

Contents

Introduction..... 1

Summary of previous discussions on DHRAs 1

Implementation considerations..... 2

Research areas during EFH Omnibus 2 process 4

Plan development team discussion..... 4

Advisory panel discussion 5

DHRAs at other councils 5

Introduction

The diversity, quality, and extent of habitats are among the most significant environmental determinants of distribution, abundance, and diversity of fishery resources. During development of EFH Omnibus 1, NEFMC and NMFS identified many information and data shortcomings that limited our understanding of the links between habitat quality and fish production. Although significant new research has been conducted in the since EFH Omnibus 1, much about the contribution habitat to the productivity of managed fishery species remains unknown. The Habitat PDT has had numerous discussions about habitat-related research needs and will summarize this information for the EFH Omnibus 2 DEIS. The implementation of specific Dedicated Habitat Research Areas (DHRAs) is also a possibility in the current Omnibus Amendment. This document summarizes past Council work on the issue of DHRAs, lists some previously developed goals and implementation considerations for DHRAs, and summarizes recent habitat PDT and AP discussions on the issue.

Summary of previous discussions on dedicated habitat research areas:

During 1999 Habitat Committee discussions regarding new habitat areas of particular concern (HAPC’s), the Committee was asked to consider designating a "habitat research area" either in addition to any new HAPC’s or prior to designating a new HAPC. The Committee directed the EFH Technical Team to develop and propose criteria and objectives for identifying candidate sites for a dedicated habitat research area.

The EFH Technical Team worked with the Habitat Committee and its Advisors to identify criteria and parameters to be used to determine appropriate candidate sites, to identify several preliminary site alternatives, and to identify important habitat-related research and information needs. The Technical Team also worked with the Habitat Committee to design a series of scoping meetings with the fishing industry and scientific community to gauge interest in the establishment of a dedicated habitat research area and to identify the major issues and concerns.

In 2000, the Habitat Committee proposed developing one or more dedicated habitat research areas most likely within one or more of the groundfish mortality closed areas. (At that time, the Habitat Closed Areas did not exist.) The intent was to designate areas

for a certain length of time that would allow important habitat-related research to be conducted. During the time that an area was designated for habitat research, it would be closed to all fishing activities. Some controlled fishing effort would most likely be allowed within the area as necessary to support habitat-related and gear-effects research.

Despite these early efforts, habitat research areas were not designated. During the development of Amendment 10 to the scallop FMP, an alternative was considered but rejected that would have identified and possibly closed to fishing and/or other activities small areas dedicated for habitat research. These special management areas would have been identified based on comment from the public and academia for the purposes of promoting and enabling habitat research that could not be conducted under the usual fishery regulations and/or marine activities. However, this alternative was removed from further consideration at the March 2002 Council meeting. The rationale for rejecting the alternative was that during the workshops in 2000 with academia and the fishing industry to explore the need and desire for habitat research closed areas, the participants concluded that the best location(s) for such a closed area would be within existing closed areas to minimize the impacts to the fishing industry. At the time of Amendment 10's development, the locations of long-term closed areas were in flux due to the development of Amendment 13 to the multispecies FMP, so was determined that further consideration of habitat research closed areas should wait until Amendment 13 either retains current closures, or implements new closed areas. It was also noted that the Council would be considering a Dedicated Habitat Research Area program as part of Habitat Omnibus Amendment 2.

Implementation considerations

In 1999, the EFH Technical Team and Habitat Committee identified the following constraints, parameters, and options to consider in deliberations for a dedicated habitat research area. These considerations might or might not be relevant at the current time, and other considerations might be important as well.

Expectation management:

- Need to set reasonable and achievable expectations
- Acknowledgment that it will take several years to begin to see results from the research area
- The shorter the duration of the habitat research area designation, the greater the potential for disappointment with the results

Need for commitments from all parties involved:

- For the research area(s) to function effectively several groups (including the Council, NMFS, fishermen, researchers, and funding organizations) need to commit to support and promote the research area(s) and the work accomplished there.
- The research community, NMFS, and the fishing industry should commit to work together, where appropriate, in support of the Council's research goals (e.g., the expedient development and approval of requests for experimental fishing permits,

experimentally fishing areas in the manner requested by the researchers, providing opportunities for research on gear conservation engineering, etc.).

- The Council should provide a commitment to the research community that the research area will remain in place and accessible to them for a minimum period of time
- NMFS should provide a commitment to the research community and the Council that they will direct research funding and/or ship time to research in the areas
- Ideally, extramural funding organizations should provide a commitment to the research community and the Council to give high priority to research proposals that address the Council's habitat-related research needs and plan to take advantage of the research area
- Ideally, the research community should provide a commitment to focus their attentions on the Council's habitat-related research needs and to develop proposals and research activities that take advantage of the research area.

Identifying suitable areas:

- The optimal design for a habitat research area system would be to establish multiple sites within each of the Gulf of Maine, Georges Bank, and the Southern New England shelf.
- The research area should be located in an area currently closed to most fishing activity
- The research area should be located in an area that is easily accessible and involves less ship time to get to the site to permit day trips and the use of smaller research or fishing vessels.
- The research area should include representations of as many habitat types as possible.
- The research area should be located near or adjacent to an actively fished area to facilitate comparative studies of fished and unfished sites.
- The research area should be zoned to allow for controlled fishing to occur in some places and no fishing to be allowed in others.
- The research area should be large enough to accommodate a variety of experiments and research.
- The research area should be located in an area such that takes advantage of oceanographic features to study such things as metapopulation sources and sinks.

Communication:

- Communication of the goals, progress, and results of all research conducted in the habitat research area should be effective and timely and should be directed with equal importance to the Council, the fishing industry, and other researchers.
- The Council should shoulder much of the responsibility for facilitating communication.
- The Council could set up a web page that would allow research sites to be identified and to access summaries of planned and on-going research.
- The Council could host annual workshops for researchers and other interested parties to discuss habitat-related research. The workshops should foster interaction and collaboration between researchers and the fishing industry.

Management/restrictions on fishing:

- The habitat research area may need to be closed to all types of fishing gear and activity.
- The Council may want to consider setting up a research "permit" system
- It was suggested that research proposed for the area(s) should be coordinated by the Council but not managed by the Council. In other words, the Council should help coordinate efforts between NMFS, individual researchers, funding organizations, and

fishermen, but the Council should not have complete control to determine what research can and cannot be done in the area(s).

- The Habitat Committee or the Research Steering Committee may retain the responsibility for oversight of the research area(s), reporting to the full Council.

Research areas during EFH Omnibus 2 process

At its June 10, 2010 meeting, the Habitat Committee proposed a few dedicated habitat research areas. These included the Ammen Rock area on Cashes Ledge, the area of overlap between SBNMS and the WGOM habitat closed area (the 'Sliver'), and areas yet to be indentified but within any of the GB habitat closures that might be eliminated in the Omnibus Amendment (i.e. NLCA, CAI, CAII habitat closures). In response to these motions, both the PDT and AP discussed the utility of habitat research areas in general, but specific areas have not been evaluated in any detail as yet.

Plan development team discussion of dedicated habitat research areas (from July 27, 2010):

While the PDT is in general very supportive of additional habitat-related research, it was not clear to the group how such research would be enhanced/facilitated by DHRAs, and what the purpose of DHRA designations might be.

Specific points made/questions raised by the PDT:

- Areas shouldn't be set aside for research alone unless work is being actively pursued
- Research areas should be proposed by research groups; this would be a more efficient way to proceed than for the PDT to make assessments about which areas might be desirable for research
- A better use of the PDT and Council would be to focus on research priorities; ideally, these priorities should be ranked
- At the conclusion of the amendment process, it seems likely that the mosaic of previously closed/recently closed/recently opened areas will provide adequate research opportunities
- Can a DHRA designation be used to streamline the permitting process, especially for vessels engaging in research that involves use of fishing gears in closed/restricted areas? (It was noted that proposals are typically red flagged if research was to be conducted in a habitat management area.)
- Multi-year and long-term funding opportunities are an important goal, especially given the need for recovery studies, where post-impact sampling should occur at various time intervals.
- Can existing funding mechanisms be improved?

In summary, the PDT did not reach any definite conclusions as to the utility of DHRAs vs. de facto areas that could be used for research, but did agree that the DHRAs would be useful if they could be leveraged to improve attention to research priorities, or facilitate permitting and/or funding opportunities.

Advisory panel discussion of dedicated habitat research areas (from August 12, 2010):

The AP passed a motion recommending that the efficacy of roller gear and ground cable restrictions be tested to evaluate their potential habitat benefits. The specified that such research should be identified as a priority and evaluated in habitat research areas in the GOM (specifically, on Cashes Ledge and in SBNMS, as identified by the Habitat committee on 6/10/10)

The AP passed a second motion that “the Council should not designate any dedicated habitat research areas until funding is available and a programmatic EIS can be developed to allow access; also that the areas should have a definite moratorium on them after which they should be reopened if no research has been conducted, and that any areas proposed should be no larger than necessary to conduct the studies.”

Other points included:

- Currently it is very difficult to gain access to do research in habitat closed areas.
- There should be a plan for any research area before it is closed.
- Any research areas should be tied to examination of existing closures; and the point of closing areas as a ‘feel good’ measure is questionable, when they serve to tie up fishery production.
- Specific research questions included: How does substrate influence productivity? What’s the functional value of the bottom?
- It would be important to justify area size.
- There is a practical benefit to locating research areas closer to shore.

DHRAs at other councils

As the Committee moves forward with possible research area designation, there are a few examples of research areas and/or research plans at other fishery management councils that might provide a useful framework.

In 1994, the SAFMC created the Experimental Oculina Research Reserve (EORR), otherwise known as the Oculina Experimental Closed Area (OECA), which closed the area to all bottom fishing indefinitely. The OECA is located within the Oculina Bank HAPC. The area was closed in order to evaluate the effectiveness of the reserve for the management and conservation of reef fish, namely the recovery of fish populations and grouper spawning aggregations. In response to the 10–year sunset provision for the closure of the OECA, Amendment 13A to the Snapper Grouper Fishery Management Plan was promulgated in 2004 to extend the fishing restrictions for the OECA for an indefinite period. In addition, the Amendment required that the size and configuration of the OECA be reviewed within three years (2007) and that a 10–year (2014) reevaluation be conducted for the area. The Council also stipulated that an evaluation plan be developed for the area to address the needed monitoring and research, outreach, and enforcement efforts. The resulting Oculina Experimental Closed Area Evaluation Plan represents a comprehensive approach towards learning more about the resources

within the OECA and how management of the area should be effectuated. An Oculina Evaluation Team, composed of individuals knowledgeable about the OECA, was created to review the results of the OEP in 2007 and 2014 (before the three year and 10-year re-evaluation periods, respectively). This team will review the most up-to-date information on the effectiveness of the OECA and provide recommendations to the Council before any significant actions concerning the closed area are carried out. The first report from the OET was presented to the Council in March 2007. No funding mechanism was put in place for the evaluation Plan to be implemented, however, so the Council has had to rely on research conducted thru the Science Centers and other agencies to fulfill the objectives of the plan. So far, they don't have a good indication whether the closure has been successful in restoring habitat or populations of fishery species.

The NPFMC is currently in the process of developing a research plan within the Northern Bering Sea Research Area (NBSRA). The purpose of the research plan is to identify what is needed to protect both a) marine life, including mammals, crabs, and endangered species; and b) subsistence needs of local communities, from adverse impacts of bottom trawling. It will also establish guidelines for an adaptive management plan for bottom trawling, including closing areas to establish a control for research on the effects of trawling on habitat, as well as requiring all vessels conducting experiments to work in conjunction with the Alaska Fisheries Science Center.

The WPFMC is currently developing the Hancock Seamount Marine Ecosystem Management Area. There has been a moratorium on fishing in the area for the past 20 years, and this will continue until armorhead (seamount groundfish) are recovered, which is forecast to take years.