



NOAA in the North Atlantic



Photos from Congressional Roundtables in Vermont and in Massachusetts



NART Continues with Congressional Roundtables in Vermont & Massachusetts

NOAA's North Atlantic Regional Team continued their third year of Congressional roundtables this summer in Vermont and Massachusetts. Vermont was the first inland roundtable hosted by the team, and Senator Warren's office hosted one of two roundtables held in Massachusetts.

The NART's 10th roundtable was held June 23 at the ECHO Leahy Center for Lake Champlain in Burlington, Vermont. Lake Champlain Sea Grant hosted the event. Twenty-five attendees, including representatives for Senator Leahy, Senator Sanders, and Representative Welch, spent the day discussing how NOAA and its partners are building community resilience in Vermont. Staffers commented that they learned new things about NOAA's work in Vermont, and that the roundtable was a valuable way to encourage interaction across disciplines and partners. Senator Leahy's staffer ended the day by suggesting additional opportunities for similar discussions.

NOAA presenters included the Northeast River Forecast Center, the Burlington Weather Forecast Office, the National Geodetic Survey, and the Vermont state climatologist, who presented on behalf of the National Centers for Environmental Information. Partner presenters in addition to Lake Champlain Sea Grant included the Vermont Agency of Transportation, Vermont Electric Power Company, Vermont Department of Emergency Management & Homeland Security, Vermont Department of Health, Vermont Department of Environmental Conservation, The Nature Conservancy, the University of Vermont, and Opti Consulting.



Congressional staffers, NOAA presenters and partners gather at Waquoit Bay National Estuarine Reserve in Falmouth, MA on July 7th.

The eighth state to be covered by the NART was Massachusetts, and was also focused on the theme of building community resilience. The first roundtable was held on July 7th in Falmouth, MA at the Waquoit Bay National Estuarine Research Reserve. There were 37 attendees including nine congressional staffers representing Senator Warren, Senator Markey, Representative Keating, Representative Capuano, Representative Moulton, Representative Clark and Representative Kennedy. The second roundtable, the NART's 12th in the series, was held September 15 in Boston hosted by Sen. Warren's office, and attended by more than 20 participants, including five staffers.

NOAA presenters at both Massachusetts roundtables included the National Centers for Environmental Information, Office for Coastal Management, Northeast Fisheries Science Center, Taunton Weather Forecast Office, Stellwagen Bank National Marine Sanctuary and the Greater Atlantic Regional Fisheries Office. Partners amplified the utility of NOAA data, products and services and represented a wide variety of sectors. Massachusetts Department of Transportation, Massachusetts Department of Public Health, MIT Sea Grant, New England Fish-ery Management Council, Waquoit Bay National Estuarine Research Reserve, Massachusetts Coastal Zone Management, Woods Hole Sea Grant, Northeast Regional Association of Coastal Ocean Observing Systems, Massachusetts Emergency Management Agency, Massachusetts Cultural Preservation, the Sturgis Charter School and Salem Sound CoastWatch all provided tangible products and outcomes from their collaborations with NOAA.

Senator Markey's staffer commented "...for us, the education component is important, but resilience is a must...I really appreciate you coming here and highlighting the work of your partners."

NART Convenes Ecosystem Modeling Experts

Through NART support, the Animal Movement Working Group held a workshop on August 15-17 in Fall River, MA to discuss how to incorporate fish movement parameters into ecosystem and stock assessment models for the Northeast US Continental Shelf Large Marine Ecosystem. The workshop was attended by representatives from NOAA's National Marine Fisheries Service, National Ocean Service (NOS), and Ocean and Atmospheric Research as well as participants from the University of Massachusetts Dartmouth and Stony Brook University. The workshop focused on characterizing types of movement, identifying the data necessary to assess movement, and developing a framework to incorporate movement information into ecosystem and assessment models.

Dr. Mark Monaco, Director of the Center for Coastal Monitoring & Assessment for NOS stated, "The key folks organizing and leading the workshop...did an outstanding job in the workshop design, pre-workshop calls and planning, and execution of the workshop. I definitely enjoyed my time on the work group steering committee and look forward to advancing the discussions and results of the workshop."

POC: Kimberly.Hyde@noaa.gov



Participants brainstorm new approaches at the August workshop.

Sea Grant and National Weather Service Weather-Ready Nation Workshop



Approximately 30 attendees from Eastern Region National Weather Forecast Offices and Sea Grant programs in the North Atlantic attended a two-day workshop on Sept 26-27 at the Wells, Maine National Estuarine Research Reserve to enhance collaboration on areas of common interest. Maine Sea Grant was a key partner in executing the workshop geared towards engaging the Sea Grant Network to build a Weather-Ready Nation. This event was designed to build capacity for the National Weather Service (NWS) outreach and information on impacts, and for Sea Grant to provide feedback on NWS products related to communication weather and climate hazards.

Attendees heard from a variety of presenters that established Sea Grant/NWS partnerships. Some examples include Delaware Sea Grant collaboration with Mt. Holly WFO on Rip Currents, wave run-up modeling, coastal storms awareness program, and the business resilience Sea Grant-NERRS transfer project. The workshop also went on a field trip to Gooch's Beach (photo above) to learn about the citizen science and modeling program. This program is used for ground truth observations for the wave run-up model in Maine. The latter half of the second day included a brainstorming session on best practices and next steps for expanding these successes to other parts of the region.

"I took away a new understanding of how local NWS offices can work with their local Sea Grant. Lake Champlain Sea Grant has applied for a NOAA B-WET (Bay Watershed Education & Training) grant, and if successful NWS Burlington will be a part of the project by helping with development of curriculum and planning, as well as training educators on weather and climate," said Greg Hanson from the Burlington Weather Forecast Office. Hanson's comments are emblematic of the conditions the workshop created for the new partnerships and collaborations that will result in a Weather-Ready Nation.

POC: Jason.Tuell@noaa.gov

Did You Know?

NOAA and its partners have developed a new forecasting tool to simulate how water moves throughout the nation's rivers and streams, paving the way for the biggest improvement in flood forecasting the country has ever seen: a National Water Model.

Launched in August, the National Water Model is running on NOAA's powerful new Cray XC40 supercomputer. The model uses more than 8,000 U.S. Geological Survey gauges to simulate conditions for 2.7 million locations in the contiguous U.S. The model generates hourly forecasts for the entire river network. Previously NOAA was able to forecast streamflow for 4,000 locations every few hours.

Initially, the model will benefit flash flood forecasts in headwater areas and provide water forecast information for many areas that currently aren't covered. As the model evolves, it will provide "zoomed-in," street-level forecasts and inundation maps to improve flood warnings, and will expand to include water quality forecasts.

Current River Forecast Points (~3,600)



NWM Streamflow Output Points (~2.7 mil)



"With a changing climate, we're experiencing more prolonged droughts and a greater frequency of record-breaking floods across the country, underscoring the nation's need for expanded water information," said Louis Uccellini, Ph.D., director of the National Weather Service. "The National Water Model will improve resiliency to water extremes in American communities. And as our forecasts get better, so will our planning and protection of life and property when there's either too much water, too little, or poor water quality."

For more information check out: water.noaa.gov



NOAA Place in the North Atlantic Profile

NMFS Milford Laboratory



The Milford Laboratory was established in 1931 when a full-time scientist, Dr. Victor Loosanoff, was assigned to study the biological problems of Connecticut's oyster industry. Since that time, techniques developed at Milford Laboratory are used worldwide by the aquaculture industry. Laboratory scientists have worked closely with the shellfish industry to help solve problems and increase production.

Today the Milford, CT Laboratory, is located on the shores of Long Island Sound. The primary mission of the lab and the 40 NOAA staffers is to understand how humans, ecology, and biology affect development of sustainable marine aquaculture, to develop marine fish and shellfish culture methods, and to better understand the health of these populations and their interactions with the environment through biotechnology and biomedical research.

The facility comprises two laboratory/office buildings and support buildings housing raceway and circular tanks. A 49-foot vessel, the R/V Victor Loosanoff, is also docked at the Laboratory for nearshore research. Present research emphasizes aquaculture and habitat-related work.

Most of the NOAA staff at Milford are part of the Northeast Fisheries Science Center's Ecosystem and Aquaculture Division. The Chief of this Division is Dr. Thomas Noji.

For more information about the Milford, CT Laboratory, visit <http://www.nefsc.noaa.gov/nefsc/Milford/>

NOAA People in the North Atlantic Region

Jeff Orrock

National Weather Service - Wakefield

What are your duties and areas of responsibility?

As the Meteorologist In Charge (MIC) of the National Weather Service (NWS) office in Wakefield duties range from helping to manage facility-related projects and issues related to contracts and making sure budgets are executed properly to forecast operations and critical decision making.

The Wakefield NWS office serves 66 individual counties and local jurisdictions in Virginia, Maryland and North Carolina and serves as the State Liaison office of the State of Virginia. The forecast area includes Ocean City MD, Richmond VA, and Hampton Roads. The Wakefield NWS office provides services as much for marine areas as it does land serving the Chesapeake Bay and coastal waters from Ocean City MD south to near Duck NC on the Outer Banks.

What do you consider your most significant achievements as a NOAA employee?

Two big things here. 1) Helping others achieve their goals assisting individuals in their career paths and decisions for success. 2) The ability to connect with core partners identifying needs and coupling science with service to meet those needs. As MIC you have the responsibility to help others both in and out of the office. I am proud to have helped a number of individuals in their careers and recognize I would not be where I am today without mentors and leaders who helped me in my path. Outside of the office, the current work with the United States Coast Guard (USCG), NAVY, Hampton Roads Port Authority, Pilots and Emergency

NART Background

The NART is one of eight regional teams created by NOAA's Regional Collaboration effort. It is composed of 20 members from five line offices and is currently led by Jason Tuell. Nicole Bartlett is the NART Regional Coordinator. For more information on team members and activities visit: http://www.regions.noaa.gov/north_atlantic

Management is incredibly rewarding.

How does what you do impact the public and why is it important?

Weather impacts everyday lives from knowing what to wear when you walk out to the door to deciding on what areas to evacuate in a major storm such as a hurricane. Decisions made on the forecast, both large and small, have an effect.

Do you have any achievements outside of NOAA that you would like to mention?

I am proud of my family and the two beautiful girls (ages 9 and 14) we are raising. Both have learned to be very responsible and well rounded individuals who are not afraid to try new things. For the past few years I have also helped lead the Youth Ministry at our church taking middle and high school youth on missions across the country and serving the local community. Helping our youth grow and seeing them actively engaging in helping each others and our society has been incredibly rewarding.

What is your favorite part of your job that makes you feel most fulfilled?

It's back to helping others both within the agency and users on the outside.

What is your favorite motto? And/or your favorite hobby?

Motto: At the heart of the Wakefield National Weather Service is our vision...to be the weather service most admired for its performance, partnerships and people. Set goals, prioritize and focus on how we can provide the best products and services meeting customer needs by capitalizing on partnerships and technology while coupling science with service.

Hobby: Boating and riding motorcycles. I guess I have a little of an adrenaline junkie in me.

What would you recommend to those who want to begin a career at NOAA?

There is a lot of opportunity within NOAA to serve in so many different ways. NOAA provides a host of avenues and venues for future employees and is always evolving looking to the future and future needs of users as well as the environment.

