New England Fishery Management Council
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MEETING SUMMARY

Habitat Plan Development Team

Webinar
April 1, 2026
1:00-3:00 p.m.

The Habitat Plan Development Team (PDT) met via webinar at 1:00 p.m. on April 1, 2026 to review and discuss (1) the 2026 Essential Fish Habitat (EFH) draft designation maps, related model outputs, and scallop distribution modeling methods; (2) Dedicated Habitat Research Area (DHRA) report prepared by NOAA GARFO; and (3) the plan for the Great South Channel Habitat Management Area (GSC HMA) clam exemption area evaluation, including the scope, information sources, and timeline for the work.

MEETING ATTENDANCE: Michelle Bachman (PDT Chair), Jennifer Couture, and Julian Garrison (NEFMC); Melissa Smith (Habitat Committee Chair); David Packer, Sabrina Pereira (NMFS GARFO); Dr. Peter Auster (University of Connecticut); Jessica Coakley, Tori Kentner (MAFMC); Dr. Chris Haak (Monmouth University); Julia Livermore (Rhode Island DEM, DMF); Anne Simpson (Maine DMR); Dr. Fiona Hogan (RODA). Christine Ford (NMFS GARFO) attended to support the DHRA discussion. In addition, seven other people attended.

KEY OUTCOMES

- The PDT reviewed the draft updated EFH designations for 12 large- and small-mesh groundfish species, discussed approaches to verify inshore designations, and flagged additional considerations for specific species and/or life stages.
- The PDT received an update on the scallop-specific single-index integrated species distribution modeling methods being developed, discussed additional optical surveys to calibrate the models, and suggested further discussions on ways to separately model juvenile and adult scallops for the updated EFH designations.
- The PDT reviewed the results of a GARFO report on research activities in the Georges Bank and Stellwagen DHRAs as well as the Great South Channel and Jordan Basin areas. The PDT discussed the utility of the DHRA designations and plan to make a recommendation to the Habitat Advisory Panel and Committee at the April 30 Habitat PDT meeting, after further discussion. The PDT also plans to compile additional research activities not documented in the GARFO report, which only includes GARFO-permitted research.
- The PDT received an update on the format, scope, information sources, and timeline of the Great South Channel Habitat Management Area clam exemption evaluation, which was prioritized by the Council for 2026.

AGENDA ITEM #1 – REVIEW 2026 EFH DRAFT DESIGNATIONS, MODEL OUTPUTS, AND SCALLOP MODELING METHODS

Council staff gave a presentation on the 2026 EFH designation updates—including a review of the timeline, methods, and types of information to be included in the 2026 EFH Framework and Appendices.

Key updates included successful joint hurdle species distribution model (SDM) runs and refined data processing rules for designating inshore EFH from occurrences and estuarine/coastal zones analysis. The PDT discussed using additional data sources (e.g., bottom longline surveys) or alternative analyses (simpler SDMs) to augment joint model-based maps for species such as Acadian redfish that are found in complex habitats that are difficult for trawl surveys to sample. Use of longline surveys and alternative modeling approaches are already planned for Atlantic wolffish. Staff noted that there had been similar comments from groundfish staff and that it could be worth exploring additional data sets or analyses if it is not too burdensome for the modeling contractor, Dr. Haak. PDT members also discussed ways to share finished EFH products (maps, text, ancillary SDM outputs) and make them more interactive, particularly as they might be more useful for EFH consultations staff to be able to overlay different map products (e.g., model quantiles combined with the final EFH map). Mid-Atlantic Council staff noted plans for later in the year to house EFH products as a separate module on the Northeast Regional Habitat Assessment page. The group agreed that further discussions on this topic would be helpful.

Council staff then led a discussion on the draft designations for the 12 large- and small-mesh groundfish species with joint SDM outputs already available. For each species and life stage, Council staff presented maps of model-predicted 22-year mean density, maximum density quantiles, and a comparison of the current (No-Action) designations and the draft updated designations. The group also reviewed smooth terms plots depicting individual relationships between species presence-absence or counts and environmental covariates to help explain the modeled distributions. The PDT discussed approaches to address anomalies (generally, spatial discontinuities with other EFH areas) in the inshore designations for several species. Dr. Haak suggested limiting how far inshore the models extrapolate; since there are very few fish observed in low salinity (< 30 psu) areas in the SDM datasets, these few observations have disproportionate influence on the model predictions. Council staff proposed examining inshore catch rates in addition to frequency of occurrence in survey tows, which is the approach currently used in the inshore methods. PDT members also cautioned that absences or low catch rates in the inshore survey data do not necessarily indicate a lack of habitat, given limited seasonal coverage of the data. One PDT member suggested consulting the literature to identify known estuaries and embayments first and then applying the inshore zones analysis. The PDT recommended including descriptions of seasonal distribution differences in the EFH text. The PDT also agreed that representative visuals of steps in the inshore methods would be useful to include in the methods documentation or in presentations. One PDT member offered to check remotely operated vehicle and towed camera data for witch flounder, deep-sea red crab, offshore hake, Acadian redfish, Atlantic halibut, and other offshore, deep-dwelling species to help verify offshore extent of EFH designations. PDT comments on specific draft designations are listed below:

- Red hake:
    - Certain estuaries had very high predicted densities for juveniles (see above for general comment on inshore extrapolation).
    - One PDT member asked whether the gaps in the predicted spatial distribution around Cultivator Shoals and Nantucket Shoals reflected sampling gaps, noting that those are very high flow areas; Dr. Haak responded that even with sampling gaps, the models can predict (extrapolate) into unsampled areas based on environmental data. Predicted densities in these shoal areas vary by species.
- Windowpane flounder
    - Council staff clarified whether the high inshore predicted densities were attributed to the same extrapolation issues as for juvenile red hake; considering the smooth plots, Dr. Haak noted that this may be a real relationship and not an issue.
- Winter flounder
    - The PDT flagged that the updated designation extends further south beyond central NJ, unlike the current (No-Action) designation that was manually clipped at Absecon Inlet, NJ. MAFMC staff noted examples where Mid-Atlantic species were manually clipped in

their 2026 Omnibus EFH Amendment and suggested a similar approach (as informed by the data, literature, and consultations with experts).

Dr. Haak shared updates on the single-index integrated species distribution model (SIISDM) for Atlantic sea scallops, which combines the NEFSC bottom trawl survey with the NMFS and other dredge surveys, including a presentation on the approach used to test model predictions, and next steps. Dr. Haak emphasized that these models leverage the different but complementary ways the trawl and dredge surveys sample scallops to provide a better representation of scallop habitat usage. Next steps include incorporating spatiotemporal effects, using a reference survey (i.e., SMAST drop-camera survey) to calibrate the single-index with "true" densities (rather than a model-inferred "index" of abundance), and including covariate-dependent catch efficiency functions for depth, sediment type, rugosity, and spatial location. Mid-Atlantic staff noted Dr. Haak employed a similar approach for Atlantic surfclams and ocean quahogs in the 2026 MAFMC Omnibus EFH Amendment.

The PDT discussed producing a single EFH map for scallops incorporating all life stages (which is consistent with the current designation and the EFH maps developed for the other sedentary bivalve mollusks in the region, Atlantic surfclam and ocean quahog). There are lengths included in the survey data such that the stages could be modeled separately. One argument for presenting a separate juvenile map is that differences in the juvenile and adult distributions, for example where juveniles recruit initially but do not survive to adulthood / harvestable size, could provide useful context for management beyond a single pooled map.

Public Comments:

- **Drew Minkiewicz (Sustainable Scalloping Fund)** clarified why the NEFSC Habitat Mapping Camera (HabCam) or other optical surveys were not included in the scallop modeling methods, noting that these types of surveys are much more efficient at documenting juvenile or recently settled scallops. Dr. Haak clarified that he plans to use the optical surveys to calibrate the single-index model to true scallop densities but has only recently gained access to those optical data.
- Mr. Minkiewicz noted that the NMFS dredge survey has not sampled areas west of Nantucket for close to a decade; rather, these areas have been handled by VIMS. Dr. Haak responded that the model includes both the NMFS and VIMS dredge data and treats them as a single unit, given that they use the same gear and protocols and have similar catchability. Dr. Haak also noted that the model includes the ME dredge survey data but needs to account for differences in swept area as that survey conducts shorter tows.
- Mr. Minkiewicz asked whether juvenile scallops have been considered for separate EFH designations previously and going forward. Council staff responded that the current EFH designations for scallops consist of a single, combined map but that staff could work with Dr. Haak to consider how to model / map juvenile and adults separately. Dr. Haak noted that the analyses presented today only depicted scallops > 75 mm but that he does have data for 40-75 mm scallops. However, the 38 mm mesh of the dredge surveys does not sample scallops < 40 mm well, so Dr. Haak would need to consider how to model very small individuals.
- **Lou Chiarella (GARFO Habitat and Ecosystem Services Division)** encouraged Dr. Haak and Council staff to include environmental covariates and/or oceanographic conditions in the EFH designation methods for scallops, as the modeling currently focuses on abundance. Council staff clarified that several covariates are already incorporated (sediment type, flow conditions, depth), but staff plan to include those in the text and use the modeling results to have further discussions on important environmental conditions for scallops.

Follow-Ups:

Garrison, Bachman – Examine inshore occurrences, catch rate data, and literature to ground-truth draft inshore designations before April 30 Habitat PDT meeting.

Packer – Check camera data for offshore, deepwater species (witch flounder, deep-sea red crab, offshore hake, Acadian redfish, Atlantic halibut, others?).
Garrison – Draft updated EFH text descriptions, starting with the 12 species with maps reviewed today.
Garrison – Coordinate engagement meetings (PDT, AP) with groundfish, whiting, and scallops plan coordinators; assemble materials for feedback and engagement meetings.

AGENDA ITEM #2 – DEDICATED HABITAT RESEARCH AREA REPORT AND EVALUATION

Council staff presented the findings from a GARFO report on research activities in the Georges Bank and Stellwagen Dedicated Habitat Research Areas (DHRA) and Great South Channel and Jordan Basin areas. The report concluded that "while a number of research activities take place in the DHRAs, the majority happen to overlap with the DHRA. Several active and ongoing projects rely on the Stellwagen DHRA. NMFS did not identify any past, current, or planned research activities in which the designation of the Georges Bank DHRA has played a critical role." The PDT discussed the report results in the context of making a recommendation at the next PDT meeting (April 30) to the Habitat Advisory Panel and Committee on whether to sunset or maintain the Georges Bank and Stellwagen DHRAs. PDT members noted additional research activities that use the DHRAs that are not in the report, including Saildrone work and upcoming NEFSC research cruises in Jordan Basin in September 2026. Christine Ford (GARFO Sustainable Fisheries Division) noted that the report only documents research that required permits through GARFO, as they would have no records of other activities. Council staff offered to compile information on non-GARFO-permitted research activities and noted that public comments at a joint AP/Committee meeting could also provide additional information. One PDT member also raised the importance of the DHRA designations in past, influential research (post hoc analyses, cruise planning, etc.) and expressed concerns about the opportunity cost of losing these designations for future analyses. Another PDT member confirmed that the PDT plans to make a final recommendation at its next meeting at the end of April and asked about the timing for Habitat AP/Committee and Council discussions on this topic. Staff clarified that they are aiming for an AP/Committee discussion in May and a Council discussion and recommendation to GARFO at the June Council meeting.

Public Comments:

There were no public comments on this agenda item.

Follow-Ups:

Bachman, PDT members – Compile one-pager on additional research activities not included in the GARFO report.

AGENDA ITEM #3 – PLANNING FOR GREAT SOUTH CHANNEL HABITAT MANAGEMENT AREA CLAM EXEMPTION AREA EVALUATION

Council staff presented an update on the Great South Channel Habitat Management Area (GSC HMA) clam exemption area evaluation, which was prioritized for 2026 Council work at the December 2025 meeting. The update covered the format, scope, information sources (both as background and new information since the 2018 Habitat Clam Dredge Exemption Framework), and timeline. Staff noted emphasized that revisions to HMA boundaries or regulations are beyond the scope of this evaluation, as is evaluating the usefulness of these areas for mussel harvest. Staff anticipate a report on the results of the Exempted Fishing Permit (which concluded in March) from Coonamessett Farm Foundation (CFF) during the summer, which will help inform the evaluation. Mid-Atlantic staff highlighted a change in the timing for Fishery Information Document (FID) development with anticipated clam data updates June 1. Council staff responded that it may be helpful to coordinate data requests for both the FID and GSC HMA exemption evaluation efforts; the FID request has already been submitted and we may wish to ask for additional data to support this evaluation.

Public Comments:

There were no public comments on this agenda item.

Follow-Ups:

Bachman, Garrison, Coakley – Coordinate data request(s) on clam information that can support the evaluation.
Bachman – Share CFF EFP report with Habitat PDT when it is available.

The meeting adjourned at approximately 3:00 p.m.