



NROC Meeting

Wednesday, May 22, 2024

**NOAA Fisheries, 55 Great Republic Drive
Gloucester, MA 01930**

IN PERSON ATTENDEES – PLEASE REMEMBER TO BRING ID FOR CHECK-IN

Briefing Book

Virtual Access Details, p.5

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Participant Agenda

Northeast Regional Ocean Council (NROC) Wednesday, May 22, 2024 NOAA Fisheries, 55 Great Republic Drive, Gloucester, MA 01930	
9:00 AM	Welcome and Overview of Meeting Agenda <i>NROC Co-Chairs: Jeff Willis, RI Coastal Resources Management Council (RI CRMC); and Mel Coté, Environmental Protection Agency (EPA)</i> <i>Note: Mel Coté is co-chairing on behalf of Rick Bennett, U.S. Fish and Wildlife Service</i>
9:05 AM	Updates from NROC Executive Committee, Federal Partners, and State Partners <i>Jeff Willis, RI CRMC; Mel Coté, EPA; and NROC state, federal, and Tribal partners</i> <ul style="list-style-type: none"> • NROC Co-Chairs and Executive Committee Updates • Key highlights from NROC federal partners • Key highlights from NROC state partners • Key highlights from NROC Tribal partners
10:15 AM	NROC Partner Updates and Opportunities for Collaboration <ul style="list-style-type: none"> • Northeast Sea Grant Consortium, <i>Speaker TBD</i> • Northeast Regional Association of Coastal and Ocean Observing Systems (NERACOOS), <i>Tom Shyka</i> • Gulf of Maine Council, <i>Prassede Vella, MassBays</i>
10:30 AM	Tribal Engagement in Regional Coastal and Ocean Management Priorities <i>Asha Ajmani, Tribal Engagement Coordinator</i> <i>Tribal Representatives</i> <ul style="list-style-type: none"> • Update on NROC's Tribal engagement and priorities • Introduce Regional Tribal Engagement and Technical Assistance Team concept • Tribal youth involvement in NROC's fall meeting
10:45 AM	Break
11:00 AM	Ocean Planning Committee <i>NROC Co-Chairs: Ted Diers, NH Department of Environmental Services; and Lou Chiarella, NOAA Fisheries</i> <i>NROC Staff: Amy Trice, Senior Program Director for Ocean Planning and Coastal and Ocean Ecosystem Health; and Emily Shumchenia, Science and NE Ocean Data Portal Director</i> <ul style="list-style-type: none"> • Atlantic Offshore Wind Transmission Action Plan and the Atlantic Offshore Wind Transmission Study, <i>Colette Fletcher-Hoppe, DOE</i> • Update on Gulf of Maine Offshore Wind Energy Planning, <i>Zach Jylkka, BOEM</i> • NOAA NCCOS Support for Transmission Planning, <i>James Morris, NOAA NCCOS</i> • Integrated Ecosystem Assessment for the Gulf of Maine, <i>Libby Jewett, NOAA Fisheries</i> • Seafloor Mapping in the Gulf of Maine, <i>Dan Sampson, MA CZM, and Jesse Minor, ME DMR</i>

	<ul style="list-style-type: none"> NROC Submerged Archaeological and Cultural Resources Work Group, <i>Nick Napoli, NROC</i> Discussion focused on NROC support for offshore wind and transmission planning (data, coordination, engagement)
12:30 PM	Lunch (provided on-site)
1:00 PM	<p>Ocean and Coastal Ecosystem Health Committee (OCEH) <i>NROC Co-Chairs: Steve Couture, NH Department of Environmental Services; Regina Lyons, Environmental Protection Agency; and Jake Kritzer, Northeastern Regional Association of Coastal Ocean Observing Systems</i></p> <p><i>Staff: Amy Trice, Senior Program Director for Ocean Planning and Coastal and Ocean Ecosystem Health</i></p> <ul style="list-style-type: none"> Update on Ocean Acidification Monitoring Priorities, draft OA Plan development, and OA Plan implementation in 2024, <i>Nick Napoli, NROC, and Austin Pugh, NERACOOS</i> Update on Blue Carbon Workgroup 2024 and 2025 Activities, <i>Emily Shumchenia, NROC</i> HCOM Regional Seafloor Mapping Prioritization, <i>Mark Finkbeiner, NOAA, and Todd Callaghan, MA CZM</i>
1:30 PM	<p>NOAA Coastal Management Fellow Projects <i>Rachael Hamilton, NOAA Coastal Management Fellow with the Maine Coastal Program, ME DMR</i></p> <p><i>Lucy Perkins, NOAA Coastal Management Fellow with the New Hampshire Department of Environmental Services Coastal Program and New Hampshire Sea Grant</i></p> <p>NOAA Coastal Management Fellows working for state coastal programs will provide an overview of their projects related to coastal resilience. Meeting participants are encouraged to ask questions and provide feedback.</p>
2:00 PM	Break
2:15 PM	<p>Coastal Hazards Resilience Committee <i>NROC Co-Chairs: Julia Knisel, MA Office of Coastal Zone Management; Gavin Jackson, CT Department of Energy and Environmental Protection; and Dani Boudreau, NOAA Office of Coastal Management</i></p> <p><i>Staff: Joan LeBlanc, Coastal Hazards Resilience Program Director</i></p> <p>Coastal Resilience Exchange NROC's Coastal Resilience Exchange will be an ongoing opportunity to share strategies, resources, and ideas for advancing resilience in the Northeast. This first resilience exchange will focus on state, federal, Tribal, and partner activities to engage underserved communities in coastal resilience planning.</p>
3:00 PM	Adjourn

Virtual Access Information

Topic: NROC May 22, 2024 Meeting

Time: May 22, 2024 08:30 AM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us06web.zoom.us/j/9223915888?pwd=tggbXBOnXA2Tfk9wWDkZOTaAcDcW7i.1&omn=85252455601>

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Passcode: 784057

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- +1 253 205 0468 US
- +1 253 215 8782 US (Tacoma)
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- +1 386 347 5053 US
- +1 507 473 4847 US
- +1 564 217 2000 US
- +1 669 444 9171 US
- +1 689 278 1000 US
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Briefing Materials

NROC Executive Committee – NROC Funding Status Update – May 2024

NROC Funding from Infrastructure Investment and Jobs Act (IIJA)

1. NOAA-NOS-OCM-2022-2007464
 - Project: *Implementation and Coordination of Coastal and Ocean Management Priorities for the Northeastern United States via the Northeast Regional Ocean Council*
 - Total Award: \$3,924,563
 - December 1, 2022 – November 30, 2023: \$1,962,144
 - December 1, 2023 – November 30, 2024: \$1,962,419
 - Leads: NROC (via Coastal States Stewardship Foundation as fiscal sponsor). Projects are led by the NROC Executive Committee, Coastal Hazards Resilience Committee (CHRC), Ocean and Coastal Ecosystem Health Committee (OCEH), and Ocean Planning Committee (OPC)
 - Funding Period: December 2022 - November 2024

**Note: IIJA Funding from December 2024 through November 2025 is pending NOAA's review of NROC's application*

Ocean Planning Committee

2. Bureau of Ocean and Energy Management
 - Project: *Operations and maintenance of the Northeast Ocean Data Portal*
 - Award: \$200,000
 - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor)
 - Funding Period: September 2023 – September 2024
3. FY2023 NOAA Regional Ocean Data Sharing/Regional Ocean Partnership Funding
 - Project: *Update fishing, marine life and habitat, recreation, maritime, seafloor, and other data on the Northeast Ocean Data Portal*
 - Award: \$204,000
 - Lead: NROC (via Coastal States Stewardship Foundation as fiscal sponsor)
 - Funding Period: July 2023 – September 2024

**Note: FY2024 NOAA Regional Ocean Data Sharing/Regional Ocean Partnership Funding is pending*

4. Funding for Regional Wildlife Science Collaborative for Offshore Wind
(Co-hosted 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, projects, and research funding.

Current and Recently Closed Funding

As of May 15, 2024, in FY 2024 (July 1 2023 – June 30 2024), RWSC received \$892,013, which includes carryover from FY 2023, \$375,000 in membership dues from 24 individual entities (states, eNGOs, offshore wind companies), in-kind staff time from NROC, MARCO, the U.S. Department of Energy, and NOAA Fisheries, and funding for the following projects and research:

1. *Regional Wildlife Science Collaborative Support to provide resources for offshore wind research planning and coordination*
 - a. Funder: Bureau of Ocean Energy Management
 - b. Award: \$450,000
 - c. Funding Period: August 2023 – July 2025
2. *Support for whale detection technology evaluation workshop series*
 - a. Funder: Turn Forward
 - b. Award: \$18,736
 - c. Funding Period: March 15 – September 30, 2024
3. *Power analysis for optimal design of a Passive Acoustic Monitoring network in the Atlantic Ocean*
 - a. Funder: Bureau of Ocean Energy Management
 - b. Award: \$45,000
 - c. Funding Period: Recently Closed
4. *Developing a baleen whale monitoring plan for Virginia's Wind Energy Area*
 - a. Funder: Virginia Department of Environmental Quality
 - b. Award: \$49,887
 - c. Funding Period: Recently Closed
5. *A systems approach to research and risk assessment for offshore wind development from Maine to North Carolina*
 - a. Funder: Duke University; Original grant from the Department of Energy and Bureau of Ocean Energy Management
 - b. Award: \$45,000
 - c. Funding Period: Recently Closed

Pending Funding

6. *Membership dues*: Another \$35,000 in membership dues for FY 2024 is pending payment. RWSC expects a similar level and mix of operational funding for FY 2025.
7. *Agreement with BOEM to operationalize the Partnership for an Offshore Wind Energy Regional Observation Network (POWERON)*: RWSC will administer and manage funds to support the long-term deployment of passive acoustic monitoring (PAM) sensors and data management for baleen whales up and down the Atlantic coast, as informed by the RWSC Marine Mammal Subcommittee (<https://rwsc.org/pam>). Funds are derived from BOEM's IRA funds and from offshore wind developers that select the option to use POWERON to manage their required PAM Plan deployments and data.

8. *Offshore Wind and Wildlife Research Fund*: RWSC is building capacity and raising funds to support a Research Fund in FY 2025 and beyond. The two projects selected under New York's recent accelerated solicitation (Empire Wind and Sunrise Wind) have each expressed the intent to provide funds to RWSC, starting in calendar year 2024, to support regional monitoring and research. NYSERDA requires that each company allocate \$10,000 per MW of project capacity to regional monitoring (50% specifically to wildlife). For these two projects together the amount available for regional wildlife monitoring will be up to \$8.67M. RWSC is working with additional prospective funders to capitalize the fund and achieve the outcomes of the Science Plan. To support this work, RWSC will hold its first annual funding strategy meeting in September.

NROC Partner Updates and Opportunities for Collaboration

NOAA Office for Coastal Management Updates – May 2024

Submitted by NOAA Office for Coastal Management

Funding Opportunities

POC: Betsy Nicholson

- Next ROP tribal capacity funding opportunity will be announced in June and will be open for 90 days for federally recognized tribes wanting support to engage with NROC. Awards are up to \$200k/yr for 2 years.
- NCRF pre-proposal applicants will be notified shortly on advancing to the full proposal round, with those proposals due in July.
- Next CZM/NERR BIL habitat conservation and restoration funding opportunity for the NEXT round will be announced in late June, with LOIs due mid August, and full proposals due in Jan.
- Climate Resilience Regional Challenge (CRRC) formal announcements will be made in August 2024.
- FYI, [SNEP Opportunity to Advance Resilience \(SOAR\)](#), Proposal Deadline: June 7, 2024

Product and Data updates

- Employment in Coastal Inundation Zones dataset
- Habitat Coastal and Ocean Mapping prioritization study nearing completion
- Marine Cadastre new or updated - Data Registry
 - Submarine Cable Areas
 - Munitions and Explosives of Concern
 - AIS Vessel Traffic - 2023 Q4
 - Federal Consistency and Geographic Location Descriptions
 - Offshore Wind Turbines
- Marine Cadastre - planned new or updates
 - Tropical Cyclone Wind Exposure (1988-2022)
 - AIS Vessel Transit Counts 2023
 - Vessel Routing Measures
- Digital Coast new or updated
 - [C-CAP High-Resolution Land Cover](#) Canopy and Impervious data available for all New England states

Learning Opportunities and Resources

- **UPCOMING webinar!!** [Advancing Coastal Resilience through Nature-Based Solutions: Leveraging Transportation Partnerships](#) webinar on **May 28, 2024 from 3 to 4:30 eastern**. **To register, fill out [this form](#)**. This webinar will showcase two projects leveraging innovative partnerships with transportation agencies to meet multiple resilience objectives through nature-based approaches. Rookery Bay National Estuarine

Research Reserve will highlight techniques used to restore mangroves and reduce flooding to a hurricane evacuation route and the partners that collaborated to make this a success. Washington State Department of Transportation and Coastal Zone Management Program will share how they worked together to assess long-term shoreline stabilization alternatives to reduce erosion and flooding to an adjacent roadway.

- **NEW guide!!** [Reducing Hazard Impacts through Plan Alignment](#) is a new guide that features best practices to help users integrate local plans and reduce coastal hazard impacts. Resources featured here include a plan alignment toolkit, plan integration for resilience scorecard, linking local planning efforts, and comprehensive economic development strategy and hazard mitigation plan alignment guide.
- **NEW community of practice!!** A national [Coastal Inundation Community of Practice](#) was recently launched. NOAA's Office for Coastal Management is working collaboratively with the National Sea Grant Office and the American Society of Adaptation Society on this effort. The aim of the Coastal Inundation Community of Practice is to be a national network of practitioners that facilitates peer-to-peer learning, information exchange, and collaborative engagement to advance coastal flooding science, knowledge and solutions.

Technical Assistance

- OCM is providing technical assistance and contract support to MADEP on the 2023-2024 eelgrass mapping efforts. 2023 mapping (Marshfield to NH) is in review. 2024 flights for south Cape Cod, and Nantucket expected week of May 20th.
- OCM is providing technical assistance to [Seabrook-Hamptons Estuary Alliance](#) in New Hampshire to map businesses, employees, property values and tax revenue at risk from future sea level rise using ESRI Business Analyst.
- [Click here for a link to Report](#) "The Economy and Flood Vulnerability for Hampton, Hampton Falls, and Seabrook, New Hampshire." POC: *Polina Dineva*
- OCM provided technical assistance to Dartmouth harbor to help plan for future economic analysis.

Coming soon...

- Seascape 2 geoform data is in review by partners. Interpreted layers (paleo deltas, moraines, etc.) are planned to be completed summer 2024.
- OCM planning benthic workshop at Waquoit Bay to further develop benthic mapping approach for the NERRs. Waquoit Bay will be a pilot case.

Newsletters and your stories

- May Newsletters from OCM
 - [Digital Coast Connections](#)
 - [Coastal Communicators](#)
- [State impact stories](#) - most recent stories are listed at the top with entries from ME, RI, MA....

Gulf of Maine Council on the Marine Environment Update – May 2024

Submitted by GOMC Working Group Chair Prassede Vella, MassBays

GOMC JANUARY 2024 MEETING

The GOMC hosted a virtual Council / Working Group meeting on January 24, 2024. The meeting included the following key issues:

- An overview of Nova Scotia's Offshore Wind Roadmap which outlines activities to support the identification of Wind Energy Areas, approach to site selection, issuing of seabed licenses, support mechanisms, and processes for interested parties to provide input on an ongoing basis.
- Updates from Maine, New Hampshire, Massachusetts, and New Brunswick and discussions regarding offshore wind activities in the Gulf of Maine region.
- An overview of NROC projects funded by NOAA through the Infrastructure, Investments, and Jobs Act (IIJA), and discussion about opportunities for GOMC engagement.
- Approval of the GOMC [2023-2028 Framework for Action](#) and updated [2023-2025 Work Plan](#).
- Presentations and materials from the meeting are available [here](#).

GOMC JUNE 2024 MEETING, MASSACHUSETTS

The Gulf of Maine Council will host a two-day in-person meeting at the Maine Maritime Academy in Buzzards Bay, Massachusetts on June 11 and 12, 2024. GOMC will host a dinner and awards reception on the evening of June 11 to recognize 2024 GOMC award winners. The meeting is expected to include the following key issues:

- Highlights from the Bay of Fundy Ecosystem Partnership Science meeting.
- Fisheries and Oceans Canada / Gulfwatch new archive management system to make Gulfwatch mussel samples available for research in the Gulf of Maine.
- Updates regarding efforts to establish an EPA geographic region program for the Gulf of Maine.
- Accomplishments for the *Regional Collaboration to Address Marine Debris in the Gulf of Maine* (partners include NOAA, GOMC, Blue Ocean Society, Center for Coastal Studies, Huntsman Marine Science Centre, Surfrider Foundation, and Urban Harbors Institute).
- Agency and jurisdictional roundtable highlights from GOMC members.
- Field excursions hosted by GOMC/USGS to explore issues such as coastal resilience in the context of habitat assessment, marine geohazards and resources, and assessing fate and transport of contaminants such as nutrients and PFAS through the flow system to receiving waters. (Final topics and locations are under development).
- Meeting details will be posted [here](#).

REGIONAL COLLABORATION TO ADDRESS MARINE DEBRIS IN THE GULF OF MAINE

With funding from the NOAA Marine Debris Program's North America Marine Debris Prevention and Removal Program, the Gulf of Maine Council has been working with partners - Urban Harbors Institute, Surfrider Foundation, Center for Coastal Studies, Blue Ocean Society, and Huntsman Marine Science Centre - to implement gulf-wide and targeted actions to reduce and prevent the introduction of marine debris into the Gulf of Maine in support of NOAA's Gulf of Maine Marine Debris Action Plan. Accomplishments over the past two and half years include (please note - final project totals are still being updated):

- Conducted 563 coastal cleanups across Nova Scotia, New Brunswick, Maine, New Hampshire, and Massachusetts
- Engaged 3,670 volunteers in 7,920 hours of service
- Removed 47,875 pounds of debris from coastal sites located throughout the Gulf of Maine
- Collected 15,780 lbs. of discarded fishing-related rope to recycle or repurpose
- Hosted workshops to promote recycling and creative reuse of old fishing rope
- Helped identify, raise awareness, and remove unidentified yellow plastic shock tubing from coastal areas in the Gulf of Maine
- Restored 7,216 acres of coastal habitat in the Gulf of Maine
- Signed up thirteen new ocean-friendly restaurants in Maine, New Hampshire, and Massachusetts that commit to sustainable practices
- Conducted outreach to 7,860 recreational boaters at New England Boat Show
- Educated 3,708 students and adults through a variety of educational programs
- Hosted several international forums to promote understanding and collaboration on addressing the environmental problem of marine debris in the Gulf of Maine
- Presented at sessions and hosted a poster at the 7th International Marine Debris Conference in Busan, Republic of South Korea
- Hosted a webinar in January 2024 to highlight US/Canada collaborative efforts to address marine debris in the Gulf of Maine.
- Published a Field Guide to Marine Debris in the Gulf of Maine.
- Additional details and links to webinar recordings and publications are available via the project webpage: <https://www.gulfofmaine.org/public/marine-debris/>

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.

RECENT PUBLICATIONS/REPORTS

- Gulf of Maine Council on the Marine Environment, Framework for Action 2023 – 2028. <https://www.gulfofmaine.org/public/wp-content/uploads/2024/02/2023-2028-GOMC-Framework-for-Action.pdf>
- Gulf of Maine Council Climate Network. Quarterly Climate Impacts and Outlook, Gulf of Maine Region, March 2024. <https://www.gulfofmaine.org/public/wp-content/uploads/2024/03/GOM-Winter-2023-24-Quarterly.pdf>
- Gulf of Maine Council / Center for Coastal Studies. 2024. Field Guide to Marine Debris in the Gulf of Maine. <https://www.gulfofmaine.org/public/wp-content/uploads/2024/01/Field-Guide-to-Marine-Debris-in-the-Gulf-of-Maine.pdf>

Tribal Engagement in Regional Coastal and Ocean Management Priorities

Submitted Asha Ajmani, NROC Tribal Engagement Coordinator

NROC's Tribal Engagement Coordinator (TEC) and other staff continue to work to ensure that Tribal priorities are elevated in NROC's committees and projects. Staff are supporting Tribal requests to host a Tribal Caucus within NROC, which would serve as a coordinating mechanism for engagement and identifying Tribal priorities.

Based on Tribal requests, NROC proposes to create a Regional Tribal Engagement and Technical Assistance Team (RTET) to coordinate and collaborate Tribal outreach, engagement, and technical assistance activities in the Northeast. Working together in this complex landscape will help to better address the needs of Tribes. RTET is intended to elevate Tribal priorities to agencies and organizations with increasingly demanding agendas. Additionally, it provides a venue for other organizations from within and outside of the region who are engaging Tribes to ensure efficient use of resources and time and moderate the impact on Tribal capacity. The RTET will participate in and collaborate with other similar initiatives, such as NOAA's North Atlantic Regional Team's Tribal Community of Practice and EPA's Regional Tribal Operations Committee.

The RTET will provide technical assistance for expertise and increased capacity around emerging needs as requested by Tribes on select ocean management topics. Topics may include geospatial data, offshore wind, marine carbon dioxide removal, living shorelines, water level monitoring, submerged resources, cultural resources, and Tribal youth career development.

These activities ensure that: 1) Tribal priorities are integrated into NROC activities; 2) engagement is coordinated in the region to mitigate the impact on Tribal capacity; and 3) Tribes have access to technical expertise and assistance.

Ocean Planning Committee

Submitted Amy Trice, NROC Senior Program Director

- [Gulf of Maine Task Force Meeting](#)
- After hearing from many of OPC members, NROC is working to advance a webinar series on marine carbon dioxide removal (mCDR) following up on the [last informational webinar](#) held with NOAA, DOE, and EPA.
- NROC will advance the scope of work defined by the *Submerged Archeological and Cultural Resources Workgroup* once funds have been released by NOAA (see scope beginning on page 20). NROC staff recently submitted a proposal for Bipartisan Infrastructure Law funds for 2025. Once awarded this winter, we will continue advancing elements under the Ocean Planning Committee portfolio including: key updates to the Northeast Ocean Data Portal such as recreational fishing and boating, providing opportunities for interjurisdictional coordination around specific planning topics, informing members and partners about emerging issues such as transmission and mCDR, and advancing the understanding of submerged archeological and cultural resource in coordination with Tribes and other NROC partners.

Ocean and Coastal Ecosystem Health Committee

Submitted Amy Trice, NROC Senior Program Director

- The Habitat Classification and Ocean Mapping Subcommittee (HCOM) is working to finalize the first seafloor mapping regional prioritization report for New England. HCOM is also working to expand members, including increasing participation from Southern New England, and to maintain a current list and map of seafloor mapping priorities in the region.
 - Information [related to upcoming bathymetric and deep-sea coral survey](#) efforts being carried out in the Gulf of Maine by Maine DMR and NOAA NCCOS are now on the Northeast Ocean Data Portal. This map and engagement across HCOM is the result of broader coordination and collaboration to advance key data gaps especially as they relate to offshore wind.
- NROC has submitted requests to NOAA to release funding to continue advancing blue carbon and ocean acidification work.
 - Ocean acidification – work to advance the [Ocean Acidification Monitoring Priorities](#) outlined by NECAN and other experts during the November workshop are a key part of the 2024 funds including developing an Ocean Acidification Theme on the Northeast Ocean Data Portal to show the location of current and ongoing monitoring activities. OA experts and NROC also identified the need to expand outreach to additional managers, planners, scientists, and industry representatives to better understand data requirements for permitting, siting, and monitoring. NROC will also fund 3 pCO₂ sensors to be deployed in MassBays. Additional engagement and data products for ocean acidification are a priority in NROC's 2025 BIL Funds, which are slated to begin in December of this year and would build on the efforts started using funding from years one and two.
 - Blue carbon – the Coastal Vegetation and Blue Carbon Work Group, which recently released the first regional maps of blue carbon reservoirs from Maine to Long Island, will be using [these new marsh soil properties layers](#) to update and improve the next regional maps.
 - Read more about the Work Group's activities: <https://neooceanplanning.org/data-issues/blue-carbon/>
 - 2024 funds will be used to improve our understanding of carbon densities and deposit depths – one of the major sources of uncertainty in blue carbon stock assessments. This work will include building off additional data sets from literature reviews as well as regional eelgrass and salt marsh field samples.

Coastal Hazards Resilience Committee

Submitted by Joan LeBlanc, NROC Coastal Hazards Resilience Program Director

Funding for these projects was provided by NOAA [Award Number NA23NOS4730040] Bipartisan Infrastructure Law (BIL) to the Coastal States Stewardship Foundation to support the project, “Implementation and Coordination of Ocean and Coastal Management Priorities for the Northeastern United States via the Northeast Regional Ocean Council”.

Advancement of Living Shorelines in New England

NROC is working in partnership with The Nature Conservancy (TNC) and other partners to advance the implementation of living shorelines projects in New England by increasing understanding of regulatory processes, monitoring techniques, and application of living shorelines approaches. In 2023, TNC enlisted the Consensus Building Institute (CBI) to assist with the advancement of this work. Since last fall, the project team hosted a webinar, convened an in-person day-long workshop, and conducted a series of interviews with stakeholders.

Next Steps

- A draft report on “Living Shorelines Permitting in New England” has been prepared to summarize the process, share findings regarding permitting challenges and opportunities, and highlight best practices for improving the permitting of living shorelines in New England. The draft report is undergoing internal review and will be circulated and posted to the NROC website once complete.
- During the summer and fall of 2024, the project team will work with partners to assess living shorelines installations and pilot projects to understand what monitoring requirements and permit conditions are being placed on projects, what monitoring is being conducted, how effective monitoring has been, and identify lessons learned about the effectiveness of constructed living shorelines in New England. This effort will also include outreach and engagement with landowners, engineers, and communities about the benefits of living shorelines and lessons learned regarding project design, monitoring, and performance. The project team will host workshops and in-person site visits to support this effort.

For Reference

NROC’s current project builds on previous multi-year efforts to work with The Nature Conservancy and regional partners to advance living shorelines in the region. Links to reports associated with this effort are provided below:

- Living Shorelines in New England: Site Characterization and Performance Monitoring Guidance (2022) <https://www.northeastoceancouncil.org/wp-content/uploads/2022/04/Living-Shorelines-Site-Characterization-and-Performance-Monitoring-Guidance-2022.pdf>

- Regulatory Challenges and Opportunities for Living Shorelines in New England (2022) https://www.northeastoceancouncil.org/wp-content/uploads/2022/04/Regulatory-Challenges-and-Opportunities-for-Living-Shorelines-in-New-England_2022.03.04-1.pdf
- Case Studies: Living Shorelines in New England (2022) <https://www.nature.org/en-us/what-we-do/our-priorities/protect-water-and-land/land-and-water-stories/northeast-living-shorelines-case-studies/>
- Piloting Living Shorelines in New England (2021) <https://www.nature.org/en-us/what-we-do/our-priorities/protect-water-and-land/land-and-water-stories/northeast-living-shorelines/>
- Living Shorelines in New England: State of the Practice (2017) http://www.northeastoceancouncil.org/wp-content/uploads/2018/12/Final_StateofthePractice_7.2017.pdf

For more information about NROC's efforts to advance living shorelines, please contact:

- Joan LeBlanc, NROC, jleblanc@northeastoceancouncil.org
- Steve Kirk, The Nature Conservancy, stephen.kirk@TNC.ORG

Establishing a Water Level Sensor Network in New England

NROC and NERACOOS continue to make significant progress in developing a network of water level sensors in the Northeast region. The project team has conducted significant outreach to identify potential locations for installing water level sensors across the Northeast coastal region. In addition to workshops and meetings, the team created a story map to help visualize locations for planned and potential sites and provide a user-friendly tool to collect recommendations. The [story map](#) and invitation to recommend new water level monitoring sites were circulated to more than 2,000 people to ensure broad involvement in the selection of potential new water level monitoring sites. The list of potential sites was informed through a workshop where representatives from government agencies, communities, non-governmental organizations, academia, and other partners were asked to identify potential sites for consideration. NROC has also been working through their Tribal Engagement Coordinator to provide an opportunity for Tribal members to recommend priority sites.

The overarching goal was to create a list of sites for water level deployment that spans a wide array of uses and geographic locations. The most recent list of requested sites for the placement of water level sensors is available [here](#). The 15 sites highlighted in green have been identified as preliminary locations for initial sensor deployments. The process for selecting these sites involved prioritizing locations in the context of the following considerations:

- Site addresses a key priority issue (e.g., coastal flooding, compound flooding, infrastructure, or ecosystem resilience concerns).
- Site is located in an environmental justice community as defined by recognized tools such as the EJ Screen, or Justice40 Mapping Tool. Communities designated by states as Environmental Justice, or other recognized EJ criteria will also be prioritized.
- Site has been identified as a Tribal priority.

- Selection of site helps promote a balanced and equitable geographic distribution in the region.
- Site fills a gap in water level monitoring coverage and does not duplicate other efforts.
- Identify capacity for maintenance and operations
 - Note: Sites located in EJ or other underserved communities were not at a disadvantage for lack of operations and maintenance capacity. Instead, those costs were factored into the project implementation budget.

Next Steps

- With recent NOAA approval and release of funding in May 2024, the team will now start moving forward with water level sensor installations.
- NERACOOS staff have had conversations with all the points of contact for the initially selected sites to determine specific installation locations, and to start working out the details for installation procedures and surveying.
- Project partner, Gulf of Maine Research Institute (GMRI), has completed the first version of a new water level data viewer which will be used to view results from the water level sensor network. The draft viewer will be shared with small groups to get user feedback over the coming weeks.

For more information about NROC's water level sensor project, please contact:

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References

Scope Of Work | Submerged Archeological and Cultural Resources Workgroup

BACKGROUND

The Northeast Regional Ocean Council's (NROC) Ocean Planning Committee (OPC) works to balance the development of new and emerging ocean uses such as offshore wind with the protection of existing maritime uses and critical habitats, species, and resources, through its leadership in ocean planning. The OPC facilitates regional coordination, stakeholder engagement, and information sharing for regulatory and management decisions, including those related to offshore renewable energy, electricity transmission and submarine cables, disposal sites, aquaculture, marine transportation, and habitat protection. NROC also maintains the [Northeast Ocean Data Portal](#), a source of ocean user-informed and expert-reviewed geospatial data products for coastal and ocean management and planning.

At the request of Tribes, states, and federal agency OPC members, NROC recently established the Submerged Archaeological and Cultural Resources Workgroup. The intent of the Submerged Archeological and Cultural Resources Workgroup is to coordinate regional approaches to assessing archeological and cultural resources, identify information gaps, and to initiate projects that will improve collective understanding and the use of information in ocean planning and decision making. The workgroup composed of Tribes, states, federal agencies, and other regional experts have convened multiple times to propose a vision and discuss priorities and approaches to advance existing mapping efforts and current understanding of areas with potentially submerged Tribal cultural resources.

ADVANCING UNDERSTANDING OF SUBMERGED ARCHEOLOGICAL AND CULTURAL RESOURCES

At the request of Tribes, states, and federal agency OPC members, NROC recently established the Submerged Archaeological and Cultural Resources Workgroup. Using 2024 funding, the workgroup will conduct a literature review of existing mapping efforts and current understanding of areas with potentially submerged Tribal cultural resources. The workgroup will also initiate an effort to use existing seafloor data to identify potential locations of submerged cultural landscapes based on the literature review outputs. NROC considers this a long-term project through the end of the Bipartisan Infrastructure Law funding and future proposals and activities will build on advice from the workgroup and results of work completed in 2024. Work proposed in 2024 includes:

1. Synthesis of information related to archeological and cultural resources for the coastal and offshore environment from Maine to New York – boundaries defined by the workgroup.
 - a. Traditional ecological and cultural knowledge including previous discussions and written documents (white papers, published literature, agency documents) with Tribes in New England. Direct discussions to follow, as defined by the workgroup, in later Tasks after current available information is compiled.

- b. Research including data and information on sea level rise, marine archaeological, geological, and geophysical survey data and literature as well as paleolandscape reconstruction and mapping, predictive modeling, marine geology and marine processes specific to New England (boundaries defined by the workgroup).
 - c. If possible, include a review of culturally relevant data and information discovered in current offshore wind development areas in Southern New England and the New York Bight.
 - d. Review similar cultural resource studies and methods implemented in other US regions, with a specific focus on the Mid-Atlantic and the West Coast, but also including Alaska, Southeastern Atlantic States, Gulf of Mexico, Pacific Islands, Caribbean Islands, and the Great Lakes.
 - e. Develop a spatial data layer for incorporation into the Northeast Ocean Data Portal that shows the footprint of each reference or study that has been conducted and includes attribute information enabling direct access to the study, its authors, and its data.
- 2. Development of data products showing cultural resources in coastal areas and identification and availability of offshore datasets that could be used to identify potential cultural landscapes. This includes:
 - a. An inventory of coastal cultural sites based on existing inventories being conducted by the states and others (particularly in Maine and Massachusetts).
 - b. Data that could inform and be used to identify paleocultural landscapes, including:
 - i. High resolution bathymetry, side scan sonar, and backscatter data
 - ii. Sub bottom profiles
 - iii. Sediment core properties data (bulk density, isotopes, pollen, magnetic properties)
 - iv. Regional stratigraphic model(s) developed as part of the Submerged Paleocultural Landscapes Project
 - v. Other relevant information, data, and methods included as appropriate and determined by researcher/contractor in consultation with workgroup
- 3. Workgroup and researcher/consultant identify data products that could indicate the geographic areas of potentially preserved paleocultural landscapes. Potentially including:
 - a. Locations and ages of paleoshorelines
 - b. Locations and ages of other landforms of interest (e.g., moraines, paleochannels, paleodeltas)
 - c. Geochemical indicators (e.g., pollen analysis, marine vs. terrestrial productivity metrics)
 - d. Areas with evidence of historic human occupation or previously identified cultural sites (e.g., shell heaps, historic sites)
 - e. Others defined by workgroup
- 4. Workgroup and researcher/consultant identify input data and methods for generating each data product. Workgroup should also determine the sensitivity of the data products identified in this Task and which can be made available for public use versus those data that should be stored on a protected site. Determine privileges and procedures for accessing potentially sensitive data that are stored on a protected site with special attention to potentially sensitive cultural areas and Tribal needs.

5. Develop data products from Task 2 in geographic areas that are data rich and develop a workplan for addressing data gaps and developing data products in other geographic areas. The workplan should include recommendations for any additional field studies, types of data and information that should be collected, modeling or other analysis methods that should be used, and intended outputs. Work to ensure data outputs are compatible with the Northeast Ocean Data Portal and can be used in decision making.
6. Develop story maps describing and depicting historic occupation, sea level change over time, known cultural resources, landforms and other indicators of cultural landscapes, contacts and resources for consultation, and others as identified by the workgroup.
7. Provide opportunities for information sharing with Tribal nations from other regions, specifically focusing on the Mid-Atlantic and West Coast.