# NROC Meeting and Living Shorelines Session
# Wednesday, May 4, 2022

## *NROC Morning Meeting*

***9:00 AM – 12:00 PM*** *(access opens at 8:45 AM)*
*Registration required to access Webex Meeting: Register with this link*

## *NROC Afternoon Living Shorelines Session*

***1:00 PM – 3:00 PM***
*Access Google Meet session with this link*

## Meeting Packet

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## How to Access the Meetings

**NROC Morning Meeting**

**Advance registration is required** to participate in the NROC morning meeting from 8:45 AM – 12:00 PM.
Register here: ***Registration Link***

**NROC Living Shorelines Afternoon Session**

Attending the living shorelines session does not require registration. Simply join the meeting on Wednesday, May 4 · 1:00 – 3:00 PM via Google Meet using details below.
Video call link: https://meet.google.com/msz-weva-rzc
Or dial: (US) +1 347-486-6525 PIN: 642 858 756#

| Northeast Regional Ocean Council – Meeting Agenda<br>**Wednesday, May 4, 2022 \| Videoconference** | |
|---|---|
| 8:45 AM | **Access to Videoconference Meeting Opens** (Meeting opens to allow for technology checks) |
| 9:00 AM | **Welcome, Meeting Overview, and Updates**<br>*NROC Co-Chairs: Lisa Engler, MA CZM and Betsy Nicholson, NOAA*<br>• Welcome / Meeting logistics<br>– Meeting attendees are invited to share updates and resources via the meeting chat<br>– Highlights from NROC members are found in the briefing book<br>• Overview of agenda, *Lisa Engler, MA CZM*<br>• NROC Executive Committee Updates, *Betsy Nicholson, NOAA*<br>– NROC Funding Status and Staffing Update<br>• Update regarding federal funding opportunities, *Betsy Nicholson, NOAA*<br>• Key updates from NROC state partners, *Lisa Engler, MA CZM* |
| 9:30 AM | **NROC Partner Updates** (*partners highlight <u>one or two key news items</u>)*<br>• New England Sea Grant Consortium, *Erik Chapman, NH Sea Grant*<br>• NERACOOS, *Jake Kritzer or Jackie Motyka*<br>• Gulf of Maine Council, *Prassede Vella, MA CZM*<br>• NE Federal Partners, *Rick Bennett, US FWS or Regina Lyons, US EPA* |
| 9:50 AM | **Gulf of Maine Intergovernmental Renewable Energy Task Force Meeting**<br>• Plans for BOEM virtual meeting, Thursday, May 19, 2022, 9 AM - 5 PM, *Wright Frank, BOEM*<br>• Opportunities for NROC to support the Task Force process, *Nick Napoli, NROC* |
| 10:00 AM | **National Updates from White House Office of Science and Technology Policy**<br>• *Deerin Babb-Brott, White House Office of Science and Technology Policy* |
| 10:20 AM | **NROC Committee Updates and Priority Projects for Funding**<br>• Overview of process for developing NROC priority projects, *Nick Napoli, NROC* |
| 10:30 AM | **Coastal Hazards Resilience Committee – Updates and Priority Projects**<br>*Co-Chairs: Julia Knisel, MA CZM, Adrianne Harrison, NOAA, and Kevin O'Brien, CT DEEP*<br>• Committee update and overview of priority projects (15 minutes)<br>• Discussion (10 minutes)<br>– Audience Q&A and feedback about committee updates or priority projects<br>– Participant feedback about opportunities to leverage partnerships, engage relevant communities, and connect with other organizations |
| 10:55 AM | **Break** |
| 11:05 AM | **Ocean and Coastal Ecosystem Health Committee – Updates and Priority Projects**<br>*Co-Chairs: Steve Couture, NH DES, Regina Lyons, EPA, and Jeffrey Runge, NERACOOS*<br>*HCOM Co-Chairs: Becca Newhall, NOAA, Dan Sampson, MA CZM, Todd Callahan, MA CZM*<br>• Committee update and overview of priority projects (15 minutes)<br>• Discussion (10 minutes)<br>– Audience Q&A and feedback about committee updates or priority projects<br>– Participant feedback about opportunities to leverage partnerships, engage relevant communities, and connect with other organizations |

| | |
|---|---|
| 11:30 AM | **Ocean Planning Committee – Updates and Priority Projects**<br>*Co-Chairs: Ted Diers, NH DES and Lou Chiarella, NOAA*<br>*Nick Napoli, NROC; Emily Shumchenia, Portal Manager and RWSC Director*<br>• Committee update and overview of priority projects (15 minutes)<br>• Discussion (10 minutes)<br>– Audience Q&A and feedback about committee updates or priority projects<br>– Participant feedback about opportunities to leverage partnerships, engage relevant communities, and connect with other organizations |
| 11:55 AM | **Next Steps for NROC Priority Projects and NROC Meeting Wrap Up**<br>*NROC Co-Chairs: Lisa Engler, MA CZM and Betsy Nicholson, NOAA* |
| 12:00 PM | **NROC Morning Meeting Adjourns** |

| **NROC Afternoon Living Shorelines Session** | |
|---|---|
| 1:00 PM | **Living Shorelines Session - Welcome and Opening Activity**<br>*Co-Chairs: Julia Knisel, MA, Adrianne Harrison, NOAA, and Kevin O'Brien, CT DEEP* |
| 1:15 PM | **Round Robin Updates**<br>CHRC Committee member organizations will provide updates on current and planned living shorelines activities in New England. Highlights will focus on living shorelines projects, training, outreach, policies, or resources. |
| 2:30 PM | **Project Showcase**<br>CHRC will highlight final products from the NROC / TNC project - *Increasing Resilience and Reducing Risk through Successful Application of Nature-Based Coastal Infrastructure Practices in New England.* |
| 2:50 PM | **Wrap Up and Next Steps for CHRC Work Plan and Project Briefs** |
| 3:00 PM | **NROC Living Shorelines Session Adjourns** |

**Coastal Hazards Resilience Committee**

1. FY2017 NOAA Coastal Resilience Grant (complete)
   - Project: *Increasing Resilience and Reducing Risk through Successful Application of Nature-based Coastal Infrastructure in New England*
   - Total Award: $999,999 (includes $50,687 for NROC – project support + general NROC Coordination)
   - Lead: The Nature Conservancy
   - Partners: NROC, ME Coastal Program, NH Coastal Program, NH DES, MA CZM, RI CRMC, UConn / CIRCA, and local partners
   - Funding Period: October 2017 to March 2022 *(includes 18-month extension)*

**Ocean and Coastal Ecosystem Health Committee**

2. FY2018 NOAA / NOS / NCCOS (complete)
   - Project: *Developing Generic Predictive Model of Ocean and Coastal Acidification Thresholds from Long Island Sound to the Nova Scotian Shelf*
   - Total Award: $498,000 (includes $20,000 for NROC – project support + collaboration with NROC)
   - Lead: NERACOOS
   - Partners: NROC, UMass Dartmouth, UNH, GMRI, Wells NERR, NH Sea Grant, UMaine, others
   - Funding Period: September 2018 through August 2021

**Ocean Planning Committee**

3. EPA (complete)
   - Project: *Updating and enhancing coastal vegetation datasets on the Northeast Ocean Data Portal*
   - Award: $14,520
   - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor) in collaboration with the EPA and the Blue Carbon Working Group
   - Funding Period: October 2020 - September 2021

4. Moore Foundation (complete)
   - Project: *Regional ocean planning activities*
   - Award: $2.2 million
   - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor)
   - Funding Period: January 2018 – April 2022

5. FY2020 NOAA Regional Ocean Data Sharing/Regional Ocean Partnership Funding (complete)
   - Project: *Update marine life data on the Northeast Ocean Data Portal*
   - Award: $135,000
   - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor) in collaboration with the Mid-Atlantic Regional Council on the Ocean
   - Funding Period: October 2020 – April 2022

6. MA Clean Energy Center
   - Project: *Developing Standard Approaches to Synthesizing, Visualizing, and Disseminating High-Resolution Acoustic and Imagery Data to Advance Benthic Mapping in the Wind Energy Areas of the Northeast*
   - Award: $163,850 (includes $49,050 for NROC stakeholder and work group coordination and integration of products into the Northeast Ocean Data Portal)
   - Lead: Inspire Environmental
   - Funding Period: January 2021 – October 2022

7. Bureau of Ocean and Energy Management
   - Project: *Operations and maintenance of the Northeast Ocean Data Portal*
   - Award: $250,000
   - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor)
   - Funding Period: September 2021 – September 2022

8. FY2021 NOAA Regional Ocean Data Sharing/Regional Ocean Partnership Funding
   - Project: *Update fishing, marine life, and recreation data on the Northeast Ocean Data Portal*
   - Award: $204,000
   - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor)
   - Funding Period: August 2021 – November 2022

9. Maine Governor's Energy Office
   - Project: *Data, Mapping, and Gulf of Maine Portal for Offshore Wind*
   - Award: $45,000
   - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor)
   - Funding Period: March 2022 – February 2023

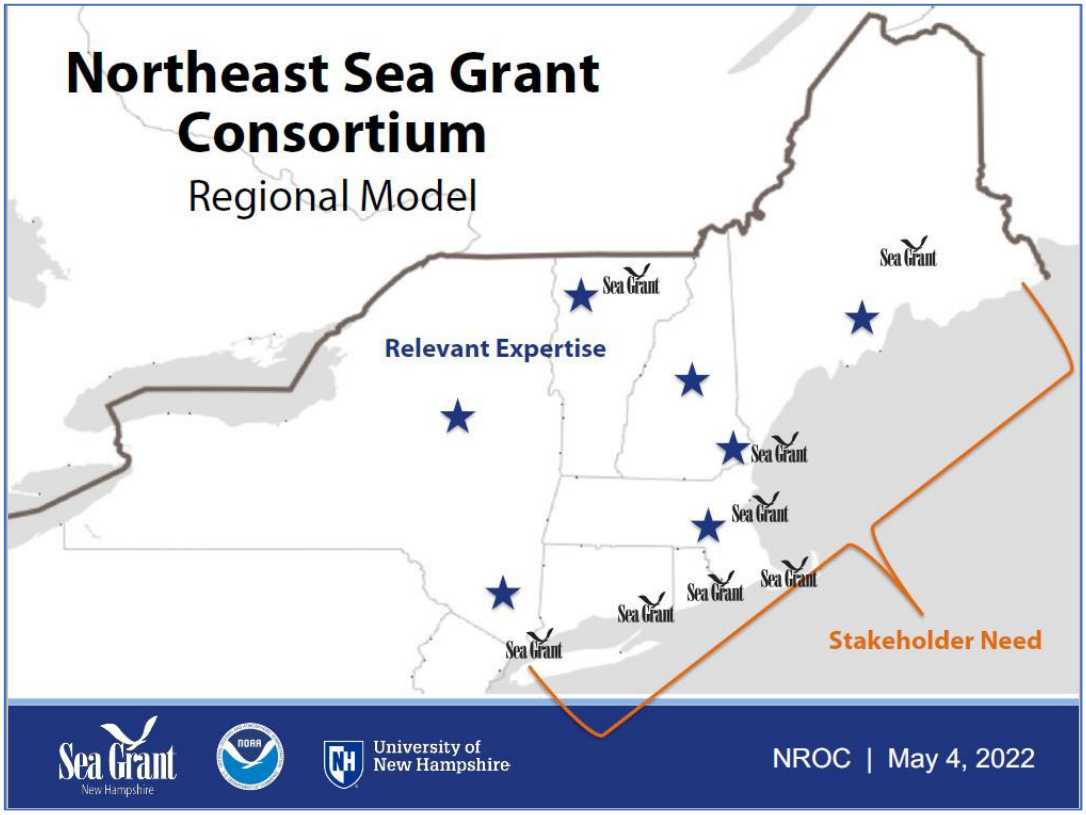
10. Funding for Regional Wildlife Science Collaborative for Offshore Wind
    (Shared with the Mid-Atlantic Regional Council on the Ocean)
    *The Regional Wildlife Science Collaborative for Offshore Wind (RWSC) is funded through a mix of member dues, in-kind contributions, grants, contracts, and research funding. RWSC is currently in a startup phase including securing funding and financial commitments to implement the work plan through February 2023. RWSC currently has secured $297,000 of outside funding and $244,640 of in-kind funding (much of the in-kind during the startup phase is from NROC and MARCO). Another $120,000 of outside funding has been committed. Staff are working to secure committed funds, additional funding commitments, and develop a budget and funding plan beyond February 2023.*

**Northeast Sea Grant Consortium Update**
**May 4, 2022**

Connecticut, Massachusetts (WHOI and MIT), Rhode Island (including Rhode Island SG Law Program), Maine, New Hampshire, New York, Lake Champlain (VT)

- Regional research and extension update
  - Offshore Renewable Energy
  - American Lobster Initiative
  - Other Regional Programs
- New funding
  - Marine Debris (Infrastructure Bill - $50M over 5 years)
  - Coastal Resilience (Base Funding + $100K/year)

Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022




Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022

# Northeast Sea Grant Consortium

2022-2023 – Offshore Renewable Energy
Partnership with DOE and NEFSC

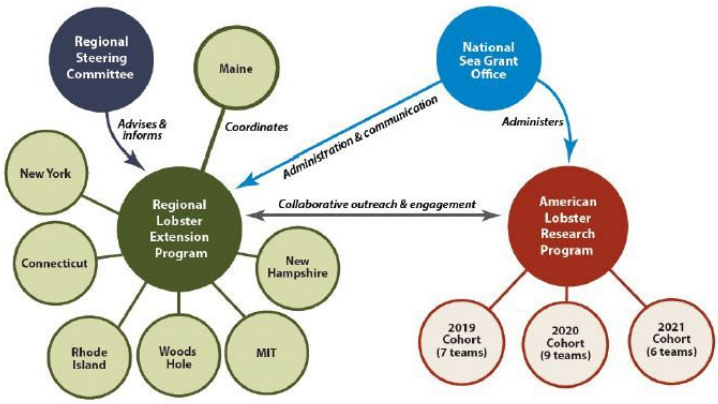
- **6 Research Projects (Announcement pending)**
  - **Community-Focused Ocean Renewable Energy Research**
- **Extension Baked In….**
  - **Regional and National Sea Grant Extension Network Engaged From the Outset**

Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022

# Northeast Sea Grant Consortium

2022-2023 – American Lobster Initiative

**Sea Grant American Lobster Initiative** (ALI)




Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022

# Northeast Sea Grant Consortium

2021-2023 – American Lobster Initiative

## 6 Funded Research Projects:

- **PI: Damian Brady - UMaine**
  An ecosystem-based approach to American lobster habitat and trophic dynamics: Integrated modeling to evaluate climate-related impacts
- **PI: Rebecca Peters – Maine Department of Marine Resources**
  Answering an industry question, "Who's eating juvenile lobsters?": An evaluation of lobster predation in the Gulf of Maine using stomach content analysis
- **PI: Jason Goldstein - Wells National Estuarine Research Reserve**
  Connecting the dots': Environmental drivers of egg production and stability in ovigerous American lobsters in the Gulf of Maine

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# Northeast Sea Grant Consortium

2021-2023 – American Lobster Initiative

- **PI: Yong Chen - Stony Brook University**
  Evaluating impacts of changing life history parameters on the American lobster stock dynamics under different management regulations in a warming Northeastern US
- **PI: Jonathan Grabowski - Northeastern University**
  Investigating the ecological impacts of range-expanding species to the American lobster fishery using collaborative surveys, fisher observations, and predator-prey experiments
- **PI: Joshua Carloni - New Hampshire Fish and Game**
  The influence of season and temperature on the distribution and abundance of juvenile lobsters assessed via traditional ventless and novel early benthic phase traps

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# Northeast Sea Grant Consortium

2021-2023 – American Lobster Initiative


## Regional Lobster Extension Program:

- Coordinated by:
  ME, NH, WHOI, MIT, RI, CT, NY
  Sea Grant Programs
- Stakeholder Engagement
  - Engage and Extend regional research
  - Inform new research priorities
  - Address additional industry needs
- Collaborative communications efforts:

Check out the ALI Story-map:
https://storymaps.arcgis.com/stories/f50bd80b84d349048e9d814769dc29cd

Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022

# Sea Grant Biennial Research Funding

- Recent and imminent announcements expected for 40+, two-year projects.

- RI: https://seagrant.gso.uri.edu/rhode-island-sea-grant-invests-over-2-million-in-research-on-harmful-algal-blooms-rust-tides-and-multi-use-of-marine-resources/
- NY: https://nyseagrant.org/articles/t/1-4-million-awarded-for-sea-grant-research-on-ny-s-coastal-environment-economies-and-communities-research-press-release
- CT: https://seagrant.uconn.edu/research/
- WHOI: https://seagrant.whoi.edu/funding-2/all-funded-projects/
- NH: https://seagrant.unh.edu/research/current-research
- Lake Champlain: https://www.uvm.edu/seagrant/research/current-projects
- ME: https://seagrant.umaine.edu/2022/04/01/research-on-forever-chemicals-carbon-emissions-ecosystem-based-management-and-fisheries-adaptation/
- MIT: Announcements coming shortly!

Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022

# Other Regional Contributions

- Regional Aquaculture
  - Seaweed Hub
    - https://seaweedhub.org/
  - *Vibrio research and extension*
  - Striper Hub
  - Southern New England Shellfish Hub
  - East Coast Hard Clam Selective Breeding Hub
    - https://storymaps.arcgis.com/stories/3425623358164278bbe1ed7f7311a605
- Contaminants of Emerging Concern Project
    - https://seagrant.uconn.edu/research/contaminants-emerging-concern/#




# New Funding

- Marine Debris (Infrastructure Bill - $50M over 5 years)
- Coastal Resilience (added to base funding of all programs – roughly $65k/year+ match)
  - Building off internal and partner discussions about needs/opportunities
- Next regional research/extension project?

Sea Grant New Hampshire | University of New Hampshire | NROC | May 4, 2022

## Gulf of Maine Council on the Marine Environment Update - May 2022

*Submitted by GOMC Working Group member Prassede Vella, MA CZM*

**Regional Collaboration to Address Marine Debris in the Gulf of Maine**

Thanks to funding from the National Oceanic and Atmospheric Administration's (NOAA) Marine Debris Program, the Gulf of Maine Association has been working in partnership with NOAA, Gulf of Maine Council, Urban Harbors Institute, Surfrider Foundation, Center for Coastal Studies, Blue Ocean Society for the Marine Environment, Huntsman Marine Science Centre and the five jurisdictions bordering the Gulf of Maine to implement an international collaborative approach for addressing marine debris in the Gulf of Maine watershed.

Since launching the program in October 2021, partners have already implemented over 100 coastal cleanups, removed 7,773.5 lbs. of debris from the environment, conducted detailed marine debris tracking, hosted a variety of outreach and awareness programs, and pursued innovative initiatives that engaged volunteers, businesses, government agencies, students, industry, and community partners in addressing marine debris throughout the Gulf of Maine. The project team met at least monthly to develop strategies and coordinate activities. During December 2021, the team participated in an international forum with government and non-governmental partners from US and Canada to share information about the project and identify opportunities for new collaborative efforts. Click here to view the presentations from the meeting. Team members also participated in a workshop this spring along with NOAA and other organizations from throughout the region to review and update NOAA's 2019 Gulf of Maine Marine Debris Action Plan.

Earlier this year, this unique regional collaborative enabled a coordinated regional response to an unexpected marine debris event that impacted coastlines throughout the Gulf of Maine during the winter and spring. As unusual yellow plastic tubing began showing up on beaches across the coastline from Massachusetts to Nova Scotia, the Center for Coastal Studies conducted research to identify the source of debris and coordinated team efforts to identify and track this event. The source of debris was identified as **yellow explosive shock tubing** used as part of blasting associated with harbor dredging projects. This Gulf of Maine regional collaborative proved invaluable in mobilizing quick communications and coordinated field work across multiple states. As a result, regional tracking helped raise awareness about the scope and extent of this source of plastic debris which the US Army Corps of Engineers is now aware of and working to address. Click here for media coverage.

Additional information about the project is available at: https://www.gulfofmaine.org/public/marine-debris/, or on Twitter.

*Funding for this project was awarded by NOAA's North America Marine Debris Prevention and Removal Grant program which funds projects that prevent and remove debris in Mexico and the US-Mexico and US-Canada border areas. This two-year project is expected to leverage an additional $448,153 in non-federal matching support to expand the scope of regional efforts to reduce marine debris in the Gulf of Maine.*

**Gulf of Maine Council July 2022 Meeting and 2022 Awards Program**

The Gulf of Maine Council will host an in-person meeting in Portland, Maine on July 28 and 29, 2022. The meeting details and agenda are currently under development. On the evening of Thursday, July 28, the Council will host an awards ceremony to honor individuals, businesses and organizations that have made a significant difference in protecting the health and sustainability of the Gulf of Maine watershed.

**Nominations Accepted through May 31, 2022**

Gulf of Maine Council partners and members of the public are encouraged to submit nominations for 2022 award winners making a difference Nova Scotia, New Brunswick, Maine, New Hampshire, and Massachusetts. Details about the award categories and award nomination forms are available on the Gulf of Maine Council's website at: GOMC Awards Program.

## NOAA Office for Coastal Management Updates – May 2022

*Submitted by NOAA Office for Coastal Management*

**Big News! CT DEEP, UCONN and NOAA Designate 30th NERR in the System**

The CT National Estuarine Research Reserve was officially designated on January 14, 2022. The CT Reserve welcomed Jamie Vaudrey, who was instrumental in the designation of the Reserve, as the Research Coordinator and George McManus as the Reserve Director and Manager. The Hiring Committee received approval to begin searching for additional core staff, including an Administrative Assistant and Education Coordinator. The ceremony to celebrate the designation of the Reserve is set for May 21, 2022 at University of Connecticut, Avery Point Campus. CEQ Chair Mallory, NOAA Administrator Dr. Rick Spinrad, NOS AA Nicole LeBoeuf, and CT Governor Lamont are just a few who are traveling to attend.

**Thank you New England NERRs for Hosting the Local Gathering of the Social Coast Forum: Fostering Social Resilience and Climate Adaptation in New England**

On March 24th, more than 100 coastal managers gathered for a chance to talk with other professionals about the **connections between social resilience and climate adaptation**, and what this means for our work in New England. Live presentations included:

- *Making Space for Socially Just Climate Adaptation.* Dr. Ashcraft (University of New Hampshire) shared recent research on what socially just adaptation means and how we can evaluate the potential effects of climate adaptation efforts for socially vulnerable groups. See their recent paper here.
- *Collaboration to Increase Social Resilience in Midcoast Maine.* This emergency response tabletop exercise used the Social Vulnerability Index to identify people who were in harm's way during a coastal storm and how best to include vulnerable populations in planning and emergency response. See project webpage here.

These live presentations were supplemented with **previously recorded presentations**, including:

- *Photovoice: A Participatory Approach to Exploring the Social Dimensions of Climate Change* (Video Link), Jessica Brunacini, Wells NERRS
- *Collaboration to Increase Social Resilience in Midcoast Maine* (Video Link), Kristen Grant, Maine Sea Grant

The local dialogue was hosted by the Wells (Maine), Great Bay (New Hampshire), Waquoit Bay (Massachusetts) and Narragansett Bay (Rhode Island) National Estuarine Research Reserves; NOAA Office for Coastal Management; and the National Estuarine Research Reserve Association.

**Product updates**

Sea Level Rise Viewer. NOAA joined with other interagency collaborators to release the *Sea Level Rise Technical Report*, providing the most up-to-date sea level rise projections available for all U.S. states and territories. The updated data offer projections out to the year 2150 and information to help communities and decision makers. These projections fill in the gaps for some rural and underserved regions.

NOAA Office for Coastal Management teams have been hard at work incorporating the data into our *Sea Level Rise Viewer*, *Coastal County Snapshots*, and the *Stormwater Adaptation Tool*.
NOAA Office for Coastal Management partnered with the Bureau of Labor Statistics to release the Employment in Coastal Inundation Zones dataset in April. The dataset is foundational in describing the potential impact of flooding on a community's economy and includes the number of business establishments and the number of employees that fall within various coastal inundation footprints. The data can be used by city planners, state governments, nonprofits, private sector, and federal government agencies to examine potential business and employment disruptions from storm surge and other flooding.

**Training opportunities**
Seven Best Practices for Risk Communication. This 90-minute interactive training introduces participants to seven best practices, numerous techniques, and examples for communicating about hazards.

- June 7, 2022, 2:00 to 3:30 p.m. (Eastern). Register here.

Working with Lidar. The self-guided training just added the second module: Identify Lidar-Derived Products. You will learn to quickly determine which lidar data products are needed for your project—and easily locate lidar data. See typical projects and the lidar products needed for your region.
Using Conceptual Models to Integrate Ecosystem Services into Your Coastal Projects – *Coming in Spring 2022.* This new training walks participants through the steps involved in creating a conceptual model of a planned intervention and how it results in biophysical and human changes. This approach allows participants to visualize how the intervention ripples through the natural and human systems and results in changes to ecosystem services. This is a companion course to A Framework for Ecosystem Services Projects. For more information, contact *Peter.Wiley@noaa.gov* or *Rebecca.love@noaa.gov*

**Technical Assistance**
OCM Science and Geospatial Division staff are assisting Massachusetts DEP in their next round of eelgrass mapping. Sections of coast from Provincetown to Plymouth will be mapped and new imagery will be collected along the coast from Plymouth to New Hampshire. This work will be conducted through OCM's Coastal and Geospatial Services Contract. This year's work also includes a pilot test of semi-automated methods for seagrass mapping.

**Fellow News**
New Coastal Management Fellows are currently being selected for the coastal programs in Massachusetts and New Hampshire at the fellowship matching workshop, and will be announced in early May.

Davidson Fellowship News - The latest issue features Davidson Fellow, Claudia Mazur who is finishing up her fellowship in Waquoit Bay Reserve in Massachusetts. Claudia spearheaded a series of workshops, titled Step Into STEM, to encourage and mentor students who are the first in their families to attend college. The workshops are part of the NOAA for Minority Student STEM Initiative and were supported by funding from NOAA's North Atlantic Regional Collaboration Team. In addition, this issue shares an accolade for Jessica Brunacini (Wells Reserve in Maine) who attended the Story Collider's Estuary Storytelling virtual workshop.

**Upcoming Events**

- CZM and NERRs Program Managers Meeting, May 17-19, 2022, in Washington D.C.
- National Working Waterfront Network Conference, July 19-21, 2022, in Boston, sponsored by Massachusetts Coastal Zone Management and the University of Massachusetts Urban Harbors Institute. An NROC panel was accepted featuring our ME, MA, RI and CT state NROC members and will focus on "Positioning large and small working waterfronts to meet current challenges through the eyes of Coastal Zone Management leadership in New England. What's needed, what will work, and what are the biggest challenges and opportunities to increasing pressures on working waterfronts in this region."

**Coming soon… Gulf of Maine Seascape**

NOAA has worked hand in hand with Gulf of Maine state coastal management partners and Tetra Tech over the last three years to develop the Gulf of Maine Seascape mapping project. The Gulf of Maine is experiencing an increase in demand for ocean-related projects. To help people make the best decisions possible when it comes to this important natural resource, NOAA's Office for Coastal Management funded and coordinated the development of a mapping product that can help inform the planning process. The seascape map was developed using the seamless BlueTopo data from NOAA's Office of Coast Survey, a compilation of existing bathymetric surveys. Together, these map products show how interrelating seafloor components and habitat areas across the region are distributed.

This map of the seafloor will provide a regional view of the Gulf of Maine from the highest annual tide on the coast out to 24 nautical miles. The Coastal and Marine Ecological Classification Standard and a consistent mapping approach were used, along with the best-quality data available to identify different bottom types, such as rocky areas, shoals, and moraines. This mapping product covers Maine, New Hampshire, and Massachusetts.

This new product is scheduled to be released in *Spring 2022* (stay tuned!). Partners in Southern New England are interested in expanding this new mapping tool to cover their area.
For more information, contact *Mark.Finkbeiner@noaa.gov* or *Rebecca.Newhall@noaa.gov*.

## Bureau of Ocean Energy Management (BOEM) Updates – May 2022

*Submitted by Lean Bullin, BOEM*

### 1. Gulf of Maine Intergovernmental Renewable Energy Task Force Meeting

**Release date: 04/12/2022** **Contact: Tracey Moriarty, (703) 787-1571**

**Washington, DC**

Dear Stakeholder:

The Bureau of Ocean Energy Management (BOEM) would like to invite you to a **Gulf of Maine Intergovernmental Renewable Energy Task Force meeting on May 19, 2022**, from 9 a.m. to 5 p.m. (EDT).

The meeting will take place virtually via Zoom. To register for the meeting, please click here.

This task force is an intergovernmental group composed of federal officials and elected tribal, state and local officials from Maine, New Hampshire and Massachusetts.

The upcoming task force meeting will focus on the following topics:

- Planning process for commercial wind energy leasing in federal waters of the Gulf of Maine
- State and federal perspectives on offshore wind in the Gulf of Maine
- Framework approach for the first step in the commercial planning process: a Request for Interest
- Stakeholder engagement approach for the commercial planning process
- State of Maine's research lease application

The public is encouraged to attend this meeting, which will include an opportunity for public input on the topics identified above.

Additional details are available on BOEM's Gulf of Maine web page.

### 2. BOEM Report: Atlantic Science Year in Review 2021

The Bureau of Ocean Energy Management (BOEM) funds environmental studies for information needed to predict, assess, and manage impacts from offshore energy and marine mineral activities on human, marine, and coastal environments as mandated under Section 20 of the Outer Continental Shelf Lands Act. This year in review presents the studies completed in 2021 in support of BOEM's Offshore Renewable Energy Program along the Atlantic coast. The studies represent a broad spectrum of research and monitoring to address a variety of environmental concerns and issues. This review represents a snapshot of the ongoing and completed studies funded in whole or in part by BOEM. To learn more about other studies, please visit the BOEM website at www.boem.gov.

The report is available for download here:
*https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Atlantic-Year-in-Review-2021-v4.pdf*

## 3. Multi-Agency Approach to Enhance Protection for North Atlantic Right Whales

**BOEM Announces Multi-Agency Approach to Enhance Existing Protection Efforts for Endangered North Atlantic Right Whales**

**Release Date: 02/07/2022** **Contact: Sara McPherson**, (202) 341-9827

**WASHINGTON** – Building on existing initiatives to study and assess impacts of offshore wind energy development on the North Atlantic right whale, the Bureau of Ocean Energy Management (BOEM) is fostering multiple federal and state partnerships that will inform and strengthen protections for this endangered species.

For more than a decade, BOEM has funded independent research studies and formed partnerships to better assess potential offshore wind energy development impacts on protected species. These studies collect broadscale baseline distribution, behavioral, and ecological data on protected species in general, as well as on North Atlantic right whales.

As offshore wind energy development expands in the Atlantic, BOEM is engaging with the National Oceanic and Atmospheric Administration (NOAA) to develop a science and management strategy to protect and promote the recovery of North Atlantic right whales while responsibly developing offshore wind energy. The strategy will identify existing and needed collaborative research, mitigation requirements and regional-scale monitoring to help minimize impacts to this critically endangered species. BOEM expects to provide a draft strategy later this year for stakeholder input.

BOEM and NOAA are also working with partners to develop a regional passive acoustic monitoring (PAM) network to identify the larger scale movements and distribution of marine mammals, including the North Atlantic right whale. In addition, real-time PAM systems will be deployed to detect animals in the vicinity of construction operations and prompt site-specific mitigation measures designed to reduce the impacts of offshore wind energy projects on marine species.

BOEM is also working with NOAA Fisheries on a Federal Survey Mitigation Implementation Strategy that will describe steps to limit the impact of offshore wind energy development on NOAA Fisheries survey activities including those for North Atlantic right whales.

These efforts align with the recent interagency memorandum between BOEM and NOAA that will leverage the responsibilities, expertise and relationships of both agencies in support of the Biden-Harris administration's offshore wind energy goals while protecting biodiversity and promoting cooperative ocean use.

"BOEM is deeply committed to ensuring responsible offshore wind energy development and to protecting marine species, like the North Atlantic right whale. Continued collaboration with our federal and non-federal partners is essential to our success in both endeavors," said BOEM Director Amanda Lefton. "These partnerships embody the Biden-Harris administration's commitment to confronting the climate crisis and sustaining our oceans for future generations."

BOEM is also collaborating on several other research initiatives related to the North Atlantic right whale and offshore wind energy development. For more than seven years, BOEM has partnered with the Massachusetts Clean Energy Center (MassCEC) on right whale aerial surveys around and within the designated Wind Energy Areas offshore Massachusetts and Rhode Island.

In response to stakeholder requests, BOEM, MassCEC, and other state, federal and private funders recently agreed to help fund one additional year of targeted aerial surveys to augment the existing survey series. Throughout 2022, when researchers observe groupings of North Atlantic right whales during aerial surveys, they will also conduct separate focused and directed surveys on the identified aggregations to improve BOEM's understanding of the whales' behavior.

The funding extension will allow time for regional partnerships to address this long-term data need and reinforces BOEM's commitment to collaborate with the Regional Wildlife Science Collaborative to determine the best path forward for North Atlantic right whale research.

This current survey effort includes funding from the Connecticut Department of Energy and Environmental Protection and the Maine Community Foundation. Discussions are ongoing for further funding from the New York State Energy Research and Development Authority. State funding for the surveys has been facilitated by the Regional Wildlife Science Collaborative.

## 4. 2022 Mid-Atlantic Ocean Forum

**Mid-Atlantic Ocean Forum Scheduled for May 5 and 6**

The Mid-Atlantic Committee on the Ocean (MACO) will convene its fourth annual Mid-Atlantic Ocean Forum on May 5 and 6. The Forum gathers hundreds of ocean professionals and stakeholders representing federal and state agencies, Tribal entities, marine industries, nonprofit research and advocacy organizations, and the public. The free event will once again be held virtually. Instructions for joining the Forum via Zoom will be provided upon registration.

Links to registration, detailed program agenda, information about poster sessions and more are available at: https://www.midatlanticocean.org/mid-atlantic-ocean-forum/2022-mid-atlantic-ocean-forum/

A PDF version of the agenda is available here: https://www.midatlanticocean.org/wp-content/uploads/2022/04/agenda_4-27-22.pdf

Questions about the forum may be directed to Judy Tucker at info@midatlanticocean.org.

NROC
Northeast Regional Ocean Council

# Potential Projects for IIJA Funding

May 4, 2022

## Project Identification and Prioritization

- Committees develop work plans, including identification of where additional funds could be used – **work plans approved October 2021**
- Committees identify priority projects and develop project briefs – **March through early April**

  Guidance for project briefs

  - Projects should be consistent with Committee work plans and consider the near term (2 years) and longer-term (3-5 years) objectives and outcomes
  - Consider tribal priorities and engagement
  - Consider the impact to and involvement of underserved communities
  - Identify partners and potential leveraging opportunities

## Project Identification and Prioritization (continued)

- Staff work with Committees to obtain clarifications on budget and project details – **April**
- Staff summarize projects for NROC distribution and NROC meeting – **Late April**
- Obtain partner input on potential projects - **May 4 NROC meeting**
  (see next slides – additional details for each project will be presented at the May 4 meeting)
- NOAA spend plan approved and funding opportunity released – **TBD**
- Staff submit a general budget, including projects, and identify decision points for NROC EC – **after May 4**
- Staff develop proposal – **after funding opportunity is released**

## Coastal Hazards Resilience Committee - Proposed Projects

1. *Establish a water level sensor community of practice in New England*
2. *Advancing living shorelines in New England (Phase 3)*
3. *Roundtable: Approaches for integrating updated sea level rise projections into planning tools and policies*

## Ocean and Coastal Ecosystem Health Committee - Proposed Projects

1. *Coastal vegetation and blue carbon data updates to inform long-term monitoring*
2. *Development of a regional system for monitoring ocean and coastal acidification*
3. *Comprehensive Seafloor mapping in a high priority, 3-state ocean planning area of the Gulf of Maine*
4. *Identification of high priority areas and an acquisition plan for augmenting high-resolution multibeam echosounder bathymetry across the northeast shelf to facilitate derived products (seascapes, slopes, seafloor ruggedness) for use in habitat identification and ocean planning*
5. *Identification of high priority areas for seafloor characterization (biological and sediment) within the Gulf of Maine and conduct 1-3 directed seafloor surveys to assist with regional management goals.*

## Ocean Planning Committee – Proposed Projects

1. *Updates and enhancements to Northeast Ocean Data Portal map interfaces, website, data services, and IT infrastructure*
2. *Update marine life data on the Northeast Ocean Data Portal*
3. *Reorganize and update commercial fishing data on the Northeast Ocean Data Portal*

**NROC proposal for IIJA funds will also include:**

- *Support for a tribal engagement coordinator*
  - Identify and scope tribal priorities
  - Ensure engagement in each of NROC's committees and projects, if interested
  - Assist with fundraising and proposal development for tribal priorities

**NROC proposal for IIJA funds will also include :**

- *Contract staff support for the EC and each Committee*
  - Project management and coordination across committee portfolios
  - Manage and support NROC/committee/project meetings, webinars and workshops
  - Contract development/management
  - Grant and progress reporting
  - Fundraising
  - Communications – website, newsletters, other
  - General administration

**NROC proposal for IIJA funds will also include :**

- *A budget for general administration*
  - Funding to respond to emerging needs
  - IT, website, communications, meeting space, travel and other direct costs

## Contact for more information:

**Joan LeBlanc**
*NROC Coordinator*, jleblanc@northeastoceancouncil.org

**Emily Shumchenia**
*Manager, NE Ocean Data Portal*
*Director, Regional Wildlife Science Collaborative*
emily.shumchenia@gmail.com

**Nick Napoli**
*Executive Director,* nicknapoli01@gmail.com

**Products from the NROC / TNC Project, *Increasing Resilience and Reducing Risk Through Successful Application of Nature Based Coastal Infrastructure Practices in New England***

*Prepared by: Steve Kirk, The Nature Conservancy; and Joan LeBlanc, NROC*

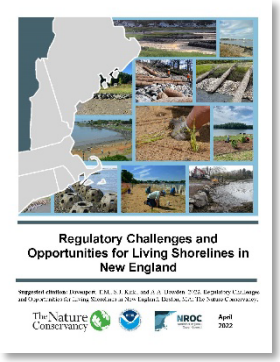
This project was funded by the National Oceanic and Atmospheric Administration (NOAA), FY2017 Coastal Resilience Grant Federal Funding Opportunity Award Number: NA17NOS4730141, with support from project partners. Project period: October 2017 to March 2022.

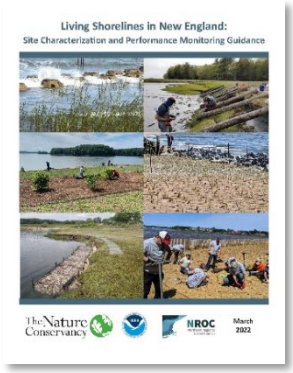
## Piloting Living Shorelines in New England

Overview of regional partnership led by The Nature Conservancy with the Northeast Regional Ocean Council, state Coastal Zone Management programs and local organizations to advance appropriately designed living shorelines in New England.

## Regulatory Challenges and Opportunities for Living Shorelines in New England

Report highlights key regulatory challenges and opportunities to better support the application of living shorelines in New England.




## Living Shorelines in New England: Site Characterization and Performance Monitoring Guidance

Report provides guidance to inform site characterization and performance monitoring for Living Shorelines in New England. Metrics and data collection tools for different types of living shorelines are outlined to advance knowledge about the performance of these approaches in New England conditions.

## Case Studies: Living Shorelines in New England

Case studies provide an in-depth look at five living shoreline demonstration projects developed to advance knowledge and understanding about permitting, design, construction, and monitoring of living shorelines in New England.

These new products are available on the NROC website at:
https://www.northeastoceancouncil.org/committees/coastal-hazards-resilience/living-shorelines-group/

Questions about the project may be directed to jleblanc@northeastoceancouncil.org or stephen.kirk@TNC.ORG.

**Northeast Regional Ocean Council**
**Summary – October 28, 2021, Virtual Meeting**

**ATTENDEES**

Seth Ackerman, USGS; Robert Ballou, RI DEM; Rick Bennett, US FWS; David Blatt, CT DEEP-LWRD; Bob Boeri, MA CZM; Dani Boudreau, NOAA; Derek Brockbank, Coastal States Organization; Leann Bullin, BOEM; Todd Callaghan, MA CZM; Alex Carli-Dorsey, US EPA; Jamie Carter, NOAA; Lou Chiarella, NOAA; Jesse Cleary, Duke University; Deb Cohen, US EPA; Mel Coté, US EPA; Steve Couture, NH DES; Corrie Curtice, Duke University; Mark Cutter, USCG; Alexandra Dichter, US EPA; Steve Dickson, ME Geological Survey; Theresa Davenport, The Nature Conservancy; Nelle D'Aversa, NOAA; Ian Dombroski, US EPA - SNEP; Jenna Ducharme, RPS Group; Lisa Engler, MA CZM (NROC State Co-Chair); Claire Enterline, ME Coastal Program; Jennifer Felt, Conservation Law Foundation; Marianne Ferguson, NOAA Fisheries; Mark Finkbeiner, NOAA; Christy Foran, RAND Corporation; Darryl Francois, BOEM; Wright Frank, BOEM; Melissa Gates, Surfrider Foundation; Brent Greenfield, National Ocean Policy Coalition; Adrianne Harrison, NOAA; Claire Hodson, URI; Marcus Holmes, US EPA; Jill Valdes Horwood, Barr Foundation; Sarah Hudson, Gotham Whale; Rafeed Hussain, Ocean Conservancy; Cathy Johnson, National Park Service; Rachel Keylon, Coastal States Organization; Julia Knisel, MA CZM; Connie Kot, Duke University; Joan LeBlanc, NROC; Kathleen Leyden, ME DMR; Rebecca Love, NOAA; Katie Lund, UConn CIRCA; Regina Lyons, US EPA; Jennifer McCann, URI; Ellen Mecray, NOAA; Meredith Mendelson, ME DMR; Ivy Mlsna, US EPA; Jackie Motyka, NERACOOS; Nick Napoli, NROC; Becca Newhall, NOAA OCM; Betsy Nicholson, NOAA OCM (NROC Federal Co-Chair); Tom Nies, NEFMC; Kevin O'Brien, CT DEEP; James O'Donnell, University of Connecticut / CIRCA; Larry Oliver, US ACE; Sabrina Pereira, NOAA; Adam Reilly, US EPA; Marta Ribera, The Nature Conservancy; Colleen Roche, NOAA; Dan Sampson, MA CZM; Jessica Scott, ME Governor's Office of Policy Innovation and the Future; Kaitlyn Shaw, HESD; Emily Shumchenia, NROC; Brian Thompson, CT DEEP; Timothy Timmermann, US EPA; Aaron Toffler, Boston Harbor Now; Amy Trice, Ocean Conservancy; Michael Triantafyllou, MIT Sea Grant; Prassede Vella, MA CZM; Cadijah Walcott, Coastal States Organization; Sheila Warren, USACE; Jeffrey Waldner, BOEM; Maya Whalen-Kipp, US DOE; Chris Williams, NH Coastal Program; Kate Williams, Biodiversity Research Institute

**WELCOME AND INTRODUCTIONS**

NROC Co-Chairs Lisa Engler, MA CZM, and Betsy Nicholson, NOAA, welcomed meeting participants and reviewed the meeting agenda.

**NROC EXECUTIVE COMMITTEE**

**NROC Funding Status**

Betsy Nicholson provided an overview of NROC's funding status noting that NROC does not have an appropriation or steady funding stream but instead relies on a variety of sources to support NROC coordination and Committee activities. NOAA grants have supported work of the Coastal Hazards Resilience Committee and the Ocean and Coastal Ecosystem Health Committee. Ocean Planning Committee activities have recently received funding from EPA, BOEM, Moore Foundation, NOAA, and the MA Clean Energy Center. Detailed funding amounts, project descriptions and funding periods are included in the meeting packet at: https://www.northeastoceancouncil.org/library/. Betsy noted that NROC partners should be looking for new funding opportunities as all current sources of funding expire in 2023.

**BIDEN ADMINISTRATION AND CONGRESSIONAL PRIORITIES**
Betsy Nicholson provided the following updates regarding Biden Administration and legislative actions that are particularly relevant to NROC.

**Budget Updates**
*FY22 House and Senate marks point to increases in relevant programs*
NOAA
- Increases to CZM, NCRF, reserves, data sharing initiative
- Increases for offshore wind, Right Whales and 17 earmarked projects in NE

EPA
- Emphasis on climate change, environmental justice
- Increases for geographic programs (LISP and SNEP), NEPs, water infrastructure

**Bipartisan Infrastructure Bill ($1T) – across five years**
*Significant resources for NOAA and partners:*
- Coastal Zone Management Grants – $207 million
- Research Reserve System – $77 million for restoration and acquisition
- National Coastal Resilience Fund – $492 million
- Regional Ocean Partnerships and data sharing– $56 million

*Lines with connections to Office for Coastal Management:*
- NOAA Mapping, Observations, and Modeling – $492 million
- Tribal Climate Resilience – $216 million

**Topical Legislation of Interest**
- Pingree Working Waterfronts bill
- Regional Ocean Partnership Authorization bill
- Ocean-based Climate Solutions bill
- Living Shorelines Act

**Administration Priorities**
- America the Beautiful FRN out Friday for comment
- Themes: Ocean co-use (including new blue economy), S&T, and reducing carbon emissions (Ocean Climate Action Plan)
- How: Interagency coordination and a whole-of-government approach (including states, tribes, etc.)

**Emergency Coastal Resilience Fund**
- RFP coming mid-Nov for $25M (CT, RI eligible)

**KEY STATE PARTNER UPDATES**
Lisa Engler shared the following key updates on behalf of NROC's state partners.

Maine
- Maine Offshore Wind Roadmap to create economic development plan for offshore wind. Kicked off in 2021.
- Research application submitted to BOEM for 12 turbine Floating Wind Array.

New Hampshire
- Seeking contract support to gather information on potential impacts of Gulf of Maine offshore wind.
- Hydrodynamic coastal flood risk model to be developed (2022).

- Initiating 18-month effort to improve project queue for FEMA BRIC funding (NOAA PSM).
- ARPA funding for coastal resilience and stormwater projects through solicitation (2022).

Massachusetts

- Bids for third solicitation for OSW submitted in September (up to 1600 MW). Selection by December.
- Draft 2021 Ocean Management Plan out for public comment until November 30.

Connecticut

- Proposed CT NERR. Comment period closed on DEIS. Designation by January 2022.

**NROC PARTNER UPDATES AND OPPORTUNITIES FOR COLLABORATION**

**Gulf of Maine Council**

Prassede Vella provided the following updates on behalf of the Gulf of Maine Council. The Gulf of Maine Association has been awarded $367,839 from the National Oceanic and Atmospheric Administration's (NOAA) Marine Debris Program to partner with NOAA, Gulf of Maine Council, Urban Harbors Institute, Surfrider Foundation, Center for Coastal Studies, Blue Ocean Society for the Marine Environment, Huntsman Marine Science Centre and the five jurisdictions bordering the Gulf of Maine to create an international collaborative approach for addressing marine debris in the Gulf of Maine watershed. Funding was awarded by NOAA's North America Marine Debris Prevention and Removal Grant program which funds projects that prevent and remove debris in Mexico and the US-Mexico and US-Canada border areas. This two-year project begins this fall and will leverage an additional $448,153 in non-federal matching support to expand the scope of regional efforts to reduce marine debris in the Gulf of Maine.

US and Canadian partners will work together to advance implementation of NOAA's 2019 Gulf of Maine Marine Debris Action Plan through actions to remove, reduce and prevent the introduction of marine debris into the Gulf of Maine. The project team brings together experts from throughout the region who will coordinate over 100 coastal cleanups, track marine debris, and reduce the introductions of plastics, fishing gear and other sources of marine debris before they damage fisheries, marine mammals and other natural resources in the Gulf of Maine.

Gulf of Maine Council December 2021 Meeting and Awards Program

The Gulf of Maine Council will host its next virtual meeting on Thursday, December 9th. Details and agenda are currently under development. On the evening of December 9, GOMC will host a virtual awards program to present international awards to honor individuals, businesses and organizations that have made a significant difference in protecting the health and sustainability of the Gulf of Maine watershed. Award winners from Nova Scotia, New Brunswick, Maine, New Hampshire, and Massachusetts will be announced in December.

Gulf of Maine Council – June 2021 Meeting and Events

- A virtual joint GOMC Council and Working Group meeting was held on June 22. During the meeting participants shared agency updates, and discussed the opportunity provided by NOAA's marine debris grant award for the provinces and states to work closely together on a joint project. GOMC members also discussed potential opportunities to pursue a special designation and associated US federal funding for environmental protection and monitoring efforts in the Gulf of Maine.
- The Gulf of Maine Council's Coastal and Marine Spatial Planning (CMSP) Committee hosted a forum on June 21, 2021, to discuss the current landscape of coastal and marine spatial planning in the Gulf of Maine and opportunities for continued Canadian / US collaboration. Examples of cross border opportunities discussed included conservation opportunities via the 30x30 in the GOM and data coordination such as sharing AIS data, seafloor characterization, and climate change vulnerability assessments. Presentations from the forum are available on the GOMC website.

**Northeast Sea Grant Consortium (NESGC)**
Jennifer McCann of Rhode Island Sea Grant provided updates on behalf of the Northeast Sea Grant Consortium (NESGC), which focuses on implementing regional projects in Connecticut, Maine, New Hampshire, New York, Rhode Island, and Massachusetts (MIT and Woods Hole Oceanographic Institution). NESGC is launching a new initiative on Community-Focused Ocean Renewable Energy Research with $1 million in funding. NESGC will solicit proposals to catalyze social science and technology research for ocean renewable energy planning in the Northeast, in partnership with the U.S. Department of Energy's Wind Energy Technologies Office and Water Power Technologies Office, and NOAA's Northeast Fisheries Science Center. Submission information, contacts, and more details can be found at MIT Sea Grant.

The following additional updates were submitted in writing by Michael Triantafyllou. NESGC's recently completed a regional research competition on Ocean Renewable Energy - 26 preliminary proposals were received and 14 of these were invited to submit full proposals. After receiving 11 strong full proposals, NESGC was able to fully fund the top six of these proposals. Formal announcements regarding the winning proposals will be made once approvals are received from the Sea Grant National Office. Each state program is responsible for managing the projects led by institutions located within their state. Relevant Extension and Advisory staff from each of the seven participating Sea Grant Programs are expected to coordinate with the PIs for a kick-off meeting and subsequent collaboration. Additional representatives from NESGC include: Matt Charette (WHOI SG), Erik Chapman (NH SG), Tracey Dalton (RI SG), Sylvain DeGuise (Connecticut SG), Becky Shuford (NY SG), Michael Triantafyllou (MIT SG), and Gayle Zydlewski (Maine SG).

**NERACOOS**
Jackie Motyka provided the following updates regarding NERACOOS activities and projects during the meeting and in the briefing materials.

Organizational Funding
NERACOOS has been awarded $3.4 million to sustain their efforts to support the region. The award is the first of a five-year cooperative agreement between NERACOOS and IOOS. This funding will support existing monitoring, modeling and data management efforts, as well as the assessment of future observing assets in Downeast Maine. More information is available here.

Operational Update
- In partnership with NOAA's CO-OPS and MassDEP we will deploy a new wave buoy in Buzzards Bay as part of the Cape Cod PORTS. The buoy will be located near the Buzzards Bay tower, and we anticipate that the buoy will be deployed in the next three months.
- A passive acoustic glider operated by Dr. Mark Baumgartner (WHOI) will be deployed this winter along the Maine, New Hampshire, and Massachusetts shoreline to listen for cetaceans. Observations from current and past missions are available at http://dcs.whoi.edu/.

Northeast Coastal Acidification Network (NECAN)
- NECAN submitted one year of a three-year work/funding plan to NOAA OAP in April of this year. The instructions for submitting years two and three of this work plan are expected to come out this fall. This workplan will detail goals and objectives for NECAN over the next three years including new project ideas and regional workshops.
- Over the next few months NECAN will be re-evaluating the implementation plan and creating works plans for the four working groups (Education & Outreach, Industry, Management & Policy, and Science) to align with goals set out in the NECAN work plan to be submitted to NOAA OAP.

- NECAN has received funding through RARGOM for a working group to create and distribute an infographic detailing the effects of OCA on commercially important species in the region. Work on this infographic is ongoing and will be shared through the RARGOM and NECAN networks when available.

Ocean Acidification Information Exchange

- Since its launch in early 2018, the OA Information Exchange has grown to more than 1,400 members representing 64 countries. Additionally, many new "teams" have been started by members, including teams focusing on OCA in the Mediterranean and Latin America, and a team to support the Pier2Peer mentorship program activities. To learn more about the OAIE please contact Julianna Mullen, julianna@neracoos.org.

**New England Federal Partners**

Rick Bennett, US Fish and Wildlife Service, provided the following updates on behalf of the New England Federal Partners (NEFP).

- NEFP held a meeting in July with tribes to focus on restoration, consultation and climate. One of the key outcomes of the meeting was interest in convening a **Climate Summit** to focus on climate impacts on tribal lands. A small work group is being convened to develop plans for the summit which will hopefully take place in-person.
- NEFP had a briefing from US EPA on the **EPA's Environmental Justice Screening and Mapping Tool** as part of ongoing efforts to compile available resources and tools that will help federal partners move forward with implementing the EJ 40 initiative.
- NEFP's **work group on nature-based infrastructure habitat** (co-chaired by Rick Bennett, USFW and Larry Oliver, USACE) has been focusing on identifying sites where nature-based infrastructure projects could provide benefits. The group has been meeting monthly over the past four months. Promoting beneficial reuse for dredging materials has been a key focus area. The group has been looking at lessons learned from projects in the mid-Atlantic and recently heard a presentation about international guidelines for engineering with nature in the Arctic.
- NEFP's **stormwater / infrastructure work group** (chaired by Ken Moraff, US EPA) is exploring opportunities for cross-collaboration across agencies to identify tools that would help integrate the issues of water quality and flood resilience.

**NOAA Office of Coastal Management**

NOAA's Office of Coastal Management highlighted the following updates and resources with briefing materials for the meeting.

Proposed National Estuarine Research Reserve in Connecticut

- Public comment period for the proposed Connecticut National Estuarine Research Reserve closed on October 18, 2021. NOAA is currently considering comments and anticipates making a final decision in January 2022. For more information, visit NERR Home Page of the CT DEEP website.

NOAA's Office for Coastal Management is soliciting applications for 3 Fellowship Programs

- NOAA Coastal Zone Management Fellowship & Digital Coast Fellowship: Applications for the 2022-2024 Coastal Zone Management & Digital Coast Fellow Cohort are ***due to local Sea Grant programs by January 21, 2022***. Any U.S. citizen who will complete a master's or other advanced degree at an accredited U.S. university between August 1, 2020, and July 31, 2022, is eligible to apply for the Coastal Management and Digital Coast Fellowships. Students from a broad range of programs are encouraged to apply. For more information on these programs, visit the NOAA OCM Fellowship Information page or email ocm.fellowships@noaa.gov.

- NOAA's Davidson Research Fellowship: The call for applications for the 2022-2024 Davidson Research Fellow Cohort is open, with ***applications due on December 10, 2021***. A fellow will be placed at each of the 29 Reserves across the country. The fellow does not have to live in the vicinity of their selected Reserve. Sign up for email updates and stay connected with the program by emailing OCM.DavidsonFellowship@noaa.gov.

NOAA Training Opportunities

- Climate Adaptation Planning Essentials, Live sessions November 30 and December 2 from 1 to 3:30 p.m. (Eastern) REGISTER HERE
- Economic Guidance for Coastal Management Professionals
    - January 12, 2022, 2 to 3:30 p.m. (Eastern) REGISTER HERE

Funding News

- NCCOS ESLR FY21 awards (two in New England)
- National Coastal Resilience Fund awards will be announced after the NFWF board meeting occurs in November.

**Bureau of Ocean Energy Management (BOEM) Updates**

As part of the meeting briefing materials, BOEM shared a press release from Secretary of the Interior Deb Haaland outlining an ambitious offshore wind leasing strategy. BOEM will potentially hold up to seven new offshore leases by 2025 in support of the Biden-Harris administration's goal of deploying 30 gigawatts of offshore wind energy by 2030. A copy of the full press release is available here: https://www.doi.gov/pressreleases/secretary-haaland-outlines-ambitious-offshore-wind-leasing-strategy

**INTEGRATING DIVERSITY, EQUITY, INCLUSION AND JUSTICE (DEIJ) INTO REGIONAL PLANNING EFFORTS**

This special session focused introducing NROC's draft work plan for DEIJ, and sharing knowledge and tools from the region that have helped advance DEIJ through planning efforts in the Northeast.

**NROC DRAFT DEIJ Work Plan**

Betsy Nicholson provided an overview of NROC's draft work plan. The goal of the plan is to advance diversity, equity, inclusion and justice in the context of the Northeast Regional Ocean Council's efforts to promote regional solutions for sustainable ocean management in New England. NROC has identified the following three strategies to advance DEIJ:

1. Integrate DEIJ into NROC organizational structure
2. Promote DEIJ among NROC partners
3. Advance DEIJ through NROC projects and activities

Strategy: Integrate DEIJ into NROC organizational structure

*Activities:*

- Convene ad-hoc group including at least one rep from each committee to advance DEIJ.
- Develop NROC 'statement' on DEIJ. Define DEIJ terms and what they mean for NROC.
- Review NROC structure and operating procedures to identify and pursue opportunities to advance DEIJ. Consider voices at the table – broaden partnerships if needed.

Strategy 2: Promote DEIJ among NROC Partners

*Activities:*

- Convene opportunities for dialogue about DEIJ topics among NROC members, partners and others.

- Provide guidance to NROC members and partners for advancing DEIJ. Identify and share strategies, resources, best practices and tools for advancing DEIJ among NROC partners. Examples include: tools such as the EPA EJ screening tool, case studies, and best practices for communication, outreach and engagement.

Strategy 3: Advance DEIJ through NROC projects and activities

*Activities:*

- Integrate opportunities to advance DEIJ into the work of NROC's three committees – Coastal Hazards Resilience Committee, Ocean Planning Committee, Ocean and Coastal Ecosystem. Health Committee. Specific activities will include expanding committee membership if needed, reviewing NROC committee projects and activities to identify opportunities to advance DEIJ, seeking partnerships that promote inclusion and diversity, and aligning outreach and engagement strategies with DEIJ best practices.
- If / where appropriate identify new opportunities for NROC to partner on efforts to advance DEIJ in in the context of sustainable ocean management practices.

**EPA Environmental Justice Screening and Mapping Tool**

Adam Reilly, Alexandra Dichter, and Deb Cohen from EPA provided an overview and live demonstration of the EPA's Environmental Justice Screening and Mapping Tool which is available online at: https://www.epa.gov/ejscreen. Key points from the presentation are highlighted below.

About the EJ Screen:

- EPA's web-based GIS tool for nationally consistent EJ screening and mapping
- Combines environmental and demographic data to highlight areas where vulnerable populations may be disproportionately impacted by pollution
- Environmental indicators are mostly screening-level proxies for actual exposure or risk

Caveats and limitations of the tool:

- Indicators vary in vintage
- EJSCREEN does not cover all environmental or EJ issues
- Census data has limitations and can obscure small communities
- Results should be verified on the ground when possible
- EJSCREEN does not identify EJ communities

Types of data included:

- Primary EJSCREEN Datasets
- Demographic (7 indicators)
- Environmental (11 indicators)
- EJ Indexes (11 indicators)
- Additional Environmental Data
- Additional Demographic Data
- Other Data Sources

EJ Index:

- EJSCREEN calculates the EJ Index by multiplying together three items:
- (The Environmental Indicator) X (Demographic Index for Block Group – Demographic Index for US) X (Population count for Block Group)

Types of reports available:

- Multiple reports available in EJSCREEN
- Printable Standard Report
- Sharable analysis of the selected location
- Complete with maps, graphs, EJ indices, and raw values
- Specify user-defined areas to generate standard reports
- Census Reports
- Utilize ACS or decennial census data
- Demographic analysis of the selected location
- Health Data
- Available at the county level via CDC reports

A complete copy of the presentation is available on the NROC website at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/Environmental-Justice-Screening-Tool_EPA.pdf. US EPA staff encouraged NROC members to reach out if they have specific questions about using the EJSCREEN.

**Equity Assessment for *Maine Won't Wait: A Four-Year Plan for Climate Action***

Jessica Scott, Senior Climate Advisor, Maine Governor's Office of Policy Innovation and the Future provided an overview of the Equity Assessment of ***Maine Won't Wait: A Four-Year Plan for Climate Action*** conducted by the Maine Climate Council's Equity Subcommittee. Key points from the presentation are highlighted below.

Climate Vulnerability

Historical and systemic discrimination, underrepresentation, and isolation have made some residents of Maine more vulnerable to the effects of climate change than others.

Frontline Communities

Low-income populations, people of color and indigenous communities, rural and geographically isolated communities, and other marginalized Mainers face the "first and worst" impacts from climate change and may be least able to adapt.

Climate Equity in Maine

- Equal distribution of resources is not enough
- An equitable system seeks to provide increased resources to marginalized and disadvantaged communities
- The risks and effects of climate change disproportionately fall upon people of color and low-income populations
- Policies should not exacerbate existing burdens
- Policies should increase wellbeing and address root causes of inequality

The Equity Committee reviewed the state's climate action plan through the following key equity inventory framework questions and then developed specific recommendations to advance equity.

Key Questions – Equity Framework

- Who are the most marginalized populations affected by this issue? Does the recommendation adequately serve these populations?
- Does the program, practice, or policy ensure both short- and long-term equitable outcomes?

- Is there adequate access to data from across State of Maine departments and partner organizations statewide to understand the issue, the populations affected by it and potential ways to address it?
- Has public health been fully considered and factored into recommendations?
- What are the implications of this recommendation on Maine's emissions accounting?
- Are there barriers to access, participation, or decision making that have not been accounted for?
- What cultural or mindset considerations are essential to the success of this recommendation?
- Is there a way to address historical inequities in this recommendation and if so, how?
- If this action is taken, are the impacts to people outside of Maine understood and adequately factored into the recommendations

Clean Transportation Equity Recommendations

The state should develop programs which address the following:

- Low-income Mainers require additional grants, rebates, or loans to be able to buy a new electric car.
- Renters should be able to buy an electric vehicle, but currently they have no place to charge their vehicle overnight.
- My school district should purchase cleaner school buses, and needs additional funding and support to do this.
- The state should invest in better public transportation and safer places to bike

General Equity Recommendations

- The climate plan needs to work for all Mainers, including low-income Mainers. Cost should not be a barrier to taking action on climate change.
- When the state makes decisions about climate change, my voice should matter. I would like to be able to participate in the process.
- My neighbors may have many other household concerns that are more important to them than climate change.
- It is important to simplify applications for climate change or energy efficiency programs/funding, and to make them accessible in languages other than English.

Next Steps

- Equity Subcommittee: develop equity metrics to track implementation (2022)
- LD 1682 (Maine): directs the state to apply equity in agency decision making through the adoption of a definition of environmental justice, environmental justice populations, and frontline communities, and apply those definitions to agency decision making (Feb 2022)
- Justice40 (Federal): directs Federal agencies to work with states and local communities to deliver at least 40 percent of the overall benefits from Federal investments in climate and clean energy to disadvantaged communities

A complete copy of Jessica's presentation is available on the NROC website at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/Climate-Equity-in-Maine_Scott-Jessica.pdf.

**NROC COMMITTEE WORK PLANS**

Lisa Engler provided an overview of the NROC work plan development process and facilitated a session for NROC's three primary committees (Coastal Hazards and Resilience, Ocean and Coastal Ecosystem Health, and Ocean Planning) to present their draft workplans and receive feedback from NROC members and partners.

**NROC Coastal Hazards Resilience Committee (CHRC)**
Julia Knisel, MA CZM, Adrianne Harrison, NOAA, and Kevin O'Brien, CT DEEP provided an overview of the Coastal Hazards Resilience Committee's draft work plan.

Goal: Build hazards resilience to impacts of coastal erosion, flooding, storms, and climate change through region-wide dissemination of data, tools, and case studies, as well as fostering collaborative actions.

Strategies:
NROC has identified the following strategies to advance coastal hazards resilience:

1. Promote regional dialogue on broad-scale adaptation strategies for responding to the effects of sea-level rise.
2. Facilitate data acquisition and user-friendly tools to support planning for and responses to coastal hazards.
3. Stakeholder engagement and communication

A copy of the CHRC draft work plan, which includes detailed activities in support of the committee's strategies, is included in the meeting briefing packet on pp. 14 through 17, available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/10/NROC-October-2021-Meeting-Briefing-Packet.pdf. A copy of CHRC's presentation during the meeting is available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/NROC-Coastal-Hazards-Resilience-Committee-Work-Plan.pdf.

**NROC Ocean and Ecosystem Health Committee (OCEH)**
NROC's OCEH Committee is co-chaired by Steve Couture, NH DES, Regina Lyons, EPA, and Jeffrey Runge, NERACOOS. Within OCEH, the Habitat Classification and Ocean Mapping (HCOM) committee is co-chaired by Becca Newhall, NOAA, Dan Sampson, MA CZM, and Todd Callahan, MA CZM. This committee was established to help identify and coordinate regional activities to preserve and restore ecosystem health in New England. Representatives from OCEH provided an overview of the work plan.

Goal: Enhance region-wide coordination and collaborative actions on shared ocean and coastal ecosystem health priorities including those affecting water quality, habitats, and living resources and their derived social and economic benefits.

Need for Action: The Northeastern U.S. coastal ocean is a rich and diverse place, from the near-shore sounds of southern New England to the beaches of Cape Cod, and the rocky shores and complex circulatory patterns of the Gulf of Maine.

NROC has identified three areas of focus within coastal and ocean ecosystem health:

- Link observations to management decision-making,
- Enhance data collection, integration and dissemination, and
- Improve governance, coordination and communication.

Strategies: The committee has identified three broad strategies for working toward its goal of protecting and restoring coastal and ocean ecosystems in the Northeast:

1. Support research and monitoring that enhances our understanding of ecosystem structure and function as related to human impacts, improves utility of social, economic and environmental indicators, and leads to effective EBM implementation

2. Strengthen regional coordination to promote efficiency and collaboration by building partnerships, sharing resources, and reducing redundancy of efforts and ensuring full public and professional participation in the decision-making process
3. Facilitate the accessibility of data and decision support tools needed to support restoration, conservation, and resiliency of coastal habitats, through coordination, technical and financial assistance.

A copy of the OCEH draft work plan, which includes detailed activities that support each strategy, is included in the meeting briefing packet on pp. 18-23, available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/10/NROC-October-2021-Meeting-Briefing-Packet.pdf. A copy of the OCEH presentation from the meeting is available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/NROC-Ocean-and-Coastal-Ecosystem-Health-Work-Plan.pdf. A copy of the HCOM subcommittee presentation from the meeting is available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/NROC-Habitat-Classification-and-Ocean-Mapping-Committee-Work-Plan.pdf.

**NROC Ocean Planning Committee (OPC)**
NROC's Ocean Planning Committee Co-Chairs are Ted Diers, NH DES, and Lou Chiarella, NOAA. During the meeting, Nick Napoli, NROC and Emily Shumchenia, NROC and Regional Wildlife Science Collaborative (RSWC) provided an overview of the Ocean Planning Committee's draft work plan.

The OPC seeks to enhance decision making, improve ocean and coastal ecosystem health, and reduce conflicts. NROC and the OPC have also acknowledged broader, cross-cutting issues that affect ocean management, particularly climate change and diversity, equity, inclusion, and justice. Changing climate and environmental conditions will be important context for each of the strategies in this work plan and may result in specific activities, such as the development of data products characterizing change or convening of workshops or discussions that have specific climate considerations. The OPC will refer to NROC's draft work plan to Advance Diversity Equity, Inclusion and Justice to guide the integration of these issues into the strategies and activities of this work plan.

The draft work plan outlined the following overarching goal, need for action, and strategies.

Goal: Provide a forum, data and information, best practices, and opportunities to coordinate offshore planning, regulatory, and siting activities to improve ocean and coastal ecosystem health, enhance decision making, and ensure compatibility among human activities.

Need for Action: There is an increasing need for data and information, multi-jurisdictional coordination, and effective outreach and engagement as new activities continue to be proposed in state and federal waters.

Strategies: The OPC has identified five strategies for working toward its goal to support and coordinate ocean planning:

1. Provide a regional forum for a broad range of interests to engage in and coordinate across offshore planning and management issues
2. Identify and implement best practices for environmental review, permitting, and management of ocean uses
3. Engage stakeholders in the development of peer-reviewed geospatial data products characterizing human activities and ecological and cultural resources and their change over time
4. With partners, host and foster the Regional Wildlife Science Entity
5. Determine near and long-term capacity and funding needs to support OPC activities

A copy of the OPC draft work plan which outlines activities within each strategy is included in the meeting briefing packet on pp. 24-28, available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/10/NROC-October-2021-Meeting-Briefing-Packet.pdf. A copy of the OPC's presentation is available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/NROC-Ocean-Planning-Committee-Workplan.pdf.

**NROC PROJECT HIGHLIGHT: GULF OF MAINE GEOFORM**

Claire Enterline from ME Department of Marine Resources, Dan Sampson from MA CZM, and Todd Callahan from MA CZM provided an update regarding development of the Gulf of Maine Geoform. This initiative is a collaborative effort among NOAA's Office for Coastal Management state partners (Maine Coastal Program, Maine Geological Survey, New Hampshire Coastal Program, Massachusetts Office of Coastal Zone Management) and Tetra Tech.

The goal of the project is to develop a landscape scale depiction of seafloor structures, or geoforms, using a uniform base layer and classification criteria, created with a process that allows updating, for the purpose of initially understanding the intersection of important habitat areas and proposed projects that are within or cross the Gulf of Maine. The underlying purpose of the project is to create a standardized technique to incorporate data that uses an agreed upon habitat classification system (CMECS) provides clarity for all stakeholders involved in project review.

Project status:

- Pilots developed to represent differing geomorphic areas
- Classification system established
- Bathymetric derivatives (slope and roughness) completed
- Geoforms complete
- Data quality/reliability mapped

Next steps:

*Complete Project*

- Comprehensive review currently underway for final CMECS regional geoforms
- Provide the ability for updating with new data through clear methods documentation, spatial models and scripts.

*Make Data Available and Share Availability*

- Products will be available on Marine Cadastre and Northeast Ocean Data Portal
- Provide information on project through forums including NROC, Gulf of Maine Council, and CERF

*Leverage Project*

- Methods will be shared nationally and used for CMECS updates and implementation guidance
- Discuss lessons learned in regional and national forums

A copy of the Geoform presentation from the meeting is available at: https://www.northeastoceancouncil.org/wp-content/uploads/2021/11/Gulf-of-Maine-Geoform-Project-Update.pdf.

NROC meeting adjourned at approximately 12:30 PM

*Meeting summary prepared by Joan LeBlanc, NROC Coordinator*

*Briefing Packet and presentations are available under Council Meeting Materials at: https://www.northeastoceancouncil.org/library/*