

Northeast Regional Ocean Council
Summary - November 12, 2020, NROC Virtual Meeting

Attendees

Seth Ackerman, USGS; Michelle Bachman, NEFMC; Robert Ballou, RI DEM; Rick Bennett, US FWS; David Blatt, CT DEEP-LWRD; Chris Boelke, NOAA Fisheries; Emily Bolger, US EPA; Patricia Bowie, MA CZM; Priscilla Brooks, Conservation Law Foundation; Leann Bullin, BOEM; John Bumgarner, USGS; David Burdick, Jackson Estuarine Lab, UNH; Todd Callaghan, MA CZM; Matt Charette, NH Sea Grant Program; Sean Cosgrove, Gordon and Betty Moore Foundation; Mel Coté, US EPA; Steve Couture, NH DES (NROC State Chair); Monica DeAngelis, US Navy; Michele Desautels, USCG; Ted Diers, NH DES; Ian Dombroski, US EPA - SNEP; Lisa Engler, MA CZM; Claire Enterline, ME Coastal Program; Jennifer Felt, Conservation Law Foundation; Marianne Ferguson, NOAA Fisheries; Kathryn Ford, MA DMF; Darryl Francois, BOEM; Janet Freedman, RI Coastal Resources Management Council; Brent Greenfield, National Ocean Policy Coalition; Adrienne Harrison, NOAA; Lyndie Hice-Dunton, Responsible Offshore Science Alliance (ROSA); Rafeed Hussain, Ocean Conservancy; Cathy Johnson, National Park Service; David Kaiser, NOAA; Rachel Keylon, Coastal States Organization; Julia Knisel, MA CZM; Alison Krepp, NOAA; Jake Kritzer, NERACOOS; Mary Krueger, National Park Service; Joan LeBlanc, NROC; Lucy Lockwood, UMASS Boston; Rebecca Love, NOAA; Katie Lund, UConn CIRCA; Regina Lyons, US EPA (NROC Federal Chair); Daniel Martin, NOAA OCM; Jennifer McCann, URI; Sally McGee, The Nature Conservancy; Christopher McGuire, The Nature Conservancy; Ellen Mecray, NOAA; Meredith Mendelson, ME DMR; Ivy Mlsna, US EPA; Paul Morey, FEMA; Jackie Motyka, NERACOOS; Nick Napoli, NROC; Becca Newhall, NOAA OCM; Betsy Nicholson, NOAA OCM; Lauren Nutter, Udall Foundation; Kevin O'Brien, CT DEEP; Larry Oliver, US ACE; Edward Reiner, US EPA; Marta Ribera, The Nature Conservancy; Tonna-Marie Rogers, Waquoit Bay National Estuarine Research Reserve; Rachel Rouillard, PREP UNH; Jeffrey Runge, University of Maine; Christopher Schillaci, NOAA; Emily Shumchenia, NROC; Paul Sieswerda, Gotham Whale; Christine Sloan, National Offshore Wind Research and Development Consortium; Roselle Stern, US ACE; Alice Stratton, NOAA Stellwagen Bank National Marine Sanctuary; Brian Thompson, CT DEEP; Timothy Timmermann, US EPA; Amy Trice, Ocean Conservancy; Jim Turek, NOAA; Prassede Vella, MA CZM; Jeffrey Waldner, BOEM; Larry Ward, UNH; Sheila Warren, US ACE; Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah); Linda Welch, US FWS; Chris Williams, NH Coastal Program; Gayle Zydlewski, ME Sea Grant

Welcome and Introductions

NROC Co-Chairs Steve Couture, NH DES, and Regina Lyons, US EPA, welcomed meeting participants and reviewed the meeting agenda. Steve and Regina recognized the recent passing of Ru Morrison and highlighted his many accomplishments as founding Executive Director of NERACOOS and as an outstanding friend and colleague to all at NROC.

NROC Executive Committee

NROC Funding Status

Joan LeBlanc provided a status report regarding funds for the Coastal Hazards Resilience Committee - FY2017 NOAA Coastal Resilience Grant (The Nature Conservancy), and funds for the Ocean and Coastal Ecosystem Health Committee - FY2018 NOAA / NOS / NCCOS (NERACOOS). Nick Napoli provided a status report regarding the following sources of funding for the Ocean Planning Committee: Moore Foundation, Bureau of Ocean and Energy Management, FY2019 NOAA (Regional Ocean Data

Sharing/Regional Ocean Partnership Funding), FY2020 NOAA (Regional Ocean Data Sharing/Regional Ocean Partnership Funding), Environmental Protection Agency, and the MA Clean Energy Center. Funding amounts, project descriptions and funding periods are included in the meeting packet at: <https://www.northeastoceancouncil.org/library/>

Regional Ocean Partnership Authorization

Nick Napoli provided an update regarding the status of a ROP bill that would provide a more consistent source of funding for ROPs by authorizing five-year funding. While considered a long-shot, there is still some potential for the bill to pass prior to the end of the calendar year as it has bi-partisan support.

NROC and Partners Regional Challenges in Context of Pandemic

NROC members and partners were asked to share challenges that they have experienced during the ongoing coronavirus pandemic. The following issues were raised:

- Virtual work environment
 - Virtual vs. in-person meetings and office work has eliminated opportunities for side networking conversations with staff and partners
 - Virtual work has resulted in overwhelming number of meetings on the schedule
 - Maintaining relationships and building trust is difficult in a virtual environment
- Interaction with the public in virtual environment
 - Lack of public in-person engagement has impacted state and federal partners as well as NROC meetings and projects
 - Hosting public meetings and hearings is challenging (virtual format takes a lot of planning / technology)
 - Conducting meaningful stakeholder outreach for projects or for advancing policy agendas is challenging in a remote setting
 - Opportunities to work with and engage volunteers have been limited
- Research and field work
 - Public health and safety concerns have limited and / or made field work difficult
 - Keeping research lab personnel safe is challenging
 - Loss of continuity in important time series leads to greater uncertainty in fisheries assessments
- Budget impacts
 - Some state agencies have experienced budget cuts and reduced staff capacity
 - Uncertainty about future funding makes budget forecasting difficult
 - Support for implementing program priorities is uncertain given local and state budgets

Priorities for NROC

NROC members and partners were asked to identify key priorities to help inform NROC's focus of work over the next 18 months. NROC's current Committee Work Plans were made available for reference:

- [Coastal Hazards Resilience Committee 2019 - 2020 Work Plan](#)
- [Ocean and Coastal Ecosystem Health Committee Work Plan](#)
- [Ocean Planning Committee 2019-2020 Work Plan](#)

Meeting participants shared priorities through brief presentations and comments provided during discussion and through the chat feature of the meeting where NROC members indicated additional priorities as well as support for recommendations shared by other partners. The following tables provide a compilation of all of the input received, organized by NROC committee.

NROC Cross-Cutting Priorities	Identified by
<p>Enhance NROC role as a collaborative platform for members and partners</p> <ul style="list-style-type: none"> • Provide value for partners by sharing information and advancing regional priorities during the pandemic • Build relationships and collaborate on coastal and ocean issues including coastal resource restoration, resilience, and adaptation efforts across borders • Build on collaboration with partners to amplify results and avoid reinventing the wheel – NROC, NEPs, NECAN, NERACOOS, PREP, GOMC, NERRs, Sea Grant Programs, ISMN, etc. • Provide a forum for regional cooperation and sharing of information, data and lessons learned around priority topics such as dredging, resilience, working waterfronts, living shorelines, ocean acidification, ocean resource mapping, offshore wind, and aquaculture 	<p>MA CZM, NPS, US EPA, NH DES, NPS, ME DMR</p>
<p>Promote Justice, Equity, Diversity and Inclusion (JEDI)</p> <ul style="list-style-type: none"> • Identify opportunities for NROC to advance environmental justice across organization and through committee work • Utilize NROC to leverage partner efforts • Explore intersection of JEDI with topics such as working waterfronts, community impact to fisheries, coastal resilience, offshore renewable energy 	<p>US EPA, NH DES, CT DEEP, CLF, NOAA, PREP, Ocean Conservancy, NE Sea Grant</p>
<p>Pursue funding to leverage and enhance NROC’s ability to convene regional partners and implement committee work plans</p>	<p>US EPA, NOAA, BOEM, MA CZM, NH DES, ME DMR</p>

Ocean Planning Committee	Identified by
Implement NROC's existing Ocean Planning Committee Work Plan	NH DES
Sustain NE Data Portal as a critical resource for coastal and ocean planning <ul style="list-style-type: none"> • Seek funding to ensure sustainability for the portal <ul style="list-style-type: none"> ○ Diversify and expand funding sources • Increase sources of data for the portal • Anticipate and fill upcoming data needs • Continue using the portal to support planning for assessing offshore wind energy and other regional topics • Support portal efforts to document Federal agency actions concerning development activity and milestones 	MA CZM, RI DEM, BOEM, US EPA
Support development of offshore wind / renewable energy in New England <ul style="list-style-type: none"> • Continue NE Data Portal work • Convene regional efforts – GOM task force, RODA / ROSA • Recognize BOEM offshore wind lease area impacts on National Park Service resource areas • Help scope offshore renewable energy research topics for NE Sea Grant (wind energy and water power) – RFP March 2021 • Support best available information and coordination across jurisdictions • Inform the public about offshore energy development • Support climate mitigation with responsible renewable energy 	ME DMR, RI DEM, NPS, NE Sea Grant, BOEM, US EPA, US DOE – Wind Energy Technology Office (WETO)
Improve connections between ocean planning and fisheries <ul style="list-style-type: none"> • Seek opportunities to build connections by integrating fisheries conversations into NROC work • Build on successful NROC examples such as use of the data portal by NEFMC in decision making through the Habitat Committee • Identify opportunities to leverage efforts, improve coordination and avoid redundancy between NROC and ROSA 	ME DMR, MA DMF, ROSA
Reinstate ' lost ' aspects of the Regional Ocean Plan <ul style="list-style-type: none"> • Example: reinstate offshore oil and gas development prohibition in the Northeast 	CT DEEP
Focus research on offshore aquaculture <ul style="list-style-type: none"> • Assess impacts and support sited projects • Focus on reducing impacts on ocean resources • Increase understanding of threats to aquaculture (ocean acidification, algal blooms, shellfish disease) 	RI DEM, NE Sea Grant

Coastal Hazards Resilience Committee	Identified by
<p>Continue and expand work on living shorelines / nature-based infrastructure to create resilience</p> <ul style="list-style-type: none"> • Increase knowledge and communications about regulatory and permitting aspects of living shorelines • Identify opportunities to integrate PREP work with NROC initiatives (interest in living shorelines) • Quantify risk reduction benefits of natural and nature-based coastal resilience features • Promote cold climate nature-based infrastructure 	CT DEEP, PREP, US ACE, RI CMRC, ME DMR
<p>Share knowledge about FEMA’s BRIC Program (Building Resilient Infrastructure and Communities)</p> <ul style="list-style-type: none"> • Funding has shifted from focus on coastal disaster to pre-disaster mitigation • Incentivizes nature-based solutions for mitigation 	FEMA
<p>Convene a strategic discussion to evaluate whether regional resilience and habitat funding programs are meeting our needs in New England</p>	NOAA
<p>Advance blue economy initiatives</p> <ul style="list-style-type: none"> • Promote island and coastal energy resilience • Explore marine energy as power source for ocean observing equipment and systems 	DOE – Water Power Technology Office (WPTO)
<p>Support working waterfronts</p> <ul style="list-style-type: none"> • Provide economic and climate information to support decision making for small and large working waterfront communities • Identify opportunities for NROC to engage in working waterfront conference to be hosted by MA CZM in Boston during 2021 	NOAA
<p>Explore opportunities to promote environmental justice in the context of climate / coastal resilience</p>	NH DES
<p>Share information about relevant NOAA climate tools and planning, such as:</p> <ul style="list-style-type: none"> • New strategic action plan for drought (currently being developed) • Coastal Salinity Index (NOAA partnership with USGS) • Atlas 14 Update 	NOAA - Climate

<i>Ocean and Coastal Ecosystem Health</i>	<i>Identified by</i>
Continue and strengthen NROC / NERACOOS partnerships <ul style="list-style-type: none"> • Implement ISMN and elevate as a priority NROC program • Continue to implement NECAN 	NH DES, ME DMR, NERACOOS, US EPA
Advance salt marsh restoration and resilience <ul style="list-style-type: none"> • Expand focus on marsh restoration to get hydrology functioning • Shift community resilience work to focus on habitat, especially salt marshes • Increase focus on coastal and climate mitigation and response (including marsh resilience) • Link marsh restoration work to protection of salt marsh sparrows • Pursue mosaic of high and low marsh 	US FWS, US EPA, NH DES
Restore aquatic connectivity (dams / culverts)	US FWS
Expand blue carbon initiative through coastal and ocean habitat protection and restoration. Develop regional blue carbon science and strategy.	US EPA, ME DMR
Support identification of mitigation opportunities for eelgrass and salt marsh (in lieu fee projects)	US ACE, US EPA
Support interagency efforts to promote beneficial use of sediment / dredged material to restore / protect habitats	US ACE, US EPA
Connect with USGS to utilize science that supports regional work <ul style="list-style-type: none"> • Compound flooding issues related to climate change • Nutrient fluxes from surface water and groundwater 	USGS
Target coastal restoration efforts toward protection of at-risk species	US FWS

Next Steps

- Input about priorities provided during the November 2020 meeting will help inform NROC Committees as they begin developing the next 18-month work plans in early 2021.

NROC Partner Updates and Opportunities for Collaboration

NERACOOS

Jake Kritzer, NERACOOS Executive Director provided an overview of NERACOOS ongoing work and priorities. NERACOOS will host their annual meeting (virtual) on November 19 from 12:30 – 2:30 PM. The meeting will include remembrances of Ru Morrison and NERACOOS 10th Anniversary highlights. NERACOOS continues to fund observations, modeling, and data management efforts in the Gulf of Maine, Southern New England and Long Island Sound. Due to COVID buoy maintenance efforts have been delayed, which has impacted real-time data availability at some locations. A new HFR station has

been installed near Scituate, MA. Data is being validated and will be available shortly. Two more HFR stations are being installed in Massachusetts, one near Gloucester and one near Salisbury Beach. All of the buoy data is now available through a new Mariners' Dashboard tool:

<https://mariners.neracoos.org/>. The tool is in beta now and NERACOOS is looking for feedback.

The Northeast Coastal Acidification Network (NECAN) launched a new webinar series in November (<http://necan.org/studentwebinars>). NECAN's Industry Working Group will soon release an Industry Survey Report. Following Shell Day 2019, a simultaneous monitoring event along the coast from Long Island Sound to Down East Maine, two white papers are being released, one on the community aspect and engagement of Shell Day, the other will be an analysis of the data collected. Members of the NECAN Steering Committee and Working Groups contributed to a new set of infographics about OCA focused on industry and policy - [The Visualization of Ocean and Coastal Acidification Locally \(VOCAL\)](#). NECAN received funding from RARGOM to create another infographic about the effects of OCA on commercially important species in the region. Work on the Integrated Sentinel Monitoring Network is also moving forward though there have been some sampling delays due to COVID-19. Additional information about NROC projects is available in the meeting packet <https://www.northeastoceancouncil.org/library/> or by contacting Jake Kritzer, jake@neracoos.org.

Northeast Sea Grant Consortium (NESGC)

Matt Charette (Woods Hole 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). NE SGC has been adapting its programs to address key needs during the pandemic. Examples include providing virtual education resources to help fill the void during remote schooling, and providing rapid response funding for impacted fisheries and aquaculture industries.

Key priorities for NE SCG include funding regional research opportunities related to offshore renewable energy (including wind and water power). NE SCG could use help from NROC to help scope topic areas for funding and identify potential co-funders for this effort. A request for pre-proposals is expected to be released next March 2021 with project awards forthcoming in February 2022. Aquaculture is a second priority area of focus for NE SCG research and extension activities. Regional issues include expansion into offshore realms, technology advances and permitting, threats to aquaculture from algal blooms, and shellfish disease. Diversity, equity and inclusion is an important cross-cutting theme and high priority across the organization.

The Northeast Region Sea Grant programs are also partnering on a project, *Engaging Citizens to Monitor and Document Shoreline Flooding and Erosion in the Northeast*, to establish a learning network to facilitate peer-to-peer learning around best practices and lessons learned from current citizen monitoring and outreach efforts related to shoreline flooding and erosion throughout the Northeast region. The goal of this project is to increase the capacity of Sea Grant programs within the Northeast Region to mentor and learn from each other by sharing best practices; and increase Sea Grant capacity as a leader in the field of citizen science and extension, as applied to monitoring flooding and changing

shorelines. CoastSnap will be expanding across the NE as part of this Sea Grant effort:
<https://seagrants.whoi.edu/coastsnap/>

Gulf of Maine Council

Prassede Vella reported that the Gulf of Maine Council's hosted a virtual joint Council - Working Group meeting during June 2020. At the meeting, the Council approved the GOMC 2020-2022 Work Plan (Details are available at: <https://gulfofmaine.org/public/wp-content/uploads/2020/10/GOMC-2020-2022-Work-Plan.pdf>). The Work Plan includes initiatives to be implemented over the next two years under the following: Coastal and Marine Spatial Planning, EcoSystem Indicator Partnership, Climate Network, Marine Debris, Implementation of the actions emanating from the Gulf of Maine 2050 Symposium, Gulfwatch, GOMC Awards Program, and various GOMC learning opportunities. At the end of the meeting, leadership of the Council transitioned from the State of Maine (Maine Coastal Program) to the Province of Nova Scotia (Department of Intergovernmental Affairs) who will Chair the Council through June 2022. The next joint Council – Working Group meeting is scheduled for December 1, 2020 with a focus on coastal resilience initiatives around the Gulf of Maine. GOMA / GOMC submitted a letter of intent to NOAA in response to an RFP for removal of derelict fishing gear. Subsequently, NOAA invited GOMC to submit a full proposal. The pilot project, *Sustainable Approaches to Address Derelict Fishing Gear in the Gulf of Maine*, would test energy-efficient, unmanned survey equipment with on the ground removal of derelict fishing gear from New Hampshire coastal waters. The team requested \$80,000 in support from NOAA for this two-year project. Partners include NH Fish and Game, NH DES, ME Coastal Program, MA CZM, and SeaTrac Inc.

New England Federal Partners

Rick Bennett, US Fish and Wildlife Service provided an update on behalf of the New England Federal Partners (NEFP). NEFP heard presentations on the following topics during their October 2020 meeting:

1. Water utility collaborations in New England are a priority focus area. Collaborative efforts are needed to help water utilities improve resilience. The primary takeaway from the workshop was that stormwater infrastructure is declining.
2. FEMA's Building Resilient Infrastructure and Communities (BRIC) Grant program is focused on collaboration across state and federal partners and is looking for assistance with cost-benefit analysis, vulnerability assessments, and incorporating review of state mitigation plans.
<https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>.
3. Northeast Regional Strategy Committee is conducting a wildfire risk assessment. The key issue is fragmentation of public lands highlighting the need for collaboration to work across risk areas for fire planning – preparedness, landscape integration, safety, etc.
4. USDA is developing an indicators story map to highlight interagency efforts as part of the National Climate Assessment. They are looking for indicators that should be added to the story map. They have also issued a call for authors for National Climate Assessment 5.
5. NEFP also discussed drought in the Northeast which has been a priority topic.

Other Updates and Announcements

Robert Ballou, RI:

- CARES Act relief for fishermen, processor and shellfish farmers nearly complete in Rhode Island.

Jamie Carter, NOAA

- New high-resolution C-CAP land cover data available for CT, RI, NH and two southern counties in ME are coming soon.
- Maine Coastal Program is working with several others, including NOAA OCM, on an effort called CoastWise to provide comprehensive guidance for local and private road owners to upgrade tidal crossings to accommodate future climate scenarios.
- Maine's USACE's Silver Jackets team received funding for hydrodynamic modeling that will lead to developing future floodplain overlays in a couple coastal communities.
- Information about GMRI's Coastal Flooding community-based project is available at: https://investigate.gmri.org/project/coastal_flooding/

Steve Couture, NH DES

- NH DES is funding a new project in Dover, NH to expand the audience during development of a local master plan. Effort will engage new partners such as the housing authority and focus on ensuring diversity during development of resilience strategies.

Ian Dombroski, EPA

- EPA's Southeast New England Program (SNEP) (<https://www.epa.gov/snep>) operates in RI and southern coastal MA, focusing on restoring water quality and habitat in the region through innovation, collaboration, information sharing, and grants and contracts. SNEP is excited to start getting involved with NROC. For more information or to discuss opportunities to collaborate, contact: Dombroski.ian@epa.gov.

Lisa Engler, MA CZM

- A draft document reviewing the 2015 Massachusetts Ocean Plan will be noticed today for public comment. The document reviews progress on implementation of the 2015 ocean plan and lays out priorities for the next five years of the ocean plan to be included in the development of the Ocean Plan Amendment process (commence 2021).

Kathryn Ford, MA DMR

- CARES Act Relief reimbursements to fishermen have been completed in Massachusetts.
- MA DMF published a website about aquaculture permitting: <https://www.massaquaculturepermitting.org/>
- MA Ocean Acidification Commission expected to produce report by end of year: <https://malegislature.gov/Commissions/Detail/364>.

Adrienne Harrison, NOAA

- NOAA recently completed two virtual training workshops highlighting the North Atlantic Coast Comprehensive Study (NACCS) tools developed by the US ACE. Emily Shumchenia noted that the Portal has NACCS data and info: <https://www.northeastoceandata.org/high-resolution-data-on-coastal-storm-andflood-risk-in-the-northeast/>. NACCS training sessions will be made available on the NROC website at: <https://www.northeastoceancouncil.org/naccs/>

Lyndie Hice-Dunton, Responsible Offshore Science Alliance (ROSA)

- Next ROSA Advisory Council meeting is November 23, open to the public.
- A call for research advisors just opened today.
- Draft monitoring guidance for offshore wind and fisheries is currently in review – comments welcome. More information is available at: <https://www.rosascience.org/>.

Naomi Lewandowski, DOE-WETO; Charles Scaife, DOE-WPTO; and Simon Gore, DOE-WPTO

Note: this update was provided after the meeting as Dept. of Energy staff were not able to attend

- The wind power office (WETO) recognizes that offshore wind is a major issue in the Northeast. WETO has provided input on NROC's offshore wind transmission webinars and intends to stay engaged and involved with this and future NROC work on offshore wind.
- The blue economy is also a priority for DOE. The water power office (WPTO) has been developing efforts to bridge gaps in island and coastal energy resilience as part of their powering the blue economy initiative. Specific efforts include the Energy Transition Initiative Partnership Program (ETIPP) which recently granted an award to the Island Institute. DOE is working with industry and academic partners in the New England region to explore marine energy as a power source for ocean observing equipment and systems.

Regina Lyons, EPA

- EPA finalized designation of the Isles of Shoals North Ocean Dredge Material Disposal Site in 2020. EPA appreciated all the comments and input from NROC partners. Designation was published at end of September and the site was opened at the end of October. First disposal material will come from the Rye Harbor dredging project. EPA will conduct post-disposal monitoring. Emily Shumchenia noted that maps, data, and other information regarding the Isles of Shoals Disposal Site is available on the Portal: <https://www.northeastoceandata.org/us-epadesignates-new-isles-of-shoals-north-ocean-dredged-materials-disposal-site/>.

Daniel Martin, NOAA

- MarineCadastre.gov team just received 2020 Q1 AIS Vessel Traffic data, and will be releasing that soon. <https://marinecadastre.gov/>

Chris McGuire, TNC

- TNC is working on a spatial tool with NROC partner advisors to synthesize layers on the NE and Mid-Atlantic data portals to provide information about impacts to resources associated with proposed wind energy development lease areas or specific projects. The tool will provide a synthesis and resource for state agency staff as they work meet timelines for responding to requests for comments. Goal is for users to view all the natural resources that are important in any specific ocean area within the region. TNC looks forward to sharing the tool when it is available in 2021. For more information, contact: marta.ribera@tnc.org.

Ivy MIsna, EPA

- At the Coastal and Estuarine Research Federation (CERF) meeting this year, we heard from SHARP that it is likely we will lose the salt-marsh sparrow at this point, regardless of the management actions we take. However, they also noted that, management actions aimed at conservation of marshes and preservation of the species would have co-benefits for other threatened shorebirds.

Betsy Nicholson, NOAA

- NOAA OCM expects another round of regional data sharing initiative funding in FY21 (should include \$135K per region or more depending on final budget).
- National Coastal Resilience Fund awards (partnership between NOAA and NFWF) will be announced on Nov 17.
- Caitlyn Chaffee is the new manager for the Narragansett Bay NERR.

Larry Oliver, US Army Corps of Engineers

- Narragansett Bay RI coastal flood risk management study received funding and is starting up again. The study is looking at reducing flood damages at several Narragansett Bay sites including Warren River, Narrow River, Island Park, the Point Section of Newport, and Providence Harbor. Warren River and Narrow River have the potential for flood gates.

Tonna-Marie Rogers: Waquoit Bay NERR

- Waquoit Bay NERR Finalizing a research project on its Marsh Sustainability and Hydrology (MSH) Project, a new decision-support tool looking at the impacts of ditching and ditch maintenance under different climate conditions.
- Another project looking at the impact of sediment augmentation on marsh resilience involves eight research reserves around the country including Waquoit and sister Reserves in New England.
- New graduate student (Davidson Fellow) is examining impacts of coastal acidification on cycling of different elements in Waquoit Bay.
- Waquoit Bay NERR has an increased focus on JEDI including offering new student internships.

Brian Thompson, CT DEEP

- CT's Governor's Council on Climate Change has hosted a series of webinars on EEJ issues. Recordings are available at: <https://portal.ct.gov/DEEP/Climate-Change/GC3/Equity-and-Environmental-Justice-in-Climate-Solutions-Webinar-Series>.
- CT has been working on a climate change planning process through the year. A draft report will be submitted to the Governor in January and additional work will continue next year. EEJ has also been a critical part of the discussions. CT will share the final report once complete.

Amy Trice, Ocean Conservancy

- FY21 House mark for regional ocean data portals is currently at \$2 million and Senate just came in at \$3 million. Deadline is 12/11 and it sounds like they are hopeful to pass.
- Ocean Conservancy values all of the regional work from NROC and federal partner agencies. Lots of people are seeking to support funding for the data portal and the ROP authorization.
- For the next COVID-19 relief package, there is interest in looking at climate resilience projects that could be funded.
- Ocean Conservancy is putting forward issues and priorities related to climate resilience, mitigation, sea level rise and other climate topics for the new administration to consider.
- Amy also reported that Ocean Conservancy recently published a paper in *Nature* with international colleagues on integrated ocean management. This project is part of the ongoing work around the High-Level Panel for Sustainable Ocean Economy <https://www.nature.com/articles/s41559-020-1259-6>

NROC Committee Activities and Opportunities for Collaboration

NROC Ocean Planning Committee

Ted Diers, NH DES and Nick Napoli, NROC provided an overview of recent Ocean Planning Committee activities. Ted noted that OPC committee activities have not slowed down during the pandemic. Nick noted that without the ability to have in-person meetings, the OPC has been hosting a series of virtual events focused on specific topics.

Aquaculture Opportunity Areas Webinar

NROC OPC hosted a webinar on October 26, 2020 to provide an overview on the selection process for Aquaculture Opportunity Areas under the recent federal Executive Order on Promoting American Seafood Competitiveness and Economic Growth. A recording and slides from the webinar are available at: <https://neoceanplanning.org/news/nroc-ocean-planning-committee-webinar-aquaculture-opportunity-areas-recording-and-slides-now-available/>.

Offshore Wind Transmission Webinar Series

NROC OPC is developing a series of webinars to increase understanding about policy and planning issues related to bringing new energy sources from offshore wind development into the electric grid. A working group has been providing advice. This series of three short webinars will be scheduled for three Friday mornings in January and February 2021. More information will be available soon.

Best Practices for Ocean Permitting and Management

Over the summer, NROC OPC reconvened its Best Practices Work Group to continue identifying best practices for ocean permitting and management. “Best practices” in this context are specific activities that can be implemented in ocean permitting and management processes that enhance one or more of the following four aspects of the process: (1) stakeholder engagement, (2) agency and interjurisdictional coordination, (3) the use of data and information, and (4) regulatory pre-application practices. The “use of data and information” theme corresponds to Goal 1.3 of the “Recommendations for Increasing the Efficiency of Permitting for Ocean Exploration, Mapping, and Research Activities” issued by the Ocean Resource Management Subcommittee of the federal interagency Ocean Policy Committee and thereby provides NROC with an opportunity to inform similar considerations at the federal level while focusing on priorities, case studies, and implementation steps that are specific to the Northeast. A draft will be available for public comment in 2021.

Regional Data Sharing Funding

NROC continues to partner with MARCO to collaborate on the use of each region’s Regional Data Sharing funding, a federal appropriation administered by NOAA to nine regions throughout the United States. FY19 funds enabled collaboration with the fishing community to inform and provide advice about how fisheries information should be updated on the data portals. Outreach included several webinars and meetings with stakeholders including the commercial fishing industry and RODA. RODA is completing a draft of the final report which will provide recommendations for updating fisheries information in the portal next year. FY20 funding is being used by NROC and MARCO to update marine wildlife data on the portals. A workplan will be submitted to NOAA by the end of the year to guide

updates for marine wildlife products in 2021. Workgroups on marine mammals, fish and birds will be convened to inform these data updates. Anyone interested in participating should contact Nick Napoli or Emily Shumchenia.

Other Updates

- Recent new funding from the Massachusetts Clean Energy Center (MA CZM and BOEM were also contributors) is supporting a pilot initiative to integrate high resolution acoustic imagery that are being collected into regional habitat products. A work group will be convened to advise on this effort.
- The data portal has been online since 2010 – funding and products have diversified over the years. Recent updates can be viewed by looking under the ‘What’s New’ section on the site. As part of ongoing efforts to integrate management issues and proposed development projects into the portal, a new page was created to highlight active renewable energy leases areas and offshore wind projects: <https://www.northeastoceandata.org/offshore-wind-projects/>.

Additional information about these and other OPC activities is available in the meeting packet at: <https://www.northeastoceancouncil.org/library/>

NROC Ocean and Ecosystem Health Committee

Eelgrass / Blue Carbon Project

Ivy Mlsna reported that the US EPA provided funding to update coastal vegetation data and develop new blue carbon data products for the Northeast Ocean Data Portal. The project will result in updated eelgrass and salt marsh habitat data products as well as characterizations of carbon accumulation and sequestration in these habitats – the update should be available by July 2021.

Habitat Classification and Ocean Mapping (HCOM)

Todd Callaghan, MA CZM provided an overview about the Habitat Classification and Ocean Mapping (HCOM) committee’s focus on a Geoform project for the Gulf of Maine. Since the last NROC meeting, the project area has been finalized - head of tide out to 24 NM from the Nantucket Shoal up to the Canadian Border. Development of the geoforms will first focus on two pilot areas - one off of the Kennebec River, and a second that stretches across Mass Bays, covering part of Stellwagen Bank National Marine Sanctuary. NOAA has collected bathymetry and Tetrattech is using algorithms to map geomorphology (hills, flats, slopes, valleys etc.).

The pilot projects will give the team time to fine tune the process in areas that include most of the habitats seen in the Gulf of Maine. The goal is to create a base of information that states can then build on by adding habitat information. In Massachusetts, the project is informing updates to the Massachusetts Ocean Plan by providing important information on habitat for whales and other marine life. In Maine, the project is developing mapping for the Southern Maine coastal region and mid-coast around Portland – 50 sq. nautical miles have been mapped. Maine also recently completed a NOAA project of special merit to study sediment transport over time to inform beach nourishment and dredge disposal decision-making. Pilot projects are expected to wrap up in the spring; with the whole project being complete during 2021. Over the next six months, HCOM will continue to focus on the Geoform

Project, and will explore how the region impacts federal mapping plans. Presentation slides are available on the NROC website at: <https://www.northeastoceancouncil.org/library/>

Integrated Sentinel Monitoring Network

Jeffrey Runge provided an update from the Integrated Sentinel Monitoring Network (ISMN). Jeff acknowledged the important role that Ru Morrison played in providing an early vision about the need for ecosystem monitoring and developing the ISMN Science and Implementation Plan (<http://www.neracoos.org/sentinelmonitoring>). Jeff also recognized the value of support from NROC in providing a contract in 2018 to NERACOOS to implement the ISMN. Jeff Runge has served as the Director of this implementation phase, along with Jackie Motyka, who serves as the project coordinator.

NROC support led to successful submission of a proposal for ISMN to become part of the Marine Biodiversity Observation Network (MBON) (<https://marinebon.org/index.html>), a national biodiversity observing program coordinated by the IOOS national office and supported by several federal agencies, including NOAA and BOEM. Funding of \$1.1M over three years for ISMN MBON was received in summer, 2019 and the ISMN is now overseeing observations of plankton biodiversity at the Coastal Maine Time Series (CMTS) and Wilkinson Basin Time Series (WBTS). The biodiversity observations range from eDNA to bacteria, phytoplankton, microzooplankton and mesozooplankton, involving the coordinated efforts of researchers from UMaine, UNH, St. Joseph's College and the Bigelow Laboratory for Ocean Sciences. In addition to biodiversity observing, ISMN MBON is working with the NERACOOS DMAC team to make plankton diversity data accessible.

ISMN MBON also established the first ISMN CAPE (Center for Analysis, Prediction and Evaluation) project, which is focused on developing predictive models of zooplankton abundance for North Atlantic right whale foraging habitat models, part of NOAA's management strategy for conservation of the endangered species. As part of the CAPE project, ISMN-MBON helped convene a Joint US-Canada Zooplankton Workshop on Modeling Abundance and Distribution of Zooplankton Prey for North Atlantic right whales in Canadian and US coastal and shelf waters (see the MBON website for more details, www.sentinelmonitoring.org).

The ISMN Oversight Committee was established in 2019 and has since had seven meetings, with the next meeting planned for later in November 2020. A two-page document describing ISMN and the ISMN-MBON has been produced. A number of subcommittees have been formed to facilitate observing of other Northeast Ecosystem sentinel variables, including eelgrass, kelp, and shellfish, with the intent of expanding an ISMN white paper on sentinel variables beyond the plankton biodiversity/right whale sentinel indicators. A subcommittee is finalizing content for the ISMN website for presentation at the next Oversight Committee meeting. The activities of ISMN under the NROC contract are summarized in the April 2020 final report available from J. Runge or J. Motyka. Apart from the MBON projects, ISMN activities are presently unfunded. A modest amount of core funding for ISMN needed to expand the ISMN role is part of the NERACOOS Strategic Proposal to be submitted in December 2020. Another possible source of funding would be from proposals leveraging the NERACOOS ISMN infrastructure and IOOS connections, similar to the MBON proposal, addressing sentinel observing activities relevant to the

ISMN overall objectives. Presentation slides are available on the NROC website at:
<https://www.northeastoceancouncil.org/library/>

NROC Coastal Hazards Resilience Committee

Julia Knisel, MA CZM, provided an update from the Coastal Hazards Resilience Committee (CHRC). The last two pages of the briefing packet include a written update regarding NROC's project – *Increasing Resilience and Reducing Risk through Successful Application of Nature Based Coastal Infrastructure Practices in New England* – funded by NOAA. States have been working on siting, design and monitoring of living shorelines projects in New England. Thanks to funding from NOAA, best practices are being developed throughout the region. Feedback from monitoring of the pilot projects this year will inform best practices. Project partners provided a presentation at the National Coastal and Estuarine Virtual Summit on October 1st. A detailed project update is provided in the meeting packet at:
<https://www.northeastoceancouncil.org/library/>

NROC Leadership Transition

NROC outgoing Co-chairs Regina Lyons, EPA and Steve Couture, NH DES passed the 'rock' to incoming leadership team Betsy Nicholson, NOAA and Lisa Engler, MA CZM who will lead NROC efforts for the next 18 months. Lisa and Betsy encouraged NROC members to reach out with any additional priorities for future NROC work. Lisa Engler noted that the new leadership team will focus on the following priorities: 1) build on current work and leadership, 2) leverage strength of existing partnerships, 3) seek opportunities for new partnerships, 4) keep NROC framework relevant for all members to collaborate on problem solving and advance work, and 5) continue to diversify and raise funds for NROC efforts as several current funding sources end within this next term. NROC's next meeting will be held in the spring of 2021 (virtual format). Meetings will switch back to in-person when public health and safety allow.

NROC 15th Anniversary

Betsy Nicholson hosted a celebratory slide show and commentary from NROC participants featuring highlights from NROC over the past 15 years. Among the highlights, Betsy recognized the important role of Susan Snow-Cotter in NROC's early development, Ru Morrison's commitment to partnering and numerous contributions, and NROC committee accomplishments. Betsy also noted that the following original set of attributes for a successful regional ocean partners for NROC still apply today:

- Improved state/federal relationship and trust over time
- Alignment of priorities and resources
- Increased visibility
- Formal partnerships with other regional groups
- Neutral convener
- Influencing national policy
- Funding from diverse sources
- Alliance with other Regional Ocean Partnerships around US

Mel Coté expressed appreciation for NROC and his time co-chairing various initiatives including the Ocean Planning Committee and ISMN. Mel also recognized Ru Morrison's significant contributions over the years. NROC has been a great forum for sharing information but most importantly for creating an opportunity to build and nurture long-standing relationships. Ted Diers noted that his NROC experience has been formative as a natural resource manager and he is most proud of the way NROC normalized public participation by creating a professional forum with all voices at the table.

While not shared during the meeting, Ted authored the following haiku in celebration of NROC:

*Rolling stone, no moss.
NROCin' stone, no algae.
Keep on NROCin'!*

NROC anniversary presentation is available at: <https://www.northeastoceancouncil.org/library/>

NROC – Coastal Resilience Networking Sessions

NROC's Coastal Hazards and Resilience Committee hosted a virtual networking session focused on resilience initiatives from around the New England region. The session included the following presentations regarding planning and best practices for resilient design and round robin updates.

Resilient Design - Planning and Best Practices

- Resilient MA Action Team: Climate Design Standards, Coastal Guidance - *Julia Knisel, MA CZM*
- Connecticut Resilience Update - *Katie Lund, UCONN CIRCA*
- NH Coastal Flood Risk Guidance - *Nathalie Morison and Kirsten Howard, NHDES*
- ME Sea Level Rise "Ticker" and Dashboard Tool - *Pete Slovinsky, ME Geological Survey*

Round Robin Updates

Series of brief updates featuring upcoming events, new programs or tools, and projects.

- Silver Jackets Coastal Projects and Opportunities - *Sheila Warren, USACE*
- Diving into the Digital Coast - *Becky Love, NOAA - OCM*
- PREP-RI / Community Technical Assistance for Preparedness and Resilience - *Jen West, NBNERR*
- RI Shoreline Adaptation, Inventory and Design Project - *Caitlin Chaffee, NBNERR*

Presentations from the Coastal Resilience Networking Session have been posted to the NROC website at: <https://www.northeastoceancouncil.org/library/>

NROC meeting adjourned at approximately 3:00 PM

Meeting summary prepared by Joan LeBlanc, NROC Coordinator

*Briefing Packet and presentations are available under Council Meeting Materials at:
<http://northeastoceancouncil.org/library/>*