Habitat Committee Report
Including Offshore Wind Updates

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NEFMC Meeting
January 28, 2020
Portsmouth, NH

New England
Fishery Management Council

Outline

Offshore Wind

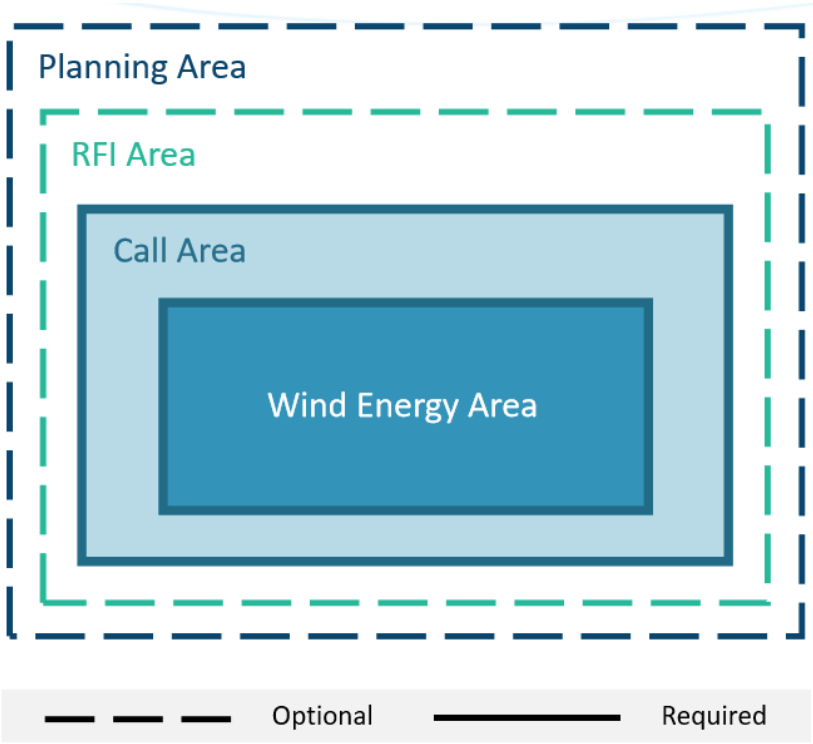
1. GOM Regional Task Force Meeting Takeaways
2. Floating Technology Overview
3. RODA Updates
4. Coast Guard/Port Access Route Study Updates

Habitat Committee work

5. Research Priority Discussion
6. Policy Development Updates
7. EFP Discussion

1. GOM Task Force Meeting

- 12/12/19 Durham, NH
- 76 task force members, 174 public (Council not a member but invited to speak)
- Presentations on offshore leasing process, roles of different governmental bodies, initiatives underway at the state level, and sources of information and relevant research



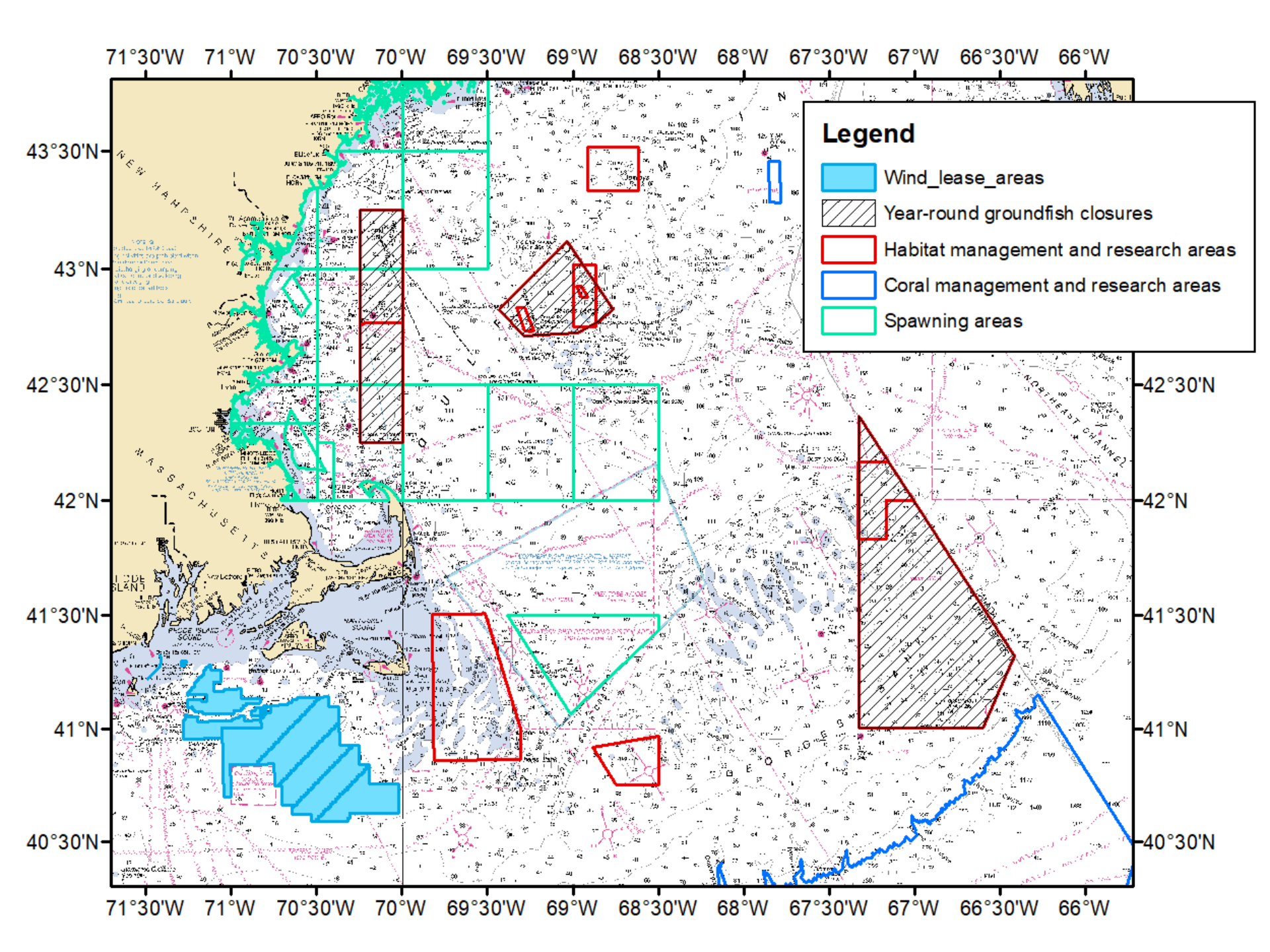
More info including a summary, recording, presentation slides:
https://www.boem.gov/Gulf-of-Maine

General issues raised

- Timelines for leaseholders; role of leaseholders in transmission and generation; decommissioning
- Possibility of offshore transmission networks, onshore infrastructure needs
- Aesthetic considerations
- Coordination between state regulatory processes and the BOEM process
- Regional workforce development; interest in maximizing local jobs
- Support for wind power to address climate change
- Opportunity for regional leadership in floating technology

Fisheries-related issues

- Concerns from commercial fishermen about impacts
  - Specific concern that fishing within floating arrays may be impossible given mooring lines between turbine and seabed and electrical cables between turbines
- A desire to be involved in the process
  - Engage fishing industry early and often
  - Promote inclusive, participatory siting and development
- Desire to learn from the European experience
- Promote research within the region to understand effects and develop best practices
- Discussion at 1/22 CTE/AP meeting about process, best way for Council to engage (motion 5, etc.)


71°30'W
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68°W
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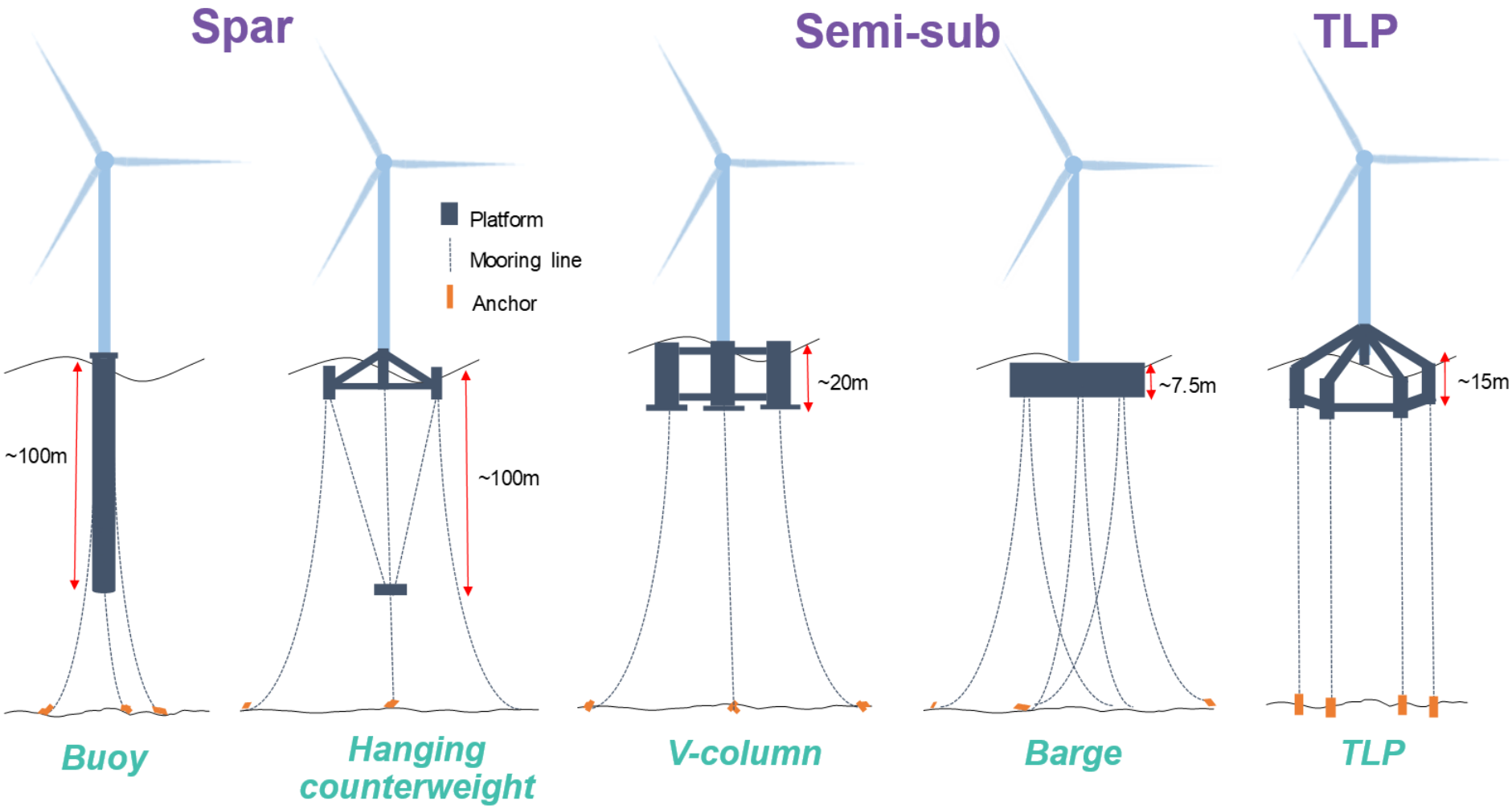
67°W
66°30'W
66°W
43°30'N
43°N
42°30'N
42°N
41°30'N
41°N
40°30'N
Legend
Wind_lease_areas
Year-round groundfish closures
Habitat management and research areas
Coral management and research areas
Spawning areas

2. Floating Technology Overview

- Emerging technology, but making the shift from demo/pilot projects to commercial
- More expensive at present compared to fixed structures; economies of scale along supply chain expected to bring costs down
- Can be used in deeper (potentially windier) areas, opening markets where fixed structures (generally used to 60 m) are infeasible
- Less invasive to seabed during installation

Types of floating turbines

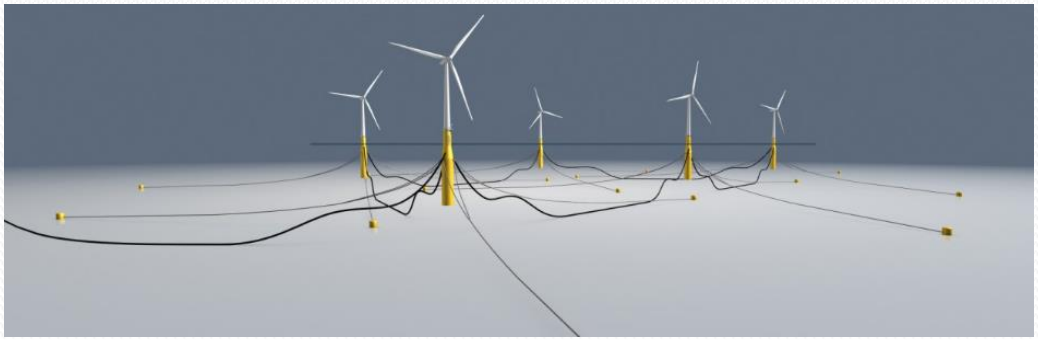
Note: not to scale



Source: BloombergNEF. Note: TLP = tension leg platform, m = meters. Based on current design announcements.

Hywind Pilot Park, Scotland

- Equinor/Masdar project
- Hywind turbine engineered by Equinor
- Previous testing of this design off Karmøy, Norway
- Spar-style foundation
- Five 6 MW turbines, total installed capacity 30 MW
- Covers area of around 4 km^2; depths between 95-129 m
- Operational 2017



Hywind Pilot Park, Scotland

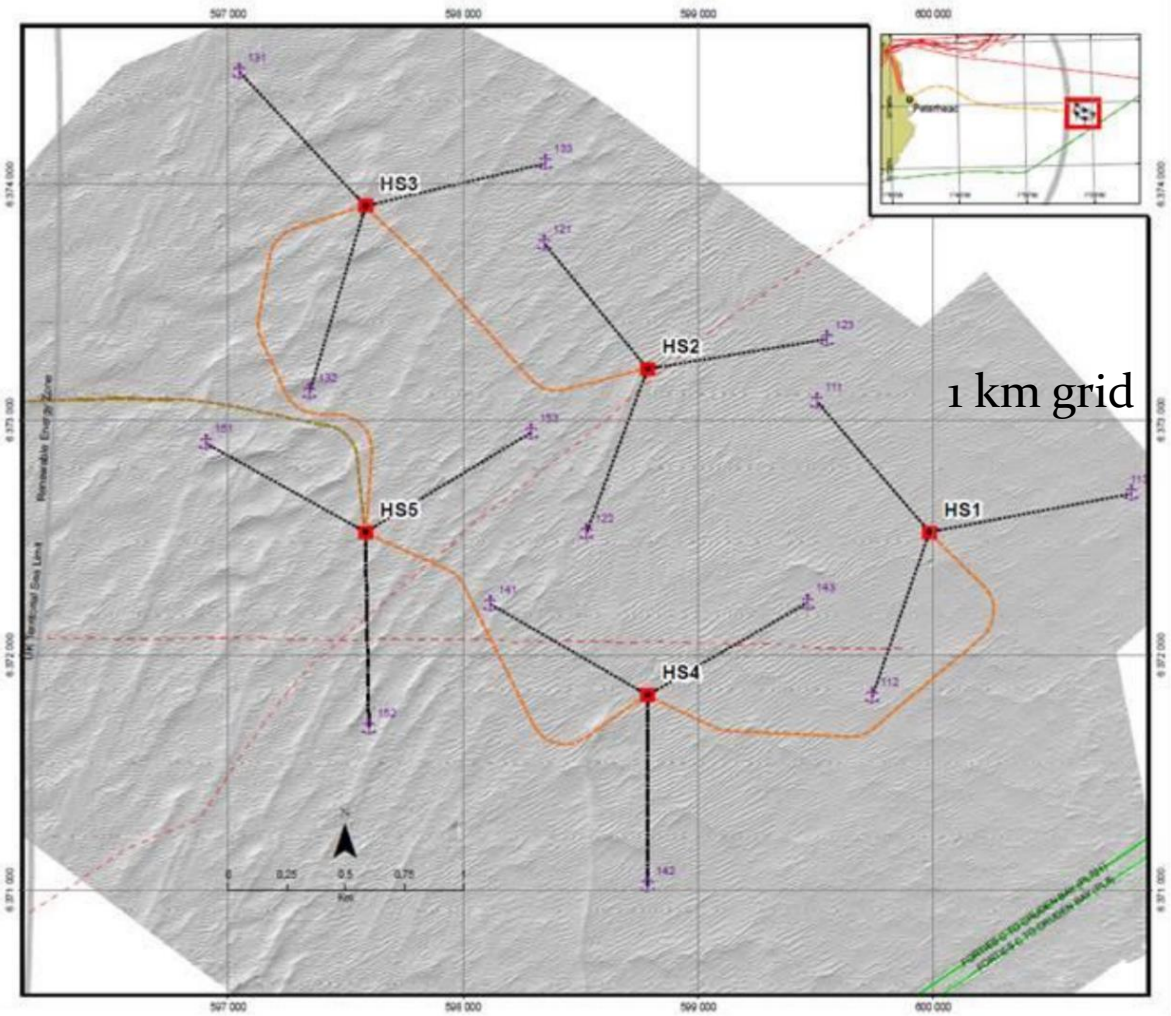
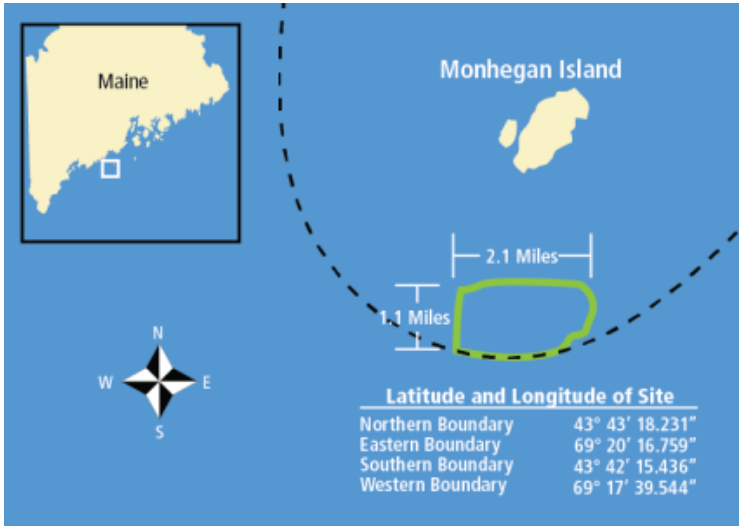


Figure 2.2. Map showing the location of the floating wind turbines (FWT units), the anchor spreads and the cables.

Source: Dec 2017 Hywind Scotland Plan for Construction

UMaine Deepwater Offshore Wind Test Site

- Allows up to two turbines and an export cable (not yet deployed, although 1/8 prototype has been)
- Various scientific surveys conducted (see here)
- Maine Aqua Ventus I, GP, LLC leading the New England Aqua Ventus I demonstration project
- Two 6 MW turbines, VolturnUS concrete semi-submersible hull, three mooring lines



WindFloat Atlantic, Portugal

- EDP Renovaveis SA, Engie SA, and Repsol SA, using platform developed by Principle Power Inc.
- 8.4 MW MHI Vestas turbine, WindFloat® foundation http://principlepowerinc.com/en/windfloat
- This is the largest floating turbine operational at present
- Site depth 100 m
- Eventually 3 turbines with 25 MW total capacity
- Transmission to grid January 2020

3. RODA Updates

- Initiated West Coast Committee; have several members
- Recent Joint Industry Task Force meeting
- Layout workshops with Equinor and Ørsted
- Still need responses to the NY Bight transit survey
- Kicked off the Fishing Industry Knowledge Trust project
- Working with data portals on fishing effort updates
- Involved with upcoming offshore wind event at MFF
- CBP finalized Jones Act interpretive changes (page 84)
- Sent lighting and marking comment letter to BOEM

4. Coast Guard/PARS Updates

- Understand that MARIPARS will be released soon; will brief Council when available
  - Information may result in the establishment of one or more vessel routing measures
  - Goal is to enhance navigational safety by examining existing shipping routes and waterway uses
- Relationship to
  - RODA transit lane proposal (see here)
  - Developer spacing proposal released in November (see here)

5. Research Priority Discussion

- PDT reviewed habitat and offshore wind-related research priorities on 1/9, Committee/Advisors on 1/22
- No additions or deletions recommended; edits will be forwarded to SSC for review
  - Recommend changing timing of 69 to strategic, 78 to essential
  - Add intent to evaluate seasonal changes to priorities 74, 78, 87, 88, 91; see Committee/AP motion 2
  - Indicate need for evaluation of floating and fixed offshore wind as appropriate (94); effects in GOM as well as SNE/MA (95); see Committee/AP motion 3
  - Add ongoing/completed studies identified by PDT to notes

Impacts to fisheries surveys and data

- Motion 3: The Committee emphasizes the urgency of priority #95, not only for Southern New England/Mid-Atlantic but also for the Gulf of Maine. This priority should be expanded to encompass maintaining and developing fishery independent surveys, survey methodology, and fishery data streams, including socioeconomic impacts of these changes.
  - The Committee adopted the motion by consensus.
  - The Advisory Panel also adopted the motion by consensus.
- Priority relates to effects of OSW on surveys, and implications for assessments and catch advice

Benthic survey guidance for OSW

- Relationship to priority 78 (geological/biological habitat sampling)
- NMFS is finalizing guidance to BOEM to augment existing BOEM guidelines and encourage collection of habitat data that will allow for more complete EFH impacts assessment
- Motion 1: Surveys of current and future wind energy areas should provide information to fishery managers and NMFS at a resolution and scale (spatial extent) useful for understanding effects on EFH and HAPCs. Specific applications might include the Fishing Effects Model and other models.
  - The Advisory Panel adopted the motion by consensus.
  - The Committee adopted the motion by consensus.

Habitat surveys and array design

- Motion 4: The Council should recommend to BOEM that at a minimum habitat surveys (as indicated in motion 1) are conducted of an entire wind lease area prior to selection of turbine locations.
  - The Advisory Panel adopted the motion by consensus.
  - The Committee adopted the motion by consensus.
- Concerns were raised that a relatively narrow sampling within sections of a lease area (i.e. just near foundation locations) can make it difficult to adjust the design of the array later in the process to accommodate, for example, transit considerations.

6. Policy Development Update

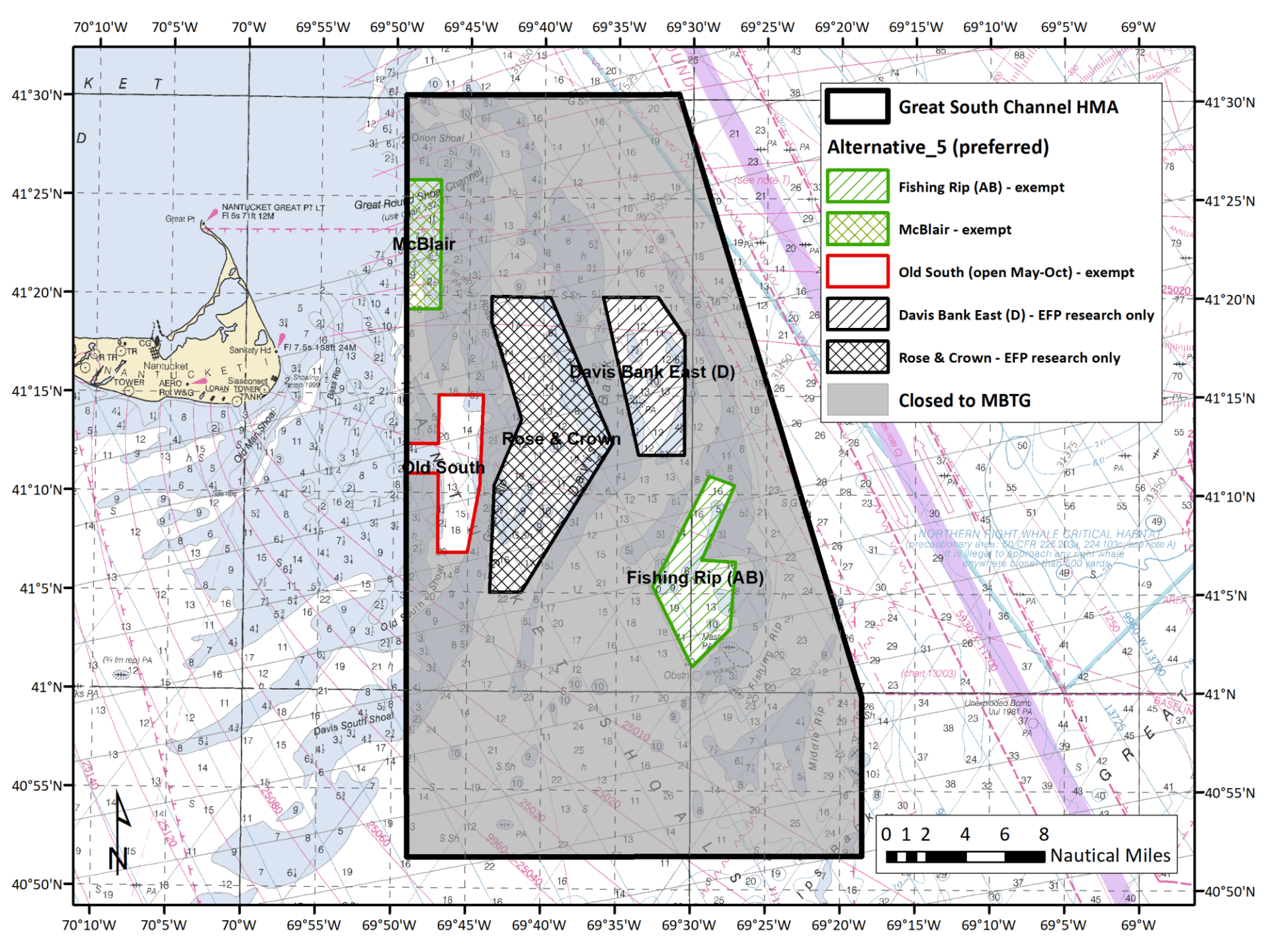
- Floating OSW, Aquaculture, Submarine Cables
- Currently developing background documents
  - First step prior to drafting polices/best management practices
  - High level overview of each activity to enable Council members to be informed participants during policy writing phase
  - Ideally < 10 pages each, with links and resources for further reading
  - Resources include NOAA TM NMFS-NE-209 – Impacts to Marine Fisheries Habitat from Nonfishing Activities in the Northeastern United States and updates in OHA2 appendix; various state guidance documents

Policy Development Update

- Background Document Outline
  - Activity Overview
  - Potential Impacts to Habitat
  - Potential Impacts to NEFMC Species
  - Potential Interactions with Other Coastal/Marine Activities
- Next steps
  - Continue gathering resources
  - Start drafting sections (PDT, others)
  - Consult with subject matter experts, as needed
  - PDT/policy work group review
  - Advisory Panel/Committee review
  - Briefing for Advisory Panel/Committee/Council

7. EFP Discussion

- Coonamessett Farm Foundation requested EFP in June 2019 to conduct dredge-mounted camera work and related assessments within the Great South Channel Habitat Management Area
- CFF has worked with GARFO since then to scale project and identify Phase 1 sampling area and objectives
- EFP notice and request for comments publishes 1/27/2020 (public inspection version in binders)
- Committee and Advisory Panel discussed the proposal on 1/22 (see meeting summary)
- Does the Council wish to provide any specific comments in response to the FR notice? Due around February 11.


Great South Channel HMA
Alternative_5 (preferred)
Fishing Rip (AB) - exempt
McBlair - exempt
Old South (open May-Oct) - exempt
Davis Bank East (D) - EFP research only
Rose & Crown - EFP research only
Closed to MBTG
McBlair
Old South
Rose & Crown
Davis Bank East (D)
Fishing Rip (AB)
NORTHERN RIGHT WHALE CRITICAL HABITAT
0 1 2 4 6 8
Nautical Miles
70°10'W
70°5'W
70°W
69°55'W
69°50'W
69°45'W
69°40'W
69°35'W
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69°25'W
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69°10'W
69°5'W
69°W
41°30'N
41°25'N
41°20'N
41°15'N
41°10'N
41°5'N
41°N
40°55'N
40°50'N

Council's research objectives (June 2019)

- Improve the Council's understanding of the distribution of living and non-living habitat features within the GSC HMA, including topography, substrate, epifauna, and infauna (i.e., develop habitat maps).
- Improve the Council's understanding of habitat stability including epifaunal persistence in relation to substrate type, tidal flows and storm events.
- Improve the Council's understanding of habitat vulnerability to mussel and clam dredges. Vulnerability includes both the nature of habitat/gear interactions (susceptibility) and recovery rates.
- Improve the Council's understanding of why the GSC HMA is important to managed species, such as Atlantic cod.

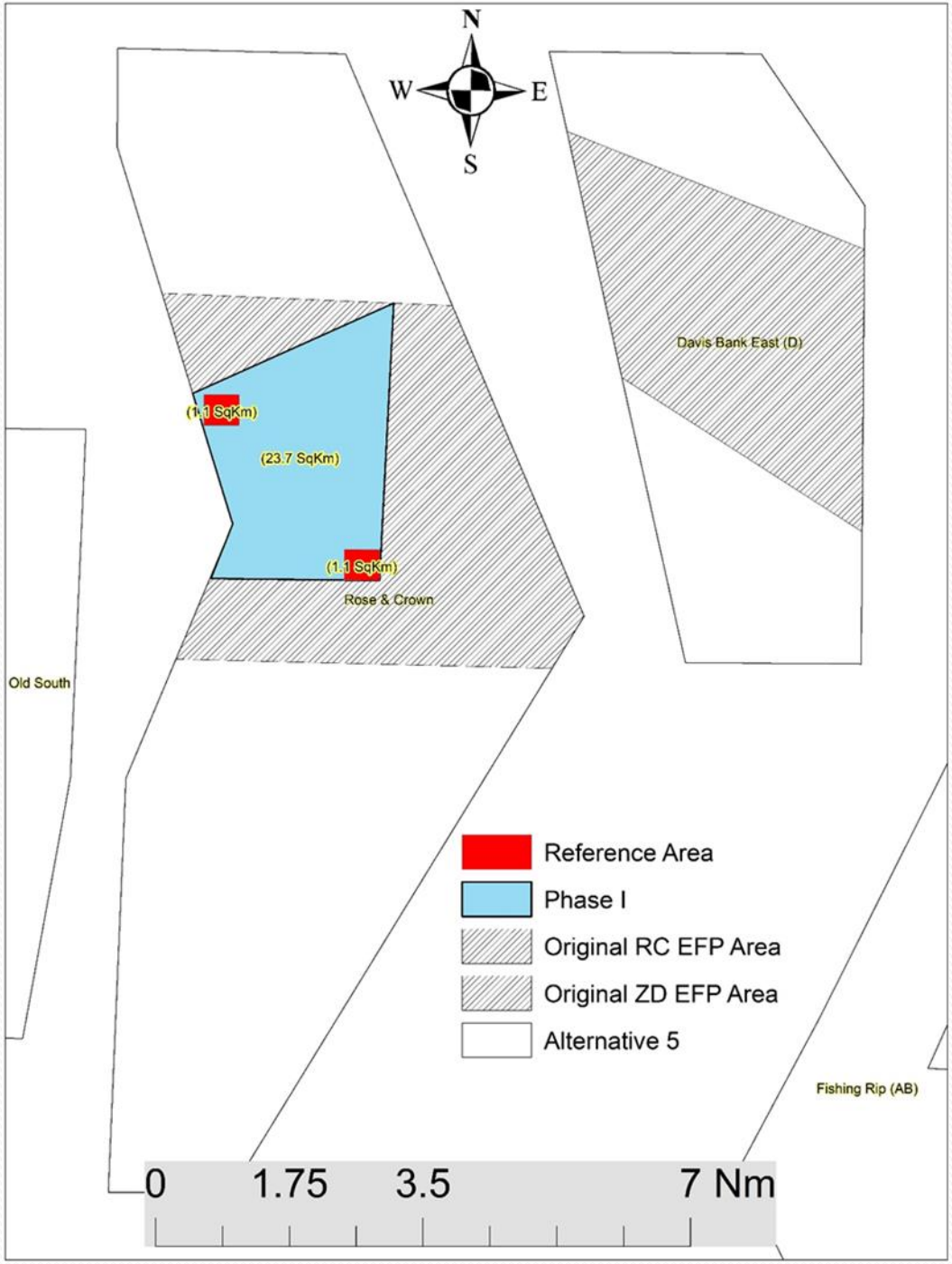

Chart:

- **Phase I research area, 23.7 km² (~7 nm²), in blue.**
- **Two unfished reference areas at 2.2 km², in red.**
- **Total fishing area 21.5 km² (~6.3 nm²).**
- **Cross hatched areas represent original CFF proposal.**

- Understand that Phase 1 focus is dredge-mounted camera work and analysis of video collected, plus analysis of dredge catches
- Dredge-independent sampling of reference areas (red) may occur as well

Points raised during Committee/AP meeting

- Not consensus statements
- If Council chooses to submit comments on the EFP, can adapt or expand upon any or all these points
- NMFS questions posed to the Committee/Advisors:
  - Is the work proposed during Phase 1 appropriate in terms of scale? Does the approach make sense?
  - Is Phase 1 responsive to the research request of the Council? Is it likely to be valuable to the Council?

Habitat Committee/Advisory Panel Discussion

Area identified for exemption

- The revised study area is relatively small, and it is uncertain how extensive the clam resource is within the area, and thus how long fishing and associated dredge-mounted camera work might continue within the Phase 1 site.
- Should CFF indicate that the study area is no longer productive, it could be desirable to shift or expand the Phase 1 study site.
- The Committee did not have a recommendation as to the process that NMFS should follow when considering a shift or expansion of the site (i.e., should NMFS issue a new FR notice seeking comment on the revised site, or should NMFS revise the terms of the EFP without seeking further comment)

Habitat Committee/Advisory Panel Discussion

Rationale and relationship to objectives

- There are data gaps with respect to habitat characterization within the GSC HMA.
- Sometimes EFPs are the only practical mechanism for obtaining information.
- Opportunity for learning is important here.
- The GSC HMA is vulnerable to the effects of clam dredging and precaution when authorizing dredge activity is reasonable.
- The Phase 1/pilot approach proposed in the FR notice attempts to balance these considerations.
- The Phase 1/pilot approach will not address all of the Council's research objectives, but is a starting point.

Habitat Committee/Advisory Panel Discussion

Sampling protocol and scope of Phase 1

- The goal is to collect video during all tows; NMFS suggested performance metric of 75% to allow for gear deployment issues/logistical challenges at sea
- Intent is that monitoring via VMS will occur at enhanced rate (every 5 min) as recommended by the Council for the proposed HMA exemption areas
- Recommend documenting everything caught in the dredge (clams, mussels, scallops, fish, habitat/epifaunal species)
- Suggest a clearer description of how research funds will be spent during Phase 1
- Also suggest mapping Phase 1 expected outcomes to the Council's research objectives