support mariners and stakeholders in the Northeast region.

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

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

#### **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 Gloucester, Massachusetts, serving the Northeast region – Maine, New Hampshire, Vermont, Massachusetts, New Jersey, Rhode Island, and New York.

Eleven regionally based **Scientific Support Coordinators (SSC)** harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental trade-offs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSC for Vermont is based in Gloucester, Massachusetts.

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 Northeast/Great Lakes region are based in Boston, Massachusetts and New York, New York.

#### **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 one is in Vermont.

#### **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, thunderstorm, and fog. There are six ASOS stations in Vermont.

#### **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 50 COOP sites in Vermont.

#### **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 four NWR transmitters in Vermont.

#### **National Ocean Service (NOS) - [Students for Zero Waste Week](#)**

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

#### **National Ocean Service (NOS) - [NOAA Ocean Guardian Youth Ambassador Program](#)**

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

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#### ***[Bipartisan Infrastructure Law \(BIL\) / Inflation Reduction Act \(IRA\) Projects](#)***

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

**BIL**

**Strengthening ocean observing infrastructure in the changing Northeastern U.S., \$1,169,000**

A diverse scope of work proposed for Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS) to modernize and build resilience into the regional observing system in the Northeast. *This award supports work in CT, RI, MA, VT, ME, and NH.*

**Implementation and Coordination of Ocean and Coastal Management Priorities for the Northeastern United States Via the Northeast Regional Ocean Council (NROC), \$3,924,563**

The Coastal States Stewardship Foundation, serving as fiscal sponsor for the Northeast Regional Ocean Council (NROC) Regional Ocean Partnership will use these funds to advance the priorities of their three committees: the Coastal Hazards Resilience Committee, the Ocean and Coastal Ecosystem Health Committee, and the Ocean Planning Committee, to achieve the following outcomes. *This award supports work in CT, RI, MA, VT, and ME.*

**Increasing Water Use Efficiency by Addressing Sensor Cost Barriers Using Novel Technology, \$157,363**

Cost is the most significant barrier to adoption of sophisticated data-driven irrigation management in permanent agriculture. Highly-resolved vertical soil water profiles are needed to learn soil-specific hydraulic response and to accurately infer crop water uptake. Basing irrigation decisions on the time-varying soil hydraulic behavior learned in situ will enable the improvement of water and energy conservation, resource protection, and adaptability to climate change. The project will greatly reduce the cost of monitoring soil water content in a highly-resolved vertical profile to promote increased adoption of more efficient water management tools.

**Foam-Free Lake Champlain: Marine Debris Community Action Coalition, \$299,904**

Foam-based marine debris commonly accumulates along the Lake Champlain shoreline, especially in Plattsburgh, New York, and Burlington and St. Albans, Vermont, where disadvantaged communities are more likely to access the lake for subsistence fishing and for cooling during summer months. In response, the purpose of this project is to develop a coalition of watershed and lake organizations focused on foam-based marine debris in the Lake Champlain basin of Vermont and New York with the goal of enhancing community literacy about and mitigating foam-based marine debris. Our work will benefit disadvantaged youth and communities in the basin, who are disproportionately impacted by the debris. *This award supports work in VT and NY.*

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**NOAA In Your State** is managed by [NOAA's Office of Legislative and Intergovernmental Affairs](#) and maintained with information provided by NOAA's Line and Staff Offices. Questions about specific programs or offices should be directed to the NOAA Line or Staff Office listed.

More information for those offices may be found at [NOAA.gov](#).

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