



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**

Potential Committee Projects

Context:

- Northeast Ocean Data Portal, Integrated Sentinel Monitoring Network, & Regional Wildlife Science Collaborative
- Subcommittees and projects are likely relevant to multiple committees and NROC priorities
- Staff will need to provide support, connections, and ensure coordination; Also many subcommittee priorities may not require subcontracts and will rely on member, staff, and partner coordination



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 IJA 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:

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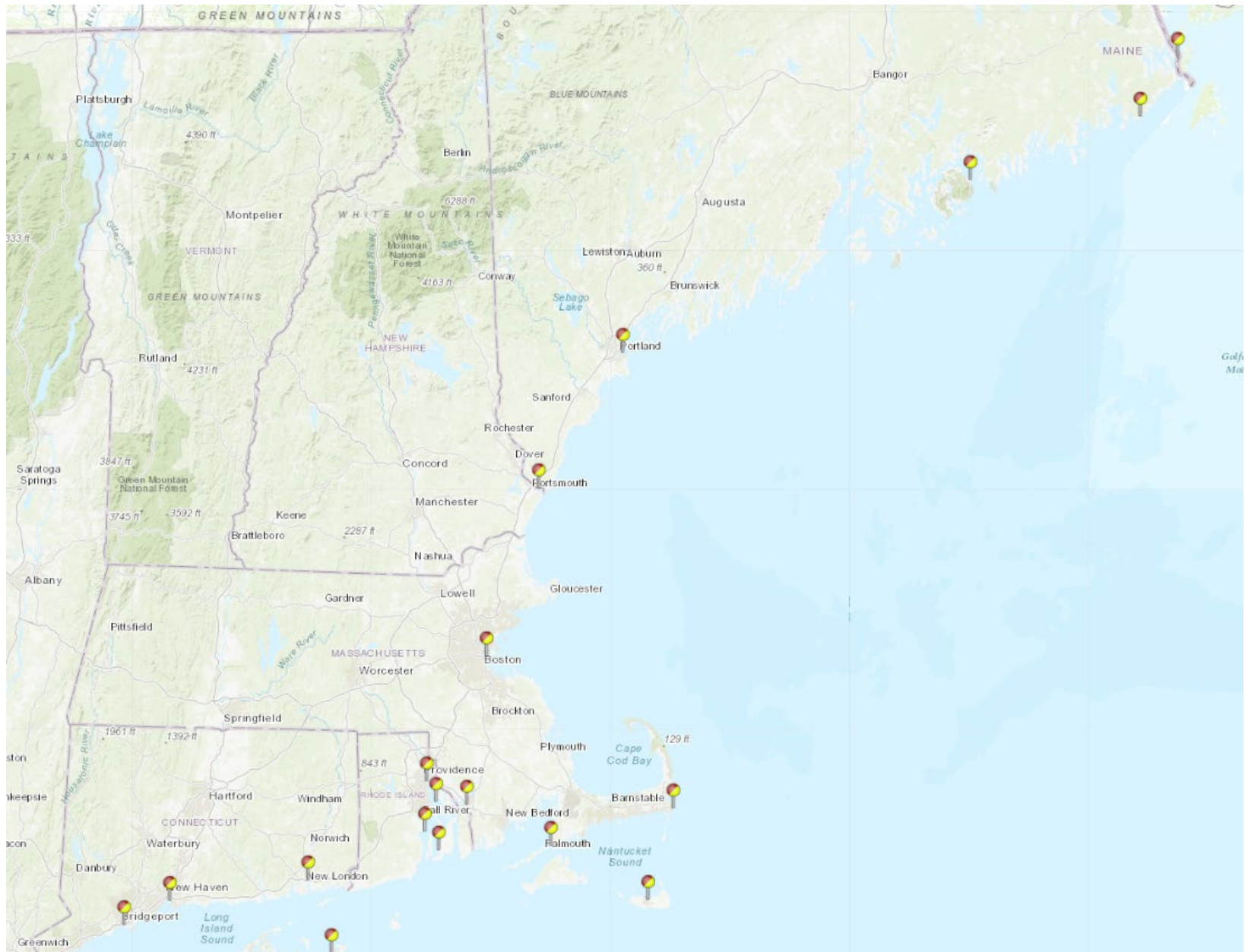
Coastal Hazards Resilience Committee - Potential Projects

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 & policies*

Coastal Hazards Resilience Committee - Potential Projects

1. *Establish a water level sensor community of practice in New England*

- Need:
 - More localized, real-time water level data to monitor storm surges & sea level rise
 - Inform storm awareness/response, coastal inundation modeling & planning
- Tasks:
 - Host a 2-day workshop including a showcase of sensors/networks & regional discussion on sensor requirements & data management
 - Develop a brief fact sheet on sensor types & deployment tips
 - Purchase & deploy a variety of sensors across the region for testing of performance over water & land, data transfer & data quality



NOAA water level (& meteorological) stations across New England.



Ultrasonic flood sensor. Photo courtesy of FloodNet.



Divirod water level sensor. Photo courtesy of US Harbors.

Coastal Hazards Resilience Committee - Potential Projects

1. *Establish a water level sensor community of practice in New England (continued)*

- Outcomes:
 - Increased awareness of cost-effective sensors that are suitable for New England conditions (e.g., tides, weather, coastal development, etc.)
 - Guidance on selection & deployment of sensors
 - Establishment of a pilot sensor network across the region
- Possible Partners: NERACOOS, NOAA & USGS
- Outreach: workshop fact sheet & findings from pilot deployment can be used to develop broader interest in use of low-cost sensors
- Engagement Opportunities: work with tribes & underserved communities to ID sensor placement locations & evaluate data

Coastal Hazards Resilience Committee - Potential Projects

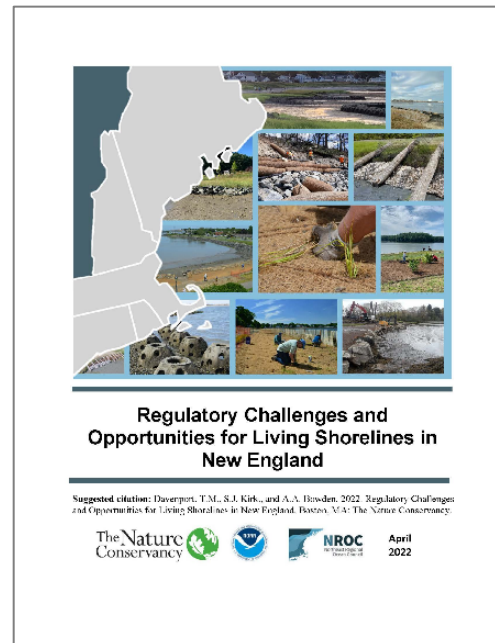
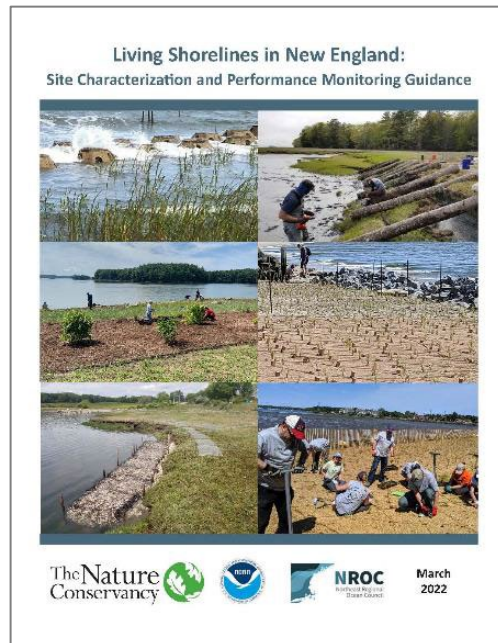
2. *Advancing living shorelines in New England - Phase 3*

- Need: additional research & regional consensus building to expand implementation of effective living shoreline projects
- Tasks:
 - Support additional monitoring of projects in the region & refinement of monitoring metrics
 - Host a forum with USACE on permitting
 - Host a workshop on climate change & living shoreline projects with a focus on habitat conversion & shoreline stabilization/flood control
- Outcomes:
 - Baseline set of critical performance monitoring metrics
 - Refined regulatory guidance document

Coastal Hazards Resilience Committee - Potential Projects

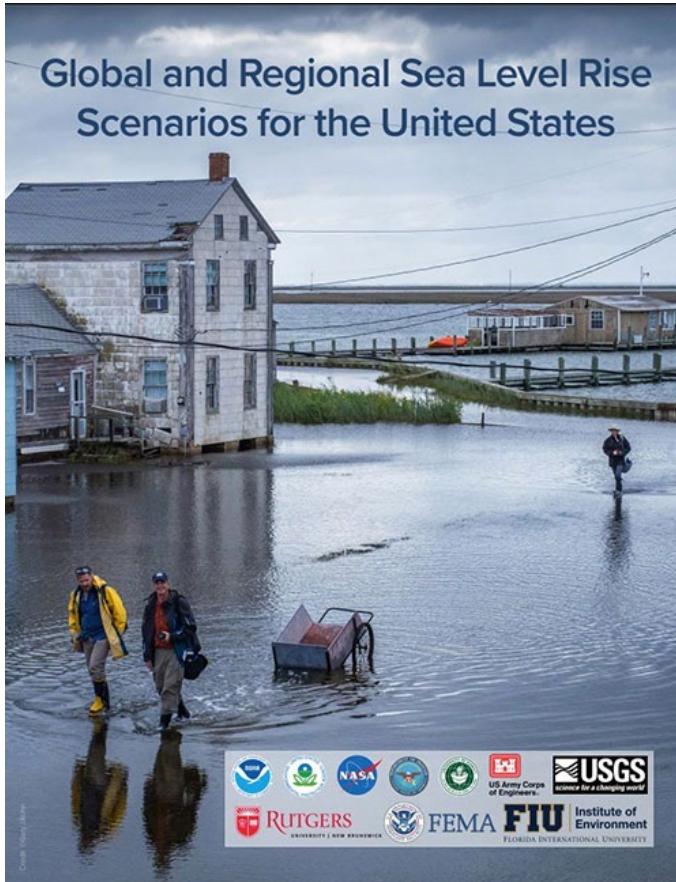
2. *Advancing living shorelines in New England - Phase 3 (continued)*

- Possible Partners: TNC, USACE & USFWS
- Outreach: disseminate products from NOAA-funded living shoreline projects
- Engagement Opportunities: work with landowners & engineers/design professionals to increase interest in living shoreline approaches



Coastal Hazards Resilience Committee - Potential Projects

3. *Roundtable: Approaches for integrating updated sea level rise projections into planning tools & policies*



- Need: new/updated sea level rise data/projections, models & visualization tools are ready to be shared
- Tasks: host a forum on new products & best practices for sea level rise policies & adaptation planning
- Outcomes: strengthened state & local policies, plans & regulations
- Possible Partners: NOAA & others
- Outreach: disseminate forum proceedings
- Engagement Opportunities: sponsor tribal & underserved community participants



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*
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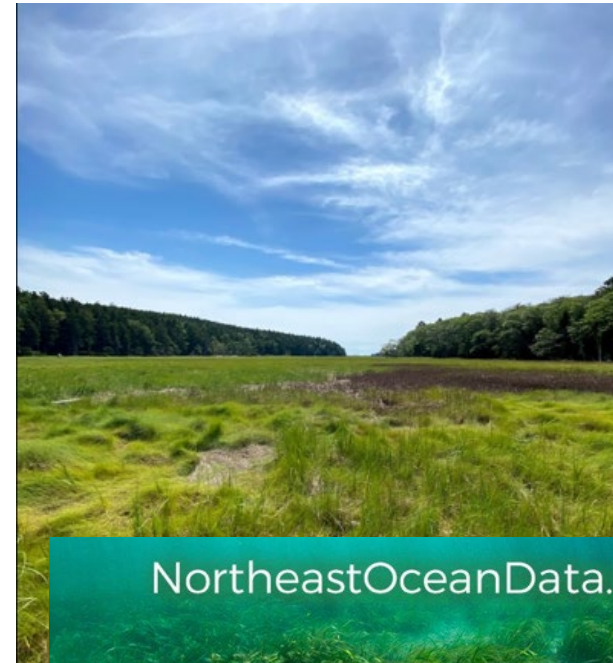
Ocean and Coastal Ecosystem Health Committee - Proposed Projects

1. *Coastal vegetation and blue carbon data updates to inform long-term monitoring*

Goal: Continue and expand on collaborative work led and funded by EPA Region 1 with NROC over the past 2 years to update and enhance coastal vegetation datasets on the Northeast Ocean Data Portal

Outcomes:

- Regular meetings of the existing work group
- Continued updates to current coastal vegetation and blue carbon layers
- Pilot retrospective analysis of blue carbon change over time
- NROC/EPA/ISMN workshop to identify additional regional sentinel sites and consistent monitoring protocols for coastal vegetation already being applied in the region such as SeagrassNET
- Support for data collection and monitoring at sentinel sites, potentially in collaboration with the states and EPA



Ocean and Coastal Ecosystem Health Committee - Proposed Projects

2. *Development of a regional system for monitoring ocean and coastal acidification*

Goal: Coordinate and strategically expand ocean and coastal acidification (OCA) monitoring to meet shared goals of the Northeast Coastal Acidification Network (NECAN), Integrated Sentinel Monitoring Network (ISMN), aquaculture and wild shellfish industries, state agencies, and other users.

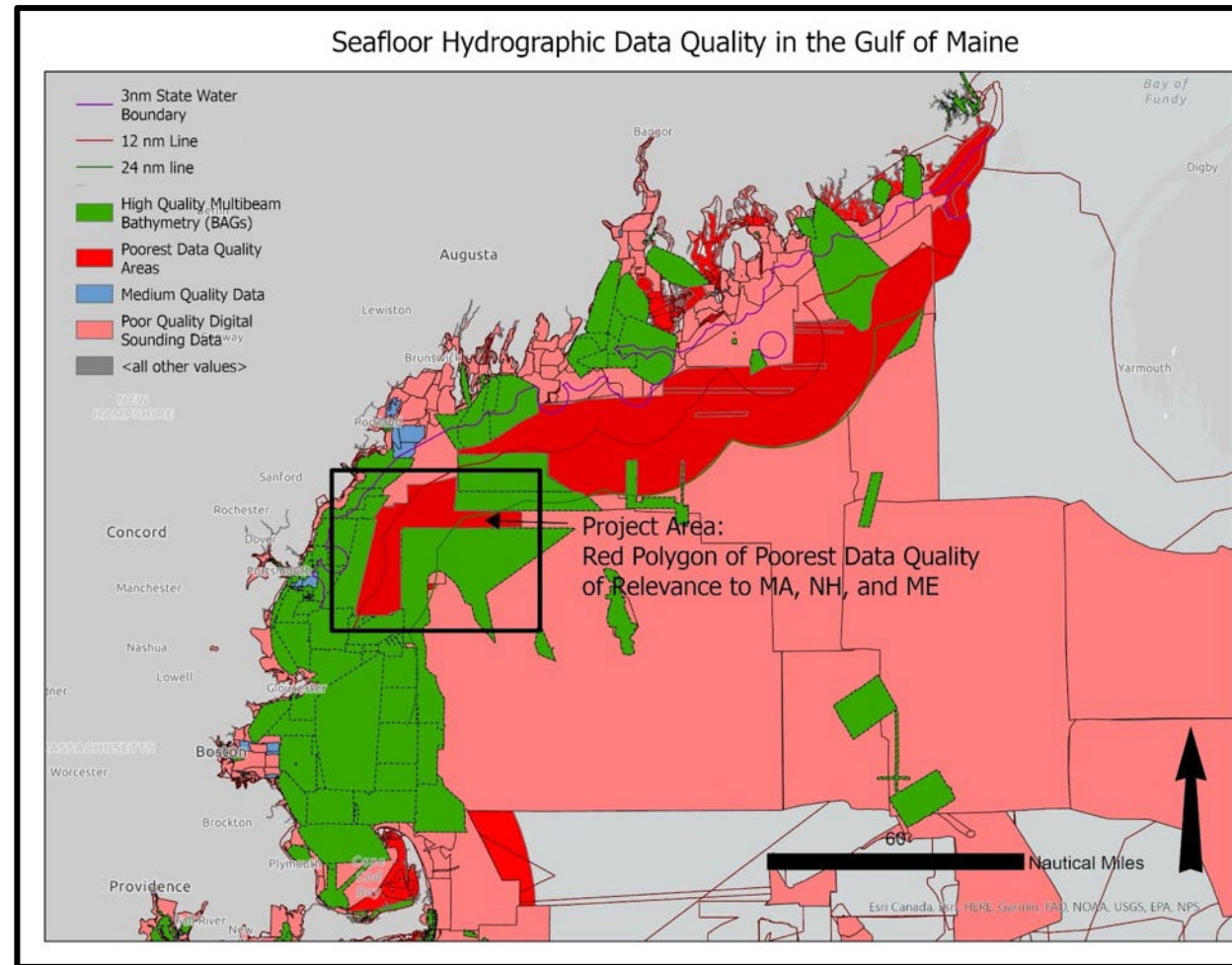
Outcomes:

- Organize a regional workshop on monitoring techniques, objectives, and applications, building on the NECAN webinar series and connecting with ISMN interests in eelgrass.
- Develop a regional monitoring plan based on the workshop outcomes.
- Integrate OCA data into the Northeast Data Portal and NERACOOS Climatology Tool to provide spatial and temporal perspectives.
- Initiate new monitoring activities, including microhabitat characterization in the rocky intertidal zone and utilizing fishing vessels as ships of opportunity (SOOPs).



Ocean and Coastal Ecosystem Health Committee - Proposed Projects

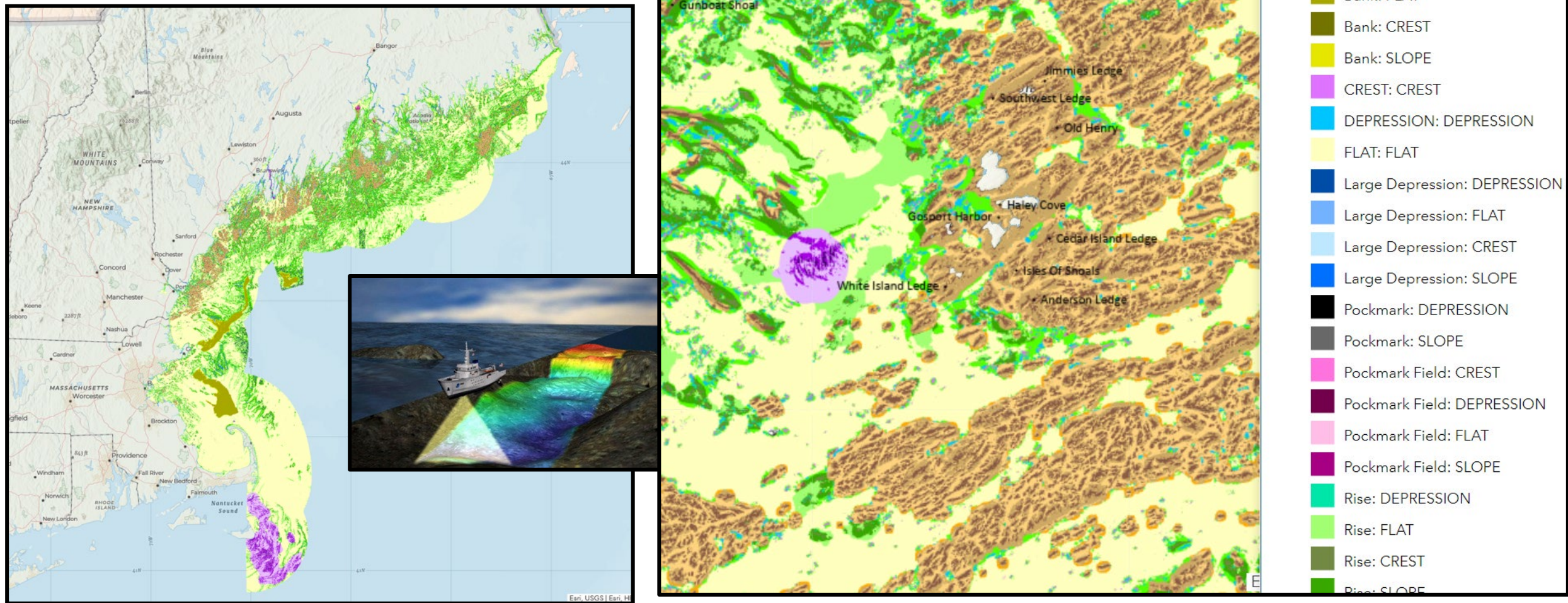
3. Comprehensive Seafloor mapping in a high priority, 3-state ocean planning area of the Gulf of Maine



This work also supports the recent ME Offshore Wind Initiative Roadmap Environment and Wildlife Subcommittee recommendation #2 <https://www.maineoffshorewind.org/working-group-recommendations/environment-wildlife/>).

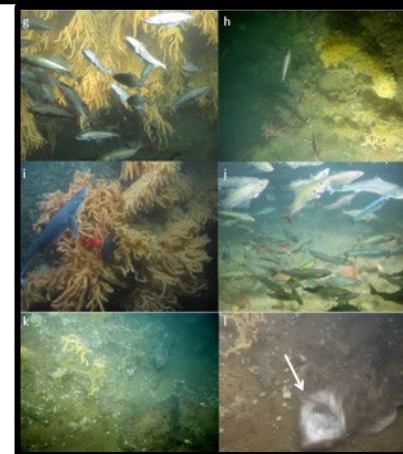
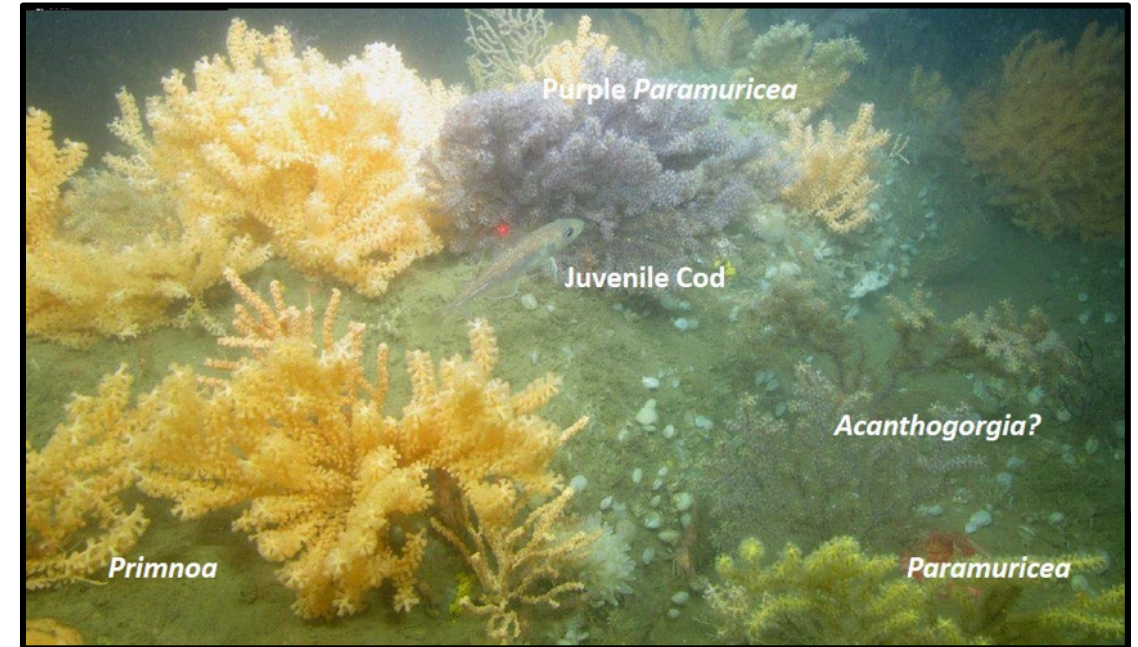
Ocean and Coastal Ecosystem Health Committee - Proposed Projects

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



Ocean and Coastal Ecosystem Health Committee - Proposed Projects

5. ID high priority areas for seafloor characterization (biological and sediment) and conduct 1-3 directed seafloor surveys to assist with regional management goals.





Ocean Planning Committee Update

1. *Aquaculture:* <https://neooceanplanning.org/planning-issues/aquaculture/>
2. *Transmission:* <https://neooceanplanning.org/planning-issues/offshore-transmission/>
3. *Best Practices for Ocean Permitting and Management:*
<https://neooceanplanning.org/planning-issues/best-practices/>
4. *Northeast Ocean Data Portal:* <https://www.northeastoceandata.org/news/>
5. *Regional Wildlife Science Collaborative for Offshore Wind:*
<https://neooceanplanning.org/rwse/>

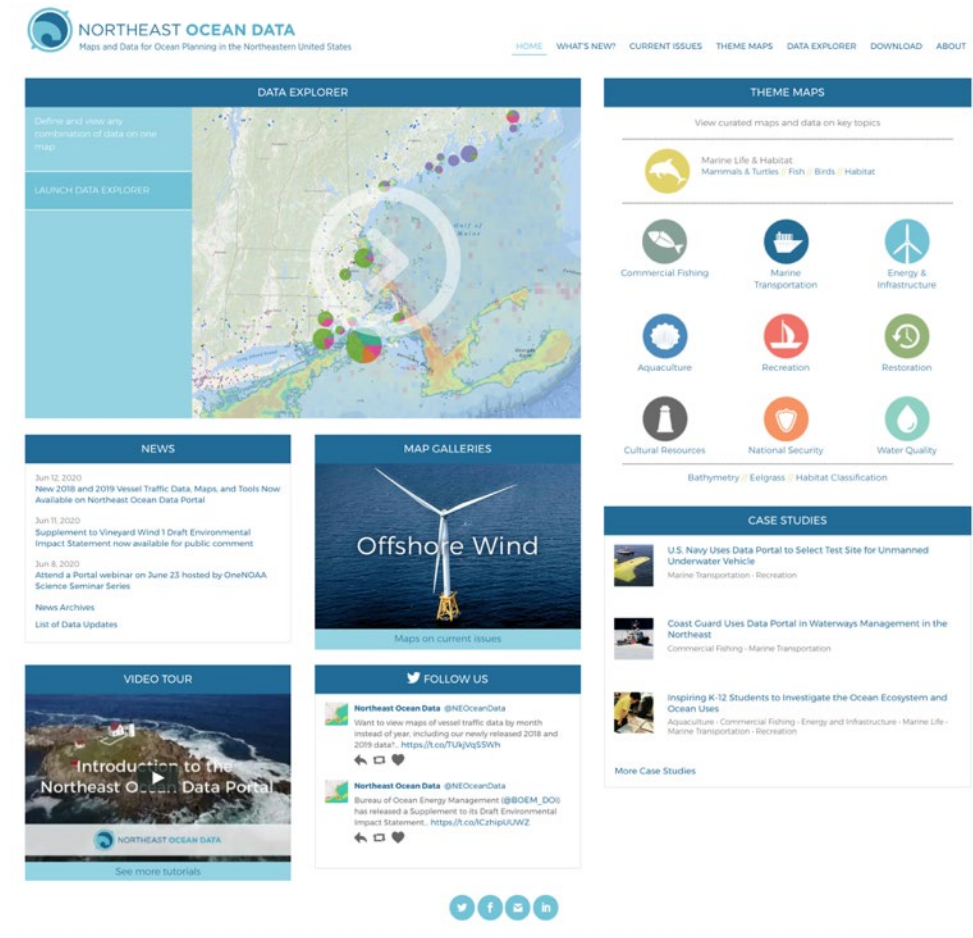
Ocean Planning Committee – Proposed Projects

- 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*

Ocean Planning Committee – Potential Projects

1. *Updates and enhancements to Northeast Ocean Data Portal map interfaces, website, data services, and IT infrastructure*

- Many years, significant increases in portal use, and many new website and mapping requirements since the last complete overhaul and redesign in 2015
- Upgrade user mapping and visualization tools and enhance connections to core external data providers
- Improve integration of Portal webpages and contextual information with map interfaces and data products
- Increase the ability for users to view select data products at multiple geographic scales
- Provide ability for place-based or specific management focused tools and analyses



Ocean Planning Committee – Potential Projects

1. *Updates and enhancements to Northeast Ocean Data Portal map interfaces, website, data services, and IT infrastructure (continued)*

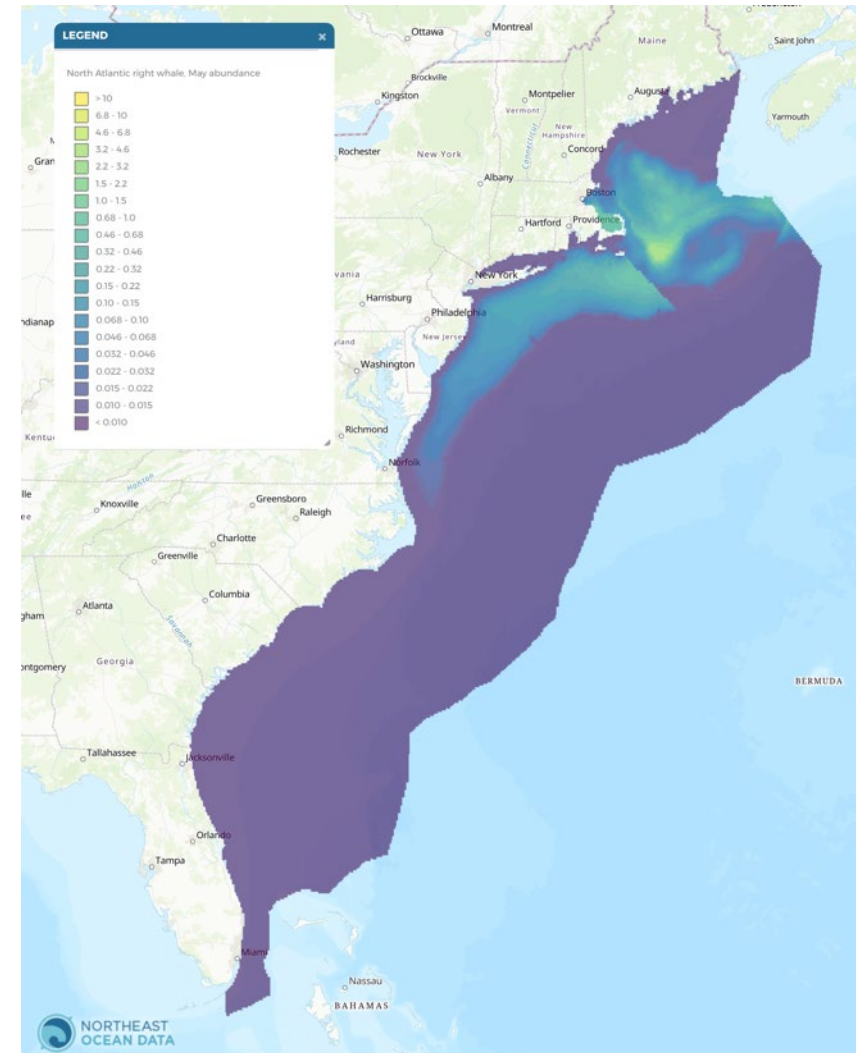
Partners, outreach and engagement

- Data providers and other regional systems – Marine Cadastre, MidA Portal, Duke MGEL, NERACOOS
- Requirements derived from users via agency meetings, sector-based outreach, NE Ocean Data Portal work groups, trainings, and general inquiries

Ocean Planning Committee – Potential Projects

2. *Update marine life data on the Northeast Ocean Data Portal*

- Among the most used and expensive datasets to maintain; requires additional funding
- Continue annual marine life updates
 - New species groups in response to management needs
 - Updated marine mammal and avian products from models being completed in 2022
 - New sea turtle products
 - Integration of Northeast Regional Habitat Assessment data products (fish/habitat)
 - Project management and coordination with expert work groups, related projects, RWSC Subcommittees, ISMN

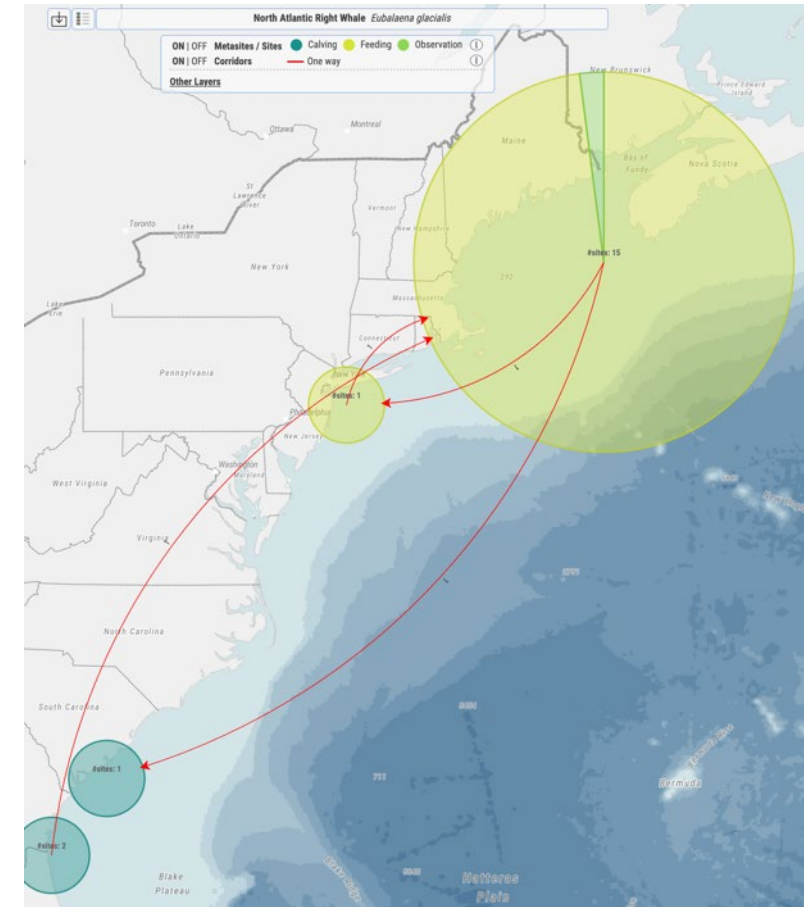


Ocean Planning Committee – Potential Projects

2. *Update marine life data on the Northeast Ocean Data Portal (continued)*

Research and development

- Maps of model covariates (e.g., oceanographic features, prey fields)
- Climate change scenarios
- Joint species modeling
- Pelagic components of ISMN
- Migratory connectivity and linkages to basin, coastwide, and international data



NARW migratory connectivity
<https://mico.eco>

Ocean Planning Committee – Potential Projects

2. *Update marine life data on the Northeast Ocean Data Portal (continued)*

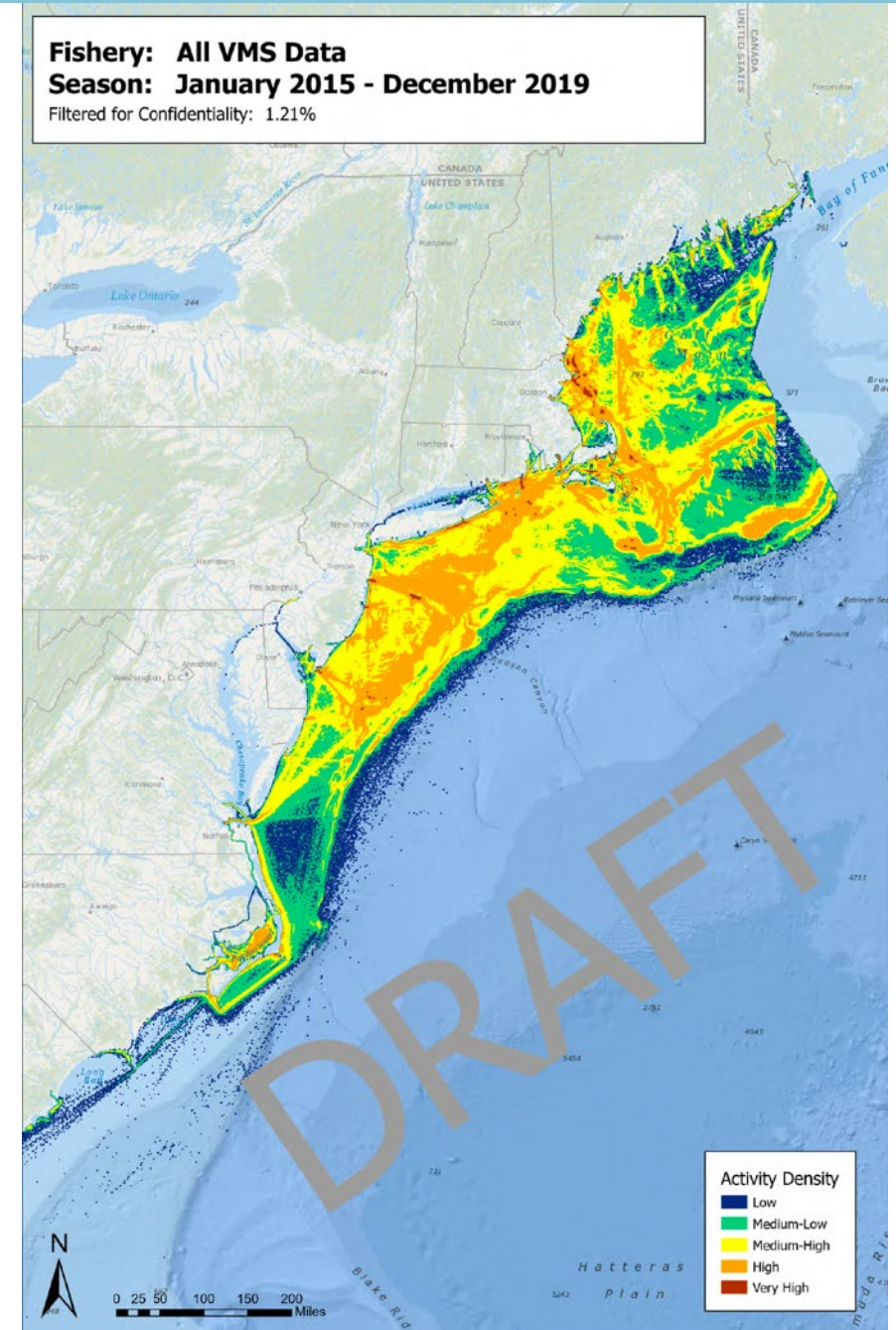
Partners, outreach and engagement

- USFWS, NOAA Fisheries, Duke MGEL, NEFMC, MAFMC
- Expert input and review through the NROC marine life work groups
- Coordination with other regional efforts – RWSC, ISMN

Ocean Planning Committee – Potential Projects

3. *Reorganize and update commercial fishing data on the Northeast Ocean Data Portal*

- Among the most used and expensive datasets to maintain; requires additional funding
- FY19 regional data sharing funded project led to many recommendations about updated and new products and how they are organized
- Reorganize data by fishery – management areas, vessel transit/fishing, communities at sea and landings



Ocean Planning Committee – Potential Projects

3. *Reorganize and update commercial fishing data on the Northeast Ocean Data Portal (continued)*

- Integrate NOAA fishing footprints and other data products
- Consider new products:
 - Directionality of tow or heading
 - Transit versus fishing areas in VMS
 - Loran-C
 - Socioeconomics
 - Linkages to resource data (trawl, other surveys)
- Ensure coordination with the industry, NMFS, and state fisheries agencies

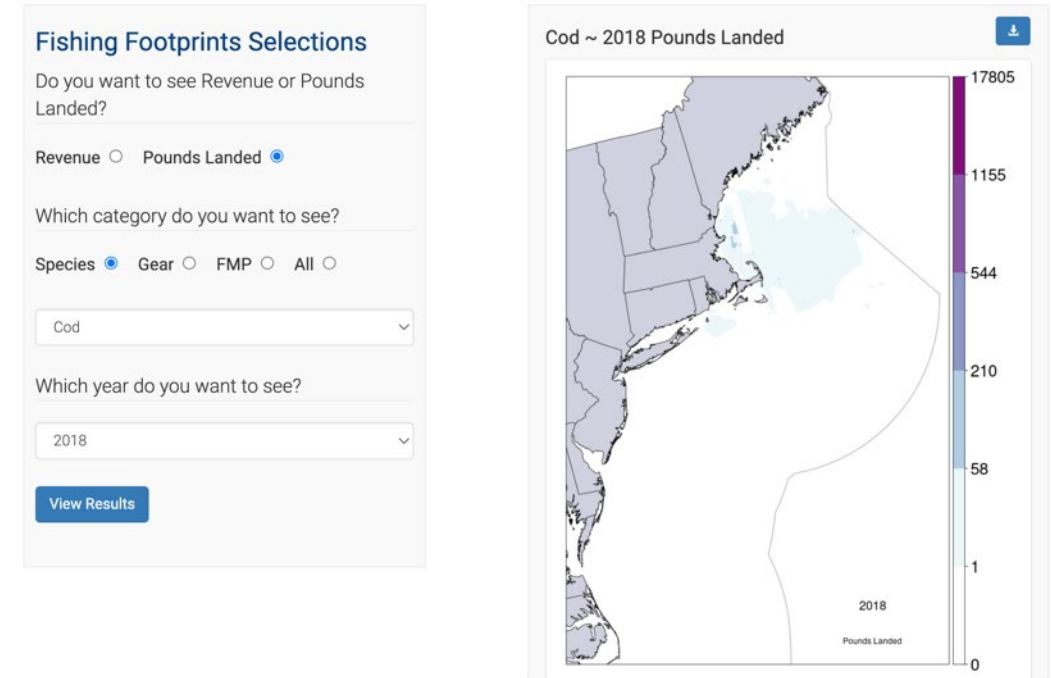


Fishing Footprints

A collection of commercial fishing activity maps

For more information on the method by which VTR data was interpreted to create this database of fishing activity maps, please see DePiper (2014) and Benjamin et al. (2017, pending publication). Commercial fishing activity is categorized using Jenks' Natural Breaks into 5 classes. All maps are plotted in North American Datum 1983 (NAD83). Revenue figures are real (2014) US dollars.

In order to comply with the data confidentiality requirements required under the Magnuson-Stevens Act, features with fewer than three contributing vessels have been obscured. For some species and year combinations, a map cannot be presented.



Ocean Planning Committee – Potential Projects

3. *Reorganize and update commercial fishing data on the Northeast Ocean Data Portal (continued)*

Partners, outreach and engagement

- NOAA Fisheries, state fishery management agencies, NEFMC, MAFMC
- Industry outreach and input through NEFMC, MAFMC, RODA, and other industry associations