

# **Atlantic States Marine Fisheries Commission**

## **Habitat Committee Guidance**



**Approved by the ISFMP Policy Board  
August 2013**

*Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration  
well in progress by the year 2015*

# **Atlantic States Marine Fisheries Commission**

## **Habitat Committee Guidance**

**Approved by the ISFMP Policy Board  
August 2013**

A publication of the Atlantic States Marine Fisheries Commission pursuant  
to National Oceanic and Atmospheric Administration  
Award No. NA10NMF4740016



## **ACKNOWLEDGEMENTS**

The Habitat Committee Guidance was drafted by Megan Caldwell, a contractor for the Commission's Habitat Program, with review and contributions from a working group of the Habitat Committee, which consisted of the current Chair, Kent Smith, current Vice Chair, Jake Kritzer, and past Chairs, Bob Van Dolah and Wilson Laney. The Habitat Committee reviewed and approved the document during their May 10, 2013 meeting.

This document is modeled after the Commission's *Committee Guidance and Assessment Process* document (February 2013). Section 5.0 (Meeting Policies and Procedures) and 6.0 (Communication Policies and Guidelines) are excerpted directly from the Committee Guidance document. Portions of Section 3.0 (Committee Responsibilities), Section 4.0 (Committee Tasking) and 5.0 (Committee Expectations) have been included and combined with more specific Habitat Committee guidance in Section 4.0 (Committee Expectations) of this document. If changes are made to the *Committee Guidance and Assessment Process* document, those changes will take precedence over the content of this document. The Habitat Committee will maintain this document and update it as needed to comply with the *Committee Guidance and Assessment Process*, as well as to modify any policies specific to the Habitat Program. Any major changes to this document must receive approval from the Interstate Fisheries Management Program (ISFMP) Policy Board.

## TABLE OF CONTENTS

Acknowledgements.....	ii
Table of Contents.....	iii
1.0 Introduction.....	3
2.0 ASMFC Boards and Committees Involved with Habitat .....	3
2.1 Habitat Committee .....	4
2.1.1 Habitat Work Groups.....	4
2.2 Artificial Reefs Committee.....	4
2.3 Management and Science Committee.....	4
2.3.1 Fish Passage Work Group.....	5
2.4 Management Boards / Sections.....	5
2.4.1 Technical Committees .....	5
2.4.2 Plan Development Team.....	6
2.4.3 Advisory Panels .....	6
2.5 Atlantic Coastal Fish Habitat Partnership.....	6
2.6 Coordination with Other Committees/Groups .....	7
3.0 Program documentation .....	7
3.1 Annual Action Plan.....	7
3.2 Habitat Committee Annual Work Plan.....	7
3.3 Habitat Committee Annual Effectiveness Review .....	8
4.0 Committee Expectations .....	8
4.1 Committee Membership.....	8
4.2 Participation Review Process.....	9
4.3 NGO Selection Process.....	10
4.4 Chairmanship .....	10
4.5 ASMFC Staff Responsibilities.....	10
5.0 Meeting Policies and Procedures .....	11
5.1 Meetings announcements.....	11
5.2 Materials Distribution .....	11
5.3 Roles of Chair and Vice-Chair at Meetings.....	11
5.4 Meeting Records .....	12
5.5 Public Participation at Meetings .....	12
5.6 Meeting etiquette .....	13
6.0 Communications Policies and Guidelines .....	14
6.1 Email Policies .....	14
6.2 Recordings .....	14
6.3 Webinars .....	14
6.4 Reports .....	15
7.0 FMP Habitat Sections .....	16
7.1 Guidance on the development of habitat sections of FMPs.....	16
7.2 Process for development of habitat sections of FMPs .....	17
8.0 Habitat Source Documents .....	18
8.1 Process for development of source documents.....	18

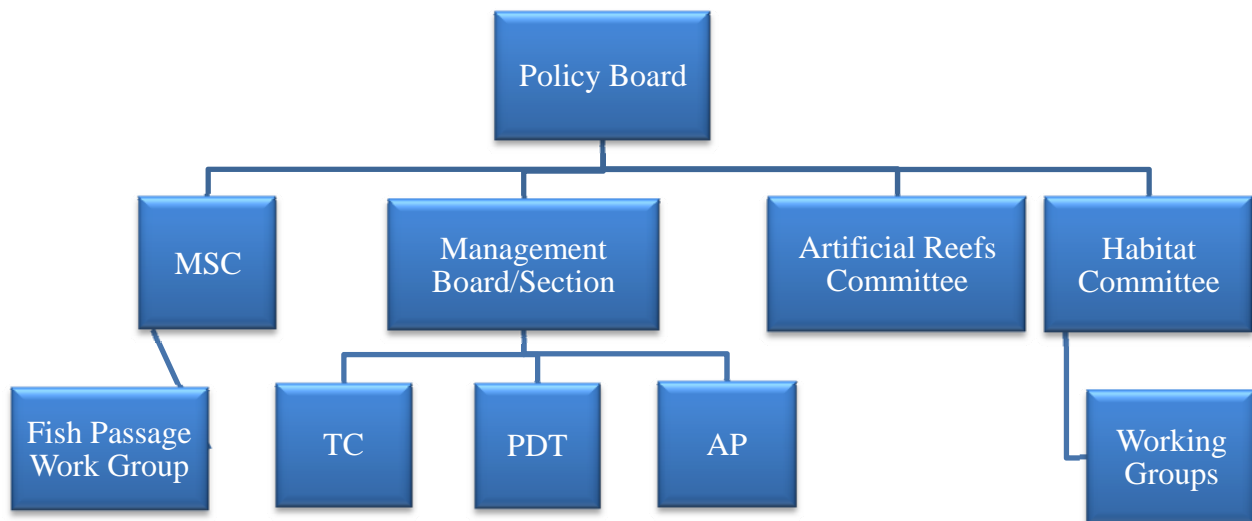
8.3 Process for selection and evaluation of authors/contractors .....	18
9.0 Habitat-Related Policy Statements and Resolutions.....	19
9.1 Drafting ASMFC policy and recommendations for action on habitat related issues .....	19
9.2 Drafting ASMFC resolutions on habitat related issues.....	19
10.0 The ASMFC Project/Permit Comment Protocol For Habitat Impacts .....	19
10.1 Process for sending an informational letter .....	20
10.2 Process for sending a recommended course of action (or comment) letter .....	21
11.0 Commenting On Other Non-ASMFC Documents.....	22
Appendix 1. ISFMP Fishery Management Plan Outline .....	23
Appendix 2. Condensed Habitat FMP Outline .....	27
Appendix 3. Developing and/or Updating Habitat Sections of ASMFC FMPs .....	28
Appendix 4. References .....	40

## **1.0 INTRODUCTION**

The Habitat Program of the Atlantic States Marine Fisheries Commission (Commission) is a branch of the Interstate Fisheries Management Program (ISFMP), which serves to support and supplement the efforts of the ISFMP Policy Board, fisheries Management Boards and Technical Committees. The goal of the Habitat Program is to identify, enhance, and cooperatively manage vital fish habitat for conservation, restoration, and protection, and supporting the cooperative management of ASMFC and jointly-managed species. Many of the Commission's committees are involved in working towards achieving this goal, but the Habitat Committee reports directly to the ISFMP Policy Board on the Commission's progress toward achieving this goal. The purpose of this document is to outline the Habitat Program structure and function and to promote understanding of Program processes.

## **2.0 ASMFC BOARDS AND COMMITTEES INVOLVED WITH HABITAT**

This section contains a brief outline of the structure, composition, and function of the Habitat Committee. The organizational chart depicts the committees that most frequently interact with the Habitat Committee, or which also can be tasked by the ISFMP Policy Board to address habitat issues and carry out habitat-related goals of the Commission's Strategic Plan. These committees include the Management and Science Committee (MSC), Management Board / Section, Artificial Reef, and Habitat Committees with input from and the working groups, technical committees (TC's), planning and development teams (PDT's), and advisory panels (AP's). While these committees and their supporting entities are not required to report directly to the Habitat Committee for approval of their work or products, the Habitat Committee should exchange frequent updates with each of these groups. The *Committee Guidance and Assessment Process* and the Interstate Fisheries Management Program Charter contain complete lists of additional committees and their descriptions.



## **2.1 Habitat Committee**

The Habitat Committee advises the ISFMP Policy Board with the goal of identifying, enhancing and cooperatively managing vital fish habitats for conservation, restoration, and protection, and supporting the cooperative management of ASMFC and jointly- managed species. Further, the Habitat Committee reviews, researches, and develops appropriate responses to concerns of inadequate, damaged, or insufficient habitat for Atlantic coastal species of concern to the Commission (ISFMP Charter, 2009). The Habitat Committee's responsibilities are to:

- Advise the ISFMP Policy Board on the conservation, restoration, and protection of vital fish habitat for ASMFC managed species.
- Prepare habitat related documents, position papers, and resolutions regarding proposed projects or general habitat altering activities that affect ASMFC managed species.
- Prepare, review and update, as needed, the habitat sections of all ASMFC Fishery Management Plans.
- Educate ASMFC Commissioners, stakeholders, and the general public about the importance of protecting, restoring, and enhancing habitat to achieve successful fisheries management goals.

The Habitat Committee is a standing Commission committee appointed at the discretion of the Commission Chair. Membership includes state representatives, representatives of several federal agencies and non-governmental organizations (NGO). Membership details are provided in section 4.1. The Habitat Committee reports directly to the ISFMP Policy Board.

### **2.1.1 Habitat Work Groups**

The Habitat Committee can create work groups to address various tasks outlined in the Annual Action Plan. Generally, Habitat Work Groups consist of Habitat Committee members, but outside experts can also be appointed for specific tasks. Most commonly, these work groups address updates to habitat sections in an FMP. When developing a habitat section, Technical Committee members are also invited to participate. A work group may also be created to develop an issue of *Habitat Hotline Atlantic*, a new installment in the Habitat Management Series, or another task or issue identified in the Annual Action Plan, but work group functions are not limited exclusively to these tasks. Each work group is given clear direction on the expected deliverable, as well as a timeframe for completion.

## **2.2 Artificial Reefs Committee**

The Artificial Reefs Committee is a standing Commission committee appointed at the discretion of the Commission Chair. The Committee advises the ISFMP Policy Board with the goal of enhancing marine habitat for fish and invertebrate species through the appropriate use of man-made materials. The Committee is comprised of the state artificial reef coordinators, representatives from the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service. The Artificial Reefs Committee works in close coordination with Habitat Committee, collaborating on relevant topics, reporting to one another on current efforts, but the Artificial Reefs Committee reports directly to the ISFMP Policy Board.

## **2.3 Management and Science Committee**

The MSC provides advice concerning fisheries management and the science of coastal marine fisheries to the ISFMP Policy Board. MSC's major duties are to provide oversight to the Commission's Stock

Assessment Peer Review Process, review and provide advice on species-specific issues upon request of the ISFMP Policy Board, evaluate and provide guidance to fisheries managers on multispecies and ecosystem issues, and evaluate and provide advice on cross-species issues (e.g., tagging, invasive species and exotics, fish health and protected species issues). The MSC also assists in advising the Policy Board regarding stock assessment priorities and timelines in relation to current workloads. The MSC is comprised of one representative from each member state/jurisdiction, the NOAA Fisheries Northeast and Southeast Regions, and the U.S. Fish and Wildlife Service (USFWS) Regions 4 and 5 who possess scientific as well as management and administrative expertise.

### **2.3.1 Fish Passage Work Group**

In 2009, the ISFMP Policy Board established the Fish Passage Working Group to address a number of tasks that were developed during the Commission workshop entitled, “Fish Passage Issues Impacting the Atlantic Coast States.” This Work Group consists of fish passage experts from state agencies, federal agencies, and non-governmental organizations working to improve passage of diadromous species managed by the Commission. The Fish Passage Working Group convenes as needed to discuss developments in fish passage and promote critical thinking to mitigate the negative effects of barriers to fish passage on diadromous species. The Fish Passage Working Group reports to the Management & Science Committee, and provide frequent updates to the Habitat Committee.

## **2.4 Management Boards / Sections**

Management boards are established by and advise the ISFMP Policy Board. Each board/section is comprised of the states/jurisdictions with a declared interest in the fishery covered by that board/section. The boards/sections consider and approve the development and implementation of FMPs, including the integration of scientific information and proposed management measures. In this process, the boards/sections primarily rely on input from two main sources – species technical committees and advisory panels. Boards/sections are responsible for tasking plan development teams (PDTs), plan review teams (PRTs), technical committees (TCs), advisory panels (APs) and stock assessment subcommittees (SAS). Each management board/section shall select its own chair and vice-chair. Chairmanship will rotate among the voting members every two years.

### **2.4.1 Technical Committees**

Management boards/sections may appoint TCs to address specific technical or scientific needs requested periodically by the respective board/section, Plan Development Team (PDT, see below for description of this group), Plan Review Team (PRT<sup>1</sup>), or the Management and Science Committee (MSC<sup>2</sup>). A TC may be comprised of representatives from the states, federal fisheries agencies, regional fishery management councils, Commission, academia, or other specialized personnel with scientific and technical expertise and knowledge of the fishery or issues pertaining to the fishery being managed. The Habitat Committee works with the Technical Committees in the development of species-specific habitat sections of FMP’s, and seeks their input on reports or issues that may influence a particular species.

---

<sup>1</sup> The PRT is responsible for providing advice concerning the implementation, review, monitoring and enforcement of FMPs that have been adopted by the Commission.

<sup>2</sup> The MSC provides advice concerning fisheries management and the science of coastal marine fisheries to the ISFMP Policy Board



### **2.4.2 Plan Development Team**

PDTs are appointed by boards/sections to draft FMPs. They are comprised of personnel from state and federal agencies who have scientific and management ability, knowledge of a species and its habitat, and an interest in the management of species under the jurisdiction of the relevant board. Personnel from regional fishery management councils, academicians, and others as appropriate may be included on a PDT. The size of the PDT shall be based on specific need for expertise but should generally be kept to a maximum of six persons. The Habitat Committee coordinates their efforts to update habitat information in an FMP with that of a PDT's to develop an FMP, amendment or addendum.

### **2.4.3 Advisory Panels**

Advisory Panel (AP) members include stakeholders from a wide range of interests including the commercial, charter boat, and recreational fishing industries, conservation interests, as well as non-traditional stakeholders. Members are appointed by the three Commissioners from each state with a declared interest in a species because of their particular expertise within a given fishery. APs provide guidance about the fisheries that catch or land a particular species. The AP's role is to provide input throughout the entire fishery management process from plan initiation through development and into implementation. APs have provided some very key information on habitats used by ASMFC species, and/or their interaction with other species.

## **2.5 Atlantic Coastal Fish Habitat Partnership**

The Atlantic Coastal Fish Habitat Partnership (ACFHP) is a coast-wide collaborative effort to accelerate the conservation of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes. The Partnership consists of resource managers, scientists and professionals representing 30 different states, federal, tribal, non-governmental and other entities. ACFHP works in areas stretching from Maine to the Florida Keys, and from the headwaters of coastally draining rivers to the edge of the continental shelf, with a focus in estuarine environments.

ACFHP is a recognized Fish Habitat Partnership (FHP) of the National Fish Habitat Action Plan (NFHAP), and is a separate entity from the Commission. However, ACFHP does receive administrative support from the Commission. Habitat Committee members may serve as steering committee members or organization representatives for ACFHP. ACFHP works in a parallel, complementary function with the Habitat Committee throughout the Commission member states to complete aquatic habitat conservation projects, including on the ground restoration projects. ACFHP coordinates closely with two adjacent and partially overlapping FHPs, the Southeast Aquatic Resources Partnership (SARP) and the Eastern Brook Trout Joint Venture (EBTJV). Collaboration and clear communication between ACFHP, adjacent NFHP's, and the Habitat Committee is beneficial to Commission habitat conservation goals associated with managed species.

ACFHP's primary goals are to:

- Prioritize fish habitat conservation needs among stakeholders.
- Support on the ground habitat conservation projects by securing and leveraging funding.
- Develop coast-wide scientific assessments and projects, whose outcomes provide decision support tools for partners and other interested stakeholders.
- Facilitate stakeholder access to tools and guidance for on-the-ground conservation and prioritization.

## **2.6 Coordination with Other Committees/Groups**

Bi-annual updates are exchanged with the Commission's MSC. The Habitat Coordinator works with the MSC Coordinator to ensure that important, relevant news is exchanged between the two committees. There are additional work groups for which the Habitat Committee either receives updates or enlists the participation of Habitat Committee member(s) (e.g. ASMFC Ecosystem Based Fishery Management Work Group). Information and updates are regularly exchanged between the Habitat Committee and Artificial Reef Committee, as well as the Habitat Committee and Fish Passage Work Group.

Species Boards/Sections may consider referring broader habitat issues to the Habitat Committee. Boards/sections will develop specific and clear guidance whenever tasking committees for advice. ISFMP staff, in consultation with the board/section Chair and technical support group Chair, will develop the written charge. The charge will contain terms of reference to clearly detail all specific tasks, the deliverables expected, and a timeline for presentation of recommendations to the board/section. It is the responsibility of the ISFMP staff and any technical support group Chair present at board/section meetings to ensure the timeline can be met. Any problems or discrepancies encountered by the technical support group in meeting the charge will be discussed with the appropriate ISFMP staff and board/section Chair.

## **3.0 PROGRAM DOCUMENTATION**

### **3.1 Annual Action Plan**

The Commission's Annual Action Plan details the activities and tasks to be accomplished and budgeted for the year. Most of the Habitat Program's responsibilities are outlined in Goal #4, "Protect, restore, and enhance fish habitat and ecosystem health through partnerships, policy development and education," but additional tasks may also be found under other goals within the Action Plan. Goal #4 includes all habitat-related tasks covered by the Commission's budget and may be assigned to Habitat Committee, Artificial Reef Committee, or ACFHP. Each year, the Habitat Coordinator will work with the Habitat Committee Chair and the ISFMP Director to update the Habitat Committee strategies in the ASFMC Action Plan. The Habitat Committee will have an opportunity to review and approve the Habitat Program's activities and planned schedule prior to submission. Annual budget planning will take place as part of this action planning process. The Coordinator will work separately with the Artificial Reef Committee to develop and approve the tasks assigned to Artificial Reef Committee. The ACFHP coordinator will facilitate the process for those tasks assigned to the Partnership.

### **3.2 Habitat Committee Annual Work Plan**

To best align the Habitat Committee's efforts and time with that of the Commission's goals and objectives, the Habitat Coordinator and Habitat Committee Chair, in consultation with the ISFMP Director, will prioritize the Annual Action Plan tasks that pertain to the Habitat Committee. The work plan will clarify the task, identify who is responsible for accomplishing the tasks (e.g. Coordinator, a potential contractor, committee member, working group or Committee as a whole), the process, and timeline to complete the task.

### **3.3 Habitat Committee Annual Effectiveness Review**

At the spring Habitat Committee meeting each year, an annual review of the effectiveness of the Habitat Program should be conducted. This review should be completed by September to allow time to incorporate changes into the Commission Annual Action Plan for the following year that is approved at the Commission annual meeting week. The review should proceed as follows:

1. Tasks completed by the Committee should be reviewed and compared to the Commission Annual Action Plan.
2. Accomplishments (regardless of inclusion in the Action Plan) should be noted.
3. Deficiencies should be realized and a plan to address them should be discussed.
4. Activities should also be evaluated in the context of the Commission's Five-Year Strategic Plan.
5. In light of this review, suggestions should be made for changes to the Annual Action Plan for the coming year.
6. Commissioners will complete a similar review of the Habitat Program once every five years, in conjunction with the revision of the Commission's Strategic Plan.

### **4.0 COMMITTEE EXPECTATIONS**

The Habitat Committee, under the direction of the ISFMP Policy Board, is a standing ASMFC Committee that conducts the activities of the Habitat Program, with the assistance of the Habitat Coordinator. Committee members should expect to attend ~2 meetings each year. The Habitat Committee operates under the principle of consensus agreement.

Even though all Committee members have been appointed by a specific agency, it is not appropriate for members to represent the policies and/or politics of that agency. It is the responsibility of each committee member to use the best scientific information available and established techniques consistent with the current state of scientific knowledge. Although each Committee member will have a different background, the Committee as a whole is expected to work in support of the Commission's broader goals, mission, and vision. The individuals on the Committee represent the expertise of their agency or organization and should offer opinions that focus on best available science when considering Commission habitat issues, which at times may differ from their own agencies or organizations. All participants in the Commission process should act professionally and expect to be treated with respect. See Section 5.6 on meeting etiquette.

#### **4.1 Committee Membership**

Each member state of the Commission shall be allowed (and encouraged to present) one nomination to the Habitat Committee for the Commission Chair's consideration. Nominations shall not include current ASMFC Commissioners. However, all ASMFC Commissioners are welcome and encouraged to attend any Habitat Committee function at their discretion.

The U.S. Fish and Wildlife Service and National Oceanographic and Atmospheric Administration Fisheries Service (NOAA Fisheries) each have two nominations (one from each geographic region within the Commission's jurisdiction) to the Habitat Committee for the Commission Chair's consideration. The following federal agencies are each provided one nomination to the Habitat Committee for the Commission Chair's consideration: National Ocean Service, Environmental Protection Agency, U.S. Geological Survey, and the Army Corps of Engineers. Additional agencies

may be added at the discretion of the Commission Chair in consultation with the Executive Director of the Commission.

Two seats shall be available on the Habitat Committee for members from non-governmental organizations (NGO). Upon the resignation of an NGO member, the NGO seat shall become available to the NGO selection process described in Section 4.3. NGO seats shall not automatically turn over to another member of the previous member's organization.

The ISFMP Policy Board shall evaluate changes to the overall structure of membership on the Habitat Committee.

All Habitat Committee members should be able to demonstrate a strong knowledge of general fish habitat for Commission managed species, a familiarity with current Atlantic estuarine and marine habitat issues, and understanding for the habitat management process within a state or Federal waters. Committee members also must be willing to dedicate a reasonable amount of time to the activities of the program, including meetings, conference calls, workshops, document review, and work group functions.

It is also important that each committee member provide periodic briefings to his/ her agency's Administrative Commissioner on the discussions and actions taken at all Habitat Committee meetings. **These briefings should be done after every Habitat Committee meeting at a minimum.**

#### **4.2 Participation Review Process**

It is important that all members of a Commission committee fully participate in all meetings and activities of the committee. In the event that it comes to the attention of the Habitat Coordinator, or the Habitat Committee, that any individual Committee member is non-participatory in activities and meetings for the period of at least one year, a participation review may take place. The appropriate Administrative Commissioner should be informed if a committee member is unable to commit to the level of participation required.

If a NGO member is found to be non-participatory, a consultation will be made with the relevant organization. If the NGO member is not able to increase participation, the NGO seat shall become available to the NGO selection process described in Section 4.3.

Habitat Committee members are encouraged to send meeting-specific proxies to meetings that they are unable to attend. Commission staff should be contacted by the committee member prior to the start of the meeting if he or she is unable to attend. The committee member, with appropriate approval from the agency supervisory staff if necessary, should provide staff with the name of his/her proxy for that committee meeting in writing (email or letter). Proxies must be from the same state or jurisdiction or agency/organization as the individual making the designation. Proxies shall abide by the rules of the committee. Advance notification of proxy names must be submitted to the Habitat Coordinator prior to the meeting to ensure proper distribution of meeting materials and inclusion on the travel authorization.

### **4.3 NGO Selection Process**

The selection process for NGO representatives to the Habitat Committee will be similar to the process for the selection of non-traditional stakeholders to Commission Advisory Panels. In the event that a NGO seat is vacated on the Habitat Committee (through non-participation, resignation, or the Commission Chair's evaluation), a "Call for Nominations" will be distributed to the public.

The NGO seat will be open to any organization, regardless of type (i.e., environmental, academic, industry, etc.). Interested organizations will be required to submit a nomination form (posted on the Commission's website or obtained from the Habitat Coordinator) identifying the nominated individual's qualifications, and present a letter of support to the Commission. Nominees should be able to demonstrate a strong knowledge of general fish habitat, a familiarity with current Atlantic habitat issues, and be an effective advocate for fish habitat. Nominees also must be willing to dedicate a reasonable amount of time to the activities of the program, including meetings, conference calls, workshops, document review, and working groups.

Demonstration of the ability to increase the credibility and expertise of the Habitat Program so that it will become a recognized authority on Atlantic coastal habitat issues will be a key element of the evaluation of nominations. The Habitat Committee will have the opportunity to review nominations and make a recommendation to the Commission Chair for the appointment of the vacant NGO seat. Ultimately, the selection of new NGO representatives will be at the discretion of the Commission Chair.

### **4.4 Chairmanship**

Unless otherwise specified, all Commission committees and subcommittees will elect their own Chair and Vice Chair. Chairs serve two-year terms and chairmanship should rotate among members of the committee. The role of the Chair is demanding and only those willing and able to commit the time and energy required by the job should agree to serve. The Chair must be willing to perform the job and state/federal agencies/NGOs must be willing to provide the Chair time to attend to Commission business. At the end of a sitting Chair's term, the Vice Chair will become the Chair, and nominations for a new Vice-Chair will be solicited from the Habitat Committee. The Vice Chair will serve in this capacity for a 2-year term under the acting Chair. It is the responsibility of all officers to facilitate meetings in an objective manner and represent the viewpoints of all committee members, including opposing opinions and opinions in opposition to their own. In the event that circumstances require a Chair to resign their position during their term, the Vice-Chair shall replace the Chair, and have the option of serving the remainder of the previous Chair's appointment in addition to their own anticipated two-year term. For Chair and Vice Chair meeting responsibilities, please see Section 6.3.

### **4.5 ASMFC Staff Responsibilities**

The Habitat Coordinator is responsible for organizing all Habitat Committee activities. The Habitat Coordinator will also serve as a liaison on species-specific issues between the ISFMP Policy Board, Management Boards/Sections, Technical Committees, Advisory Panels, Artificial Reefs Committee, Law Enforcement Committee, and Management & Science Committee. The Coordinator, in consultation with the Chair and Vice-Chair, is responsible for scheduling committee meetings, drafting agendas, and distributing meeting materials. The Habitat Coordinator works with the Habitat Committee, Habitat Committee Chair, and ISFMP Director to identify, prioritize, and carry out program activities as are outlined in the Commission's Annual Action Plan.

The Habitat Coordinator, in consultation with the Chair, will assist in prioritizing tasks assigned to the Habitat Committee and its work groups. Staff should track committee meeting attendance and provide records upon request. The Habitat Coordinator and the Chair should assist in clarifying the details of any tasks assigned to the Habitat Committee by the ISFMP Policy Board. Assistance should also be provided in the development of the written charge, including all specific tasks, expected deliverables, and a timeline for presentation of recommendations to the Board.

The Habitat Coordinator and a Habitat Committee work group are responsible for producing the newsletter, the *Habitat Hotline Atlantic*.

## **5.0 MEETING POLICIES AND PROCEDURES**

For the purpose of this section, a meeting can be attended by Habitat Committee members in-person, through a conference call, or via webinar unless specified otherwise in a specific format.

### **5.1 Meetings announcements**

A public notice, via the Commission website ([www.asafc.org](http://www.asafc.org)), will be provided at least two weeks prior to all in-person meetings of the Commission and its various committees, and at least 48 hours notice will be provided for any meetings held by conference call; provided exceptions to these notice requirements may be granted by the Commission Chair. A non-committee member can request, through Commission staff, to be notified of committee meetings via email (*Note: the public notice of the Commission website is the official notification of a scheduled meeting.*). Non-committee members may attend any in-person or conference call committee meeting, unless confidential data are being discussed.

If a non-committee member would like to attend a webinar, he/she should contact the Habitat Coordinator or other appropriate Commission staff 24 hours prior to the webinar in order for staff to determine if space is available. If Commission staff is not contacted, priority for available webinar space will be given to committee members.

### **5.2 Materials Distribution**

Meeting materials will be distributed to committee members prior to committee meetings via email or FTP site, if necessary. Agendas and documents for public review will be available via the Commission website. Draft materials with preliminary content and/or with confidential data will not be distributed outside of the committee. The Chair will explain at the outset of meetings that all data and analyses are preliminary and not to be shared until they have been finalized and distributed to the appropriate board/section.

### **5.3 Roles of Chair and Vice-Chair at Meetings**

It is the responsibility of the Chair to conduct and facilitate meetings. The Chair will lead committees through agenda items in consultation with staff, including items requiring specific action. The Chair is responsible for working with the Habitat Coordinator to ensure that the activities identified in the Commission Annual Action Plan are completed. The Chair should assist in clarifying the details of any tasks assigned to the Habitat Committee. Assistance should also be provided in the development of the written charge, including all specific tasks, expected deliverables, and a timeline for presentation

of results and/or recommendations to the Board. The Chair should attend all Board meetings and should be in frequent contact with the appropriate ISFMP staff. It is also the responsibility of the Chair of the technical support group to provide presentations to the relevant oversight committee on all findings and advice. All formal presentations should be conducted in a manner consistent with the guidance provided in Subsection 6.4.5.

The Habitat Committee Chair is also responsible for clarifying the majority and/or minority opinions, where possible. **The overall goal of all technical support groups is to develop recommendations through consensus. The committee should not vote on issues, but should develop a majority and minority opinions for presentation to the board. It should be noted that minority opinions should be used only as a last resort when full consensus cannot be reached.** The Commission will periodically conduct meetings management and consensus-building seminars for all Chairs and Vice-Chairs of technical support groups, and others as appropriate. Chairs and Vice-Chairs should attend these seminars in order to improve your their ability to conduct efficient meetings, objectively facilitate discussions and development of consensus recommendations, and objectively represent opposing viewpoints.

The Vice Chair will act as Chair when the Chair is unable to attend a meeting or conference call. It is the role of the Vice Chair of committees to take meeting minutes that will be used to develop meeting summaries and committee reports. A member of the committee will be appointed by the Vice Chair to take minutes when the Vice-Chair is acting as Chair.

#### **5.4 Meeting Records**

Meeting summaries are provided for all Commission committee meetings (a committee report or meeting minutes can serve as the meeting summary). If the Vice-Chair is unable to take minutes or there is no Vice-Chair, another committee member will be appointed to take minutes. Meeting summaries will be distributed by ISFMP staff to all committee members for review and modification. Meeting summaries should be finalized and approved by the Habitat Committee no later than 60 days following the meeting. Draft meeting summaries will only be distributed to Habitat Committee members for review. The Chair should ensure that all Habitat Committee member comments are addressed prior to approval and public distribution of meeting summaries and committee reports.

Commission staff should ensure that meeting summaries of all Commission technical support groups are distributed to other appropriate support groups, including APs, TCs, Law Enforcement Committee (LEC<sup>3</sup>), and MSC. All board/section meeting summaries, and appropriate documentation, should also be provided to technical support groups. Upon approval, these documents will also be posted to the Commission website.

#### **5.5 Public Participation at Meetings**

Public comment or questions at committee meetings may be taken at designated periods at the discretion of the Habitat Committee Chair. In order for the committee to complete its agenda, the Chair, taking into account the number of speakers and available time, may limit the number of comments or the time allowed for public comment. The Chair may choose to allow public comment

---

<sup>3</sup> The LEC provides information on law enforcement issues, brings resolutions addressing enforcement concerns before the Commission, coordinates enforcement efforts among states, exchanges data, identifies potential enforcement problems, and monitors enforcement of measures incorporated into the various FMPs.

only at the end of the meeting after the Habitat Committee has addressed all its agenda items and tasks. Where constrained by the available time, the Chair may limit public comment in a reasonable manner by: (1) requesting individuals avoid duplication of prior comments/questions; (2) requiring persons with similar comments to select a spokesperson; and/or (3) setting a time limit on individual comments. The Commission's public participation policy is intended to fairly balance input from various stakeholders and interest groups. Members of the public are expected to respect guidelines outlined in section 6.6, meeting etiquette.

Members of the public may be invited to give presentations at committee meetings if the board/section has tasked the committee with reviewing their materials, or if members of the public have been invited in advance by the Habitat Committee Chair to respond to a request from the Habitat Committee for more information on a topic. Invitations will be offered in advance of the meeting. Public presentations will not be allowed without these invitations. See Section 8 for additional details regarding public participation in stock assessment data, assessment, and peer review workshops.

#### ***5.5.1 General Submission of Materials***

Public submissions of materials for Habitat Committee review outside of the benchmark assessment process must be done through the board/section Chair (see Section 4.0). The Chair will prioritize the review of submitted materials in relation to the existing task list. Materials provided by the public should be submitted to the Chair at least one month in advance of the meeting. A committee is not required to review or provide advice to the board/section on materials provided by the public unless it is specifically tasked to do so by the Chair in writing or from the board/section. Materials will be distributed to the Habitat Committee by Commission staff.

#### **5.6 Meeting etiquette**

It is the role of the Chair to ensure participants (committee members and members of the public) are respectful of the following meeting guidelines. The Chair should stop a meeting if a participant is not following these guidelines, and direct them as to the appropriate way to continue. Commission staff should note when these guidelines are not being followed if the Chair does not do so. If a participant is being disruptive, the Chair may ask the individual to leave the meeting.

- **Come prepared.** Read the past meeting summary prior to the meeting. Bring something on and with which to write. All presenters should ensure their handouts, presentations, etc., are organized and complete, and that appropriate arrangements have been made with the Habitat Coordinator for needed media support and material distribution.
- **Be respectful of others.** Hold your comments until the Chair asks for comments, unless open discourse throughout the meeting is encouraged. Do not interrupt other attendees. Wait to speak until the Chair recognizes you. Avoid holding side-bar discussions with others until a meeting break or after the meeting is adjourned. Side conversations are disruptive to other participants and inconsiderate of the group.
- **Mute electronics.** Turn all cell phones on vibrate or turn them off completely. Do not answer your phone while in the meeting, and step out of the room to take emergency calls.



- **Attend the entire meeting.** Make travel arrangements to allow participation in the entire meeting. Early departure by committee members disrupts the meeting and impacts the development of consensus recommendations and decisions.

If complaints arise, they can be brought to the attention of the Chair of the committee, Commission staff, or the Commission's Executive Director.

## **6.0 COMMUNICATIONS POLICIES AND GUIDELINES**

### **6.1 Email Policies**

For the purposes of distributing draft committee documents, distribution will be limited to committee members. Non-committee members may request to receive notices of committee meetings, agendas, approved meeting summaries and final committee reports.

### **6.2 Recordings**

Committee meetings are open for the public to attend and as such may be recorded (audio or video) by any participant (public or committee member) with notification to the Chair and staff prior to the start of the meeting, and so long as those recordings are not disruptive to the meeting. The Chair and/or staff will notify committee members prior to the start of the meeting that they will be recorded. Staff may record meetings for note taking purposes, but the official meeting record is the meeting summary or committee report. Staff recordings will not be distributed.

### **6.3 Webinars**

While committee members are encouraged to attend all technical meetings in person, the Commission acknowledges occasional travel constraints or other impediments to attendance in person. If a committee member cannot attend a technical meeting in person, that member may request that a webinar be arranged to accommodate them. However, the Commission cannot guarantee that the audio or visual quality of the webinar will be sufficient to allow remote complete participation in the meeting by committee members. Committee members should contact Commission staff at least twenty-four hours in advance if they require a webinar, and those requests may be accommodated as feasible.

If a committee meeting is held via webinar (i.e., there is no in-person meeting), it shall be open to the public. As with in-person meetings, public comment or questions at committee webinars may be taken at designated periods at the discretion of the committee Chair (see Section 6.5 for more detailed guidance on public participation in committee meetings). Certain agenda items may not be open to the public; these include discussion of confidential data and preliminary model results. Non-committee members will be asked to leave before confidential issues are discussed. To ensure that enough bandwidth is reserved for the meeting, members of the public who wish to attend the webinar must contact staff 24 hours prior to the webinar to ensure there is available space.

Commission policy on meeting etiquette (Section 6.6) applies to webinars as well as in-person meetings. In addition, participants are asked to mute their phone lines when not speaking to reduce background noise that may disrupt the call.

Quarterly Commission Board Meetings are broadcast via webinar and information regarding listening to those meetings will be available via the Commission's website.

## 6.4 Reports

All reports developed by any Commission committee should include, at a minimum, the following components (1) the specific charge to the committee, (2) the process used by the committee to develop recommendations and/or advice, (3) a summary of all committee discussions, and (4) committee recommendations and all minority opinions. All committee reports are a consensus product of the committee, not an individual member<sup>4</sup>.

6.4.1 Non-Committee Member Reports: Outside of the benchmark stock assessment process, a non-committee member may submit reports for committee review through the board/section Chair (see Section 6.5.1). The board/section Chair will determine if the report should be reviewed by the appropriate committee and specify tasks to be completed in the review. Non-committee reports will follow the same formatting guidelines and distribution procedures as Commission committee reports.

6.4.2 Distribution of Committee Reports: Draft committee reports will only be distributed to committee members. All committee member comments should be addressed prior to approval and distribution of committee reports. Stock assessment and peer review reports will not be distributed publicly until the board/section receives and approves the reports for management use. Results of a stock assessment may not be cited or distributed beyond the committee before the assessment has gone through peer review and been provided to the board/section. Commission staff will distribute reports to the appropriate boards/sections and post committee reports on the website following board approval.

6.4.3 Corrections to Reports: Corrections to published stock assessment reports can be made on rare occasions when mistakes are found after board/section approval. All corrections will be highlighted in yellow within the report. A new publication date will be added below the original publication date on the cover of the report, e.g., *Corrected on March 29, 2012*. An explanation of the correction will be included in the introduction or executive summary and highlighted.

6.4.4 Presentations: Chairs and committee members will be responsible for presenting technical reports to boards/sections, APs, and other committees who may have a limited technical background. It is important to effectively present technical information to fishery managers and stakeholders in a straightforward and understandable manner.

All presentations should be developed using a Power Point template provided by Commission staff. Staff can assist in the development of presentations. A copy of the presentation should be provided to staff prior to the meeting. Presentations should be developed consistent with guidelines for other professional presentations, such as the American Fisheries Society. Some general guidelines include:

- Keep visuals simple, limit one idea per slide.
- Prepare figures and tables specifically for your presentation. Copies from manuscripts or papers usually contain too much detail for a presentation.
- When working with words, think brevity. Use a maximum of 6 words per line with 5 or 6 lines per slide. Use key phrases to emphasize important points.
- Tables should be simple with a maximum of 3 columns and 5 rows or vice versa.

---

<sup>4</sup> However, a committee report can acknowledge an individual member, or members, has/have been largely responsible for production of a document/report.

- Graph/table values should be in a large enough font to be clearly viewed.
- Visuals appear confusing when too many colors are used; limit to 2 to 4 contrasting colors.

## **7.0 FMP HABITAT SECTIONS**

### **7.1 Guidance on the development of habitat sections of FMPs**

For species under the sole jurisdiction of the Atlantic States Marine Fisheries Commission (Commission) or managed complementarily to federal FMPs, this document will serve as the primary guide for preparation of the habitat portion of the FMP. For species managed jointly by the Councils and the Commission, or by the Commission and NOAA Fisheries (e.g. coastal sharks), the NOAA Fisheries guidance and regulations, pursuant to current federal fishery management legislation, must be used as well. The complete ISFMP FMP outline can be found in Appendix 1.

The Commission has chosen to adopt Essential Fish Habitat (EFH) designations prepared by the Regional Fishery Management Councils (Councils) for any species managed jointly or in association with the Councils: such as bluefish, scup, summer flounder, Atlantic herring, spiny dogfish, coastal sharks, and black sea bass. For species solely under Commission management, the Commission has chosen to identify all habitat and Habitat Areas of Particular Concern but will refrain from the identification of EFH. ***When an HAPC is described for a species solely under the management of the Commission, the designation does not have any regulatory authority. Please refer to the ASMFC HAPC document for a list of species under Commission management only and description of the corresponding HAPC (ASMFC 2013b).***

The five basic sections of the habitat component required for Commission FMPs include:

1. Description of the habitat
2. Identification and distribution of habitat and HAPCs
3. Present condition of habitats and HAPCs
4. Recommendations and/or requirements for fish habitat conservation/restoration
5. Information needs/recommendations for future habitat research

A Commission FMP may also include habitat-relevant information on:

- Ecosystem considerations
- Habitat monitoring programs
- Habitat conservation and restoration management program implementation, including:
  - Preservation of existing habitat
  - Habitat restoration, improvement, and enhancement
  - Avoidance of incompatible activities
  - Fisheries practices
  - Mandatory habitat compliance requirements for states
  - Artificial reef development/management

Background synthesis information can be included in a FMP Background Document. Habitat information appropriate for the background document may be included in the FMP Background Document, or published as a separate habitat source document. In this guidance, all habitat

information used for FMP development will be referred to as information for “habitat section” preparation, rather than designated for inclusion in either FMPs or background documents. For an overview of the habitat sections of an FMP, please refer to Appendix 2. For complete description and guidance on the content of the habitat section and its parts, please refer to Appendix 3.

The best available science-based information and data should be used in development of the habitat sections. Statements should be supported by citations, which are listed in a “literature cited” section. Peer-reviewed literature, gray literature (state or federal technical reports, Doctoral dissertations, or Masters theses), and personal communication with knowledgeable professionals should be sought, utilized, and cited in the document. This includes, but is not limited to, that body of biological, environmental, and ecological data concerning habitats and their function and value, provided that the methods of collecting such information are clearly described and are generally accepted as scientifically valid. Data may come from state, federal, or private databases. If original unpublished information from the author is available, then this information should be included, with any necessary explanation about the materials and methods that were applied.

In many cases, such as the determination of how much habitat is necessary to support a given population size, there will likely be insufficient information upon which to draw conclusions. This should be clearly stated, in order to show that the information was sought but unavailable, and to identify the issue as a research need.

## **7.2 Process for development of habitat sections of FMPs**

1. Development, or revision, of a habitat FMP section will be initiated by notification from the appropriate FMP Coordinator to the Habitat Coordinator. Alternatively, the Habitat Committee may submit a request to a species board to initiate development of a FMP addendum to deal with an important habitat issue that the Committee feels should be addressed for a species that is inadequately (as determined by the Habitat Committee) covered in previous plans and amendments.
2. The Habitat Coordinator works with the Habitat Committee, or work group, to identify authors for the habitat section and create timelines for review and completion.
  - a. The Habitat Committee may create ad hoc species-specific work groups to develop habitat sections of FMPs. Such a work group may consist of Habitat Committee members and Technical Committee members. In addition to the work group and if funds are available, the Commission may initiate a contract for the development of a habitat section. The work group would provide oversight of contractor’s work.
3. The Habitat Coordinator is responsible for ensuring the section is compliant with all Commission’s requirements, and must coordinate with the FMP coordinator. Additional writers identified by the Habitat Committee can provide additional information to ensure scientific accuracy.
4. The Habitat Committee working group (when applicable) will review and approve the draft habitat section for the FMP. The draft will then be sent to the Habitat Committee for final review and approval.
5. The draft is then sent to the appropriate Technical Committee for review and approval.

6. The appropriate Management Board or Section reviews the draft and provides ISFMP staff with direction to develop an addendum for the new or revised FMP.
7. The designated Management Board or Section reviews the draft addendum and approves it for public comment.
8. The specified Management Board or Section reviews the draft addendum and public comment and considers final approval of the document.

## **8.0 HABITAT SOURCE DOCUMENTS**

### **8.1 Process for development of source documents**

1. Upon approval by the ISFMP Policy Board, the Habitat Committee can initiate the development of a habitat source document on topics of immediate and broad interest to ASMFC Commissioners that will provide needed information to the states, and advance the Commission toward achieving its vision. For a full list of topics already addressed, please visit <http://www.asmf.org/educationOutreach.htm>.
2. Development and timing will be planned by the Habitat Coordinator with final approval of the ISFMP Director to ensure that staff and funds are available to complete the proposed documents in a timely manner.
3. Before time and effort are put into any source document, an evaluation of the usefulness of the document and goal/objective/program compliance must be conducted. In this evaluation process, the Habitat Committee must consider the following components:
  - a) Clearly define the purpose of the document. Be sure the focus and expectations are well articulated.
  - b) Be sure that the objectives of the document adhere to and advance the mission of the habitat program and the Commission as a whole.
  - c) Develop an outline of the entire document in as much detail as possible before contractors are hired or a work group appointed to complete the work.
  - d) Set a realistic, detailed timeline for completion of the document.
4. The Habitat Coordinator may request an informal editorial review of the document (or sections therein) from the Habitat Committee before it is completed.

### **8.2 Process for source document approval**

1. Once a document is determined by the Habitat Coordinator to be complete, it will be presented to the Habitat Committee for formal review and approval. No documents will be formally approved until they are complete.
2. Following approval by the Habitat Committee, the document will be forwarded to the ISFMP Policy Board for final approval.

### **8.3 Process for selection and evaluation of authors/contractors**

1. Following Habitat Committee completion of a detailed outline for the given source document, a "Request for Proposals" shall be distributed that clearly outlines the direction of the document. Proposals shall be submitted to the Habitat Committee for consideration.

2. The Habitat Committee shall carefully and critically review all submissions, and select the appropriate author(s). If no (or very few) submissions are made, the ISFMP Director and Habitat Coordinator shall work with the Habitat Committee to locate an appropriate author.
3. Authors shall be made aware of, and agree to, the expected timeline for completion and content of the document.
4. Authors shall use the current American Fisheries Society Style Guide for document formatting and citations.
5. Contractors shall not receive final payment until the document is ready for publication.
6. The Commission reserves the right to request revisions of the document until it is completed to the satisfaction of the Habitat Committee, ISFMP Policy Board, and Commission staff.

## **9.0 HABITAT-RELATED POLICY STATEMENTS AND RESOLUTIONS**

The Commission may use policy statements and resolutions to take a position on an issue that may hinder the restoration or stock status of Commission-managed species in multiple jurisdictions. Unlike the project or permit commenting process discussed below, a policy statement or resolution is not specific to one project or one location, rather it refers to a broader scale issue that may impact a species or several species in several locations (e.g. fish passage or water quality).

### **9.1 Drafting ASMFC policy and recommendations for action on habitat related issues**

1. The Policy Board may direct the Habitat Committee to develop a policy statement to address an issue or the Habitat Committee can initiate the development of policies by Committee action in response to a request from the Policy Board to address an issue.
2. The Habitat Committee works with the Habitat Coordinator to draft the policy and recommendations for action, if any.
3. The Habitat Committee reviews and approves the draft policy before forwarding it to the ISFMP Policy Board for approval.
4. The Habitat Coordinator and the Habitat Committee should continually work to determine the effectiveness of policy statements in accomplishing the policy goal.

### **9.2 Drafting ASMFC resolutions on habitat related issues**

1. The Policy Board may direct the Habitat Committee to develop a policy statement to address an issue or the Habitat Committee can initiate the development of resolutions by Committee action in response to a request from the Policy Board to address an issue.
2. The Habitat Committee works with the Habitat Coordinator to draft the resolution and gather supporting documentation for a position.
3. The Habitat Committee reviews and approves the resolution before forwarding it to the ISFMP Policy Board for approval.

## **10.0 THE ASMFC PROJECT/PERMIT COMMENT PROTOCOL FOR HABITAT IMPACTS**

The Commission may have input on project and permit review that may affect Commission managed fisheries. Other federal and state agencies have the expertise, resources, and responsibility to conduct these reviews. However, in the event that a project may affect Commission-managed migratory

species, it may not only be appropriate, but responsible, to comment on landscape-scale impacts, in accordance with the Commission's unique inter-jurisdictional role.

Any input the Commission provides to permitting agencies will be as a party with an interest in protecting fish, fish habitats, and the fisheries dependent upon them. The Commission will not devote the time and resources to review and comment on permits and projects unless several conditions, outlined below, are met. However, the Commission should still call to the attention of the permitting agencies relevant information that the Commission has gathered in the form of FMPs and Habitat Management Series Reports. In this process, it is the responsibility of the Habitat Committee to evaluate a project based on its technical aspects as it may affect fisheries habitat and/or fish populations, and the responsibility of the ISFMP Policy Board to evaluate a project based on its implications to fishery management.

This process is separated into two distinct events: 1) early involvement by the Habitat Committee in the technical review of developing projects (e.g., scoping process for an EIS), which result in an informational letter that does not provide a Commission position or opinion; or 2) review by the Policy Board (usually later in the permit process), which results in a letter specifying a Commission position or policy or course of action.

### **10.1 Process for sending an informational letter**

1. Project Identification
  - a. *Who:* Commissioners, Habitat Committee members, Management and Science Committee members, Advisory Panel members, Technical Committee members, interested stakeholders, and/or Commission staff
  - b. *What:* Alert the Habitat Coordinator of a proposed project/permit that potentially impacts Commission-managed species or their supporting habitat.
  - c. *When:* As early as possible during the scoping period
2. Notification
  - a. *Who:* Policy Board
  - b. *What:* Habitat Coordinator issues notification that the Habitat Committee is examining a particular project/permit and implementing the review process.
3. Deliberation
  - a. *Who:* Habitat Committee and any interested Commissioners
  - b. *What:* Discussion to determine if the project/permit meets the following criteria:
    1. The project may have significant stock-level impacts on Commission-managed species and their supporting habitat.
    2. Staff thinks that Commission involvement has the potential to make an impact on the process.
    3. The project has inter-jurisdictional implications.
    4. The project would establish either a highly desirable, or highly undesirable, precedent from the Commission's perspective.
    5. Commission staff, with the assistance of Habitat Committee members and/or federal and state agency staff, can adequately research and address the proposed project in a reasonable time frame and within the existing budget.

#### 4. Writing and Sending an Informational Letter

- a. *Who*: Whomever proposed that an informational letter be sent, in coordination with the Habitat Coordinator, interested Habitat Committee members, and interested Commissioners
- b. *What*: The Commission has pertinent information regarding impacts of a project on a Commission species or habitat, and the Habitat Committee determines by consensus that the issue is significant enough to warrant an informational letter. Interested parties in coordination with the Habitat Coordinator compose and distribute the letter. An informational letter may include, but is not limited to, information gathered from:
  1. FMPs, including EFH designations for jointly-managed species.
  2. Habitat Management Series Reports.
  3. Commission Policies and Resolutions.
  4. External peer-reviewed literature.

**Note:** The informational letter does not provide an opinion or position of the Commission, but rather provides information necessary for the permit agency to properly evaluate their action.

#### **10.2 Process for sending a recommended course of action (or comment) letter**

1. Project Identification
  - a. *Who*: Commissioners, Habitat Committee members, Management and Science Committee members, Advisory Panel members, Technical Committee members, interested stakeholders, and/or Commission staff
  - b. *What*: Alert the Habitat Coordinator of a proposed project/permit that potentially impacts our managed species or their supporting habitat; this may be a project/permit for which an informational letter was sent previously from the Habitat Committee, or it may be an entirely new project/permit.
  - c. *When*: During the public comment period (as early as possible, especially if no informational letter was previously sent)
2. Notification
  - a. *Who*: Policy Board
  - b. *What*: Habitat Coordinator issues notification that the Habitat Committee is examining a particular project/permit and implementing the review process.
3. Deliberation Phase 1
  - a. *Who*: Habitat Committee and any interested Commissioners
  - b. *What*: Discussion to determine if the project/permit meets the following criteria:
    - i. The project may have significant stock-level impacts on Commission-managed species and their supporting habitat.
    - ii. Staff thinks that Commission involvement has the potential to make an impact on the process.
    - iii. The project has inter-jurisdictional implications.
    - iv. The project would establish either a highly desirable, or highly undesirable, precedent from the Commission's perspective.
    - v. Commission staff, with the assistance of Habitat Committee members and/or federal and state agency staff, can adequately research and address the proposed project in a reasonable time frame and within the existing budget.



4. Deliberation Phase 2
  - a. *Who*: Policy Board
  - b. *What*: Based on technical aspects, the Habitat Committee recommends to the Policy Board that the Commission issue a letter recommending a course of action for the project/permit. The Policy Board considers the Habitat Committee's recommendation, and deliberates commenting on the project based on its implications to fishery management. The Policy Board makes a decision based on a vote that requires a simple majority of participating and voting members in favor to pass.
5. Writing a Recommended Course of Action Letter
  - a. *Who*: Whomever proposed that a recommended course of action letter be sent, in coordination with the Habitat Coordinator, interested Habitat Committee members, and interested Commissioners (plus Advisory Panel or Technical Committee members if needed)
  - b. *What*: A recommended course of action letter is developed by interested parties in coordination with Commission staff, and may include, but is not limited to:
    - i. Indicating a recommended course of action.
    - ii. Indicating the level of concern.
    - iii. Presenting a justification for the recommended course of action.
    - iv. Any other pertinent information, especially if an informational letter was not sent previously.
6. Letter Review and Distribution
  - i. *Who*: Commission Chair, and anyone else (including other Commission technical committees) that he/she deems appropriate
  - ii. *What*: A brief opportunity to review the recommended course of action letter and request changes. After those changes are incorporated, the letter shall be sent to the responsible permitting agency.
  - iii. *When*: This process shall be completed in a timely fashion, according to the temporal restrictions set by the given comment period. This may require that deliberations and voting happen electronically.

## **11.0 COMMENTING ON OTHER NON-ASMFC DOCUMENTS**

*The following process describes the review of a non-ASMFC document that is not a project or permit proposal.* This process was developed following a request by the Commission Chair for the Habitat Committee to comment on the 2007 Draft Framework for a National System of Marine Protected Areas.

1. The ISFMP Policy Board, or Commission Chair, may request at any time that the Habitat Committee formally review and comment on a non-ASMFC document that is not a project or permit proposal.
2. If members of the Habitat Committee would like to initiate comment on a non-ASMFC document, they may approach the ISFMP Policy Board with a request to allow comment from the Commission.
3. If the Habitat Committee is directed to comment on a non-ASMFC document by the ISFMP Policy Board, or Commission Chair, they shall complete a review in a timely manner as organized by the Habitat Coordinator.
4. Prior to submitting their review, the Committee's comments shall be provided to the Commission Chair, and if deemed necessary the Policy Board, for consent.

## **APPENDIX 1. ISFMP FISHERY MANAGEMENT PLAN OUTLINE**

This document outlines the contents of Commission FMPs developed by the ISFMP. It contains FMP elements required by the ISFMP Charter as well as suggestions on other sections, should information on these elements be available.

It is intended that this outline be a working document for use by PDTs, PRTs, and others in drafting, compiling, and reviewing FMPs as guidance in FMP development and implementation. The ISFMP Charter, Section Six, lists the required elements of a FMP.

This outline was adopted by the ISFMP Policy Board during the Spring Meeting in Atlantic Beach, North Carolina on May 20, 1999. Suggestions for additional changes to the FMP outline are welcomed and should be forwarded to ISFMP Staff.

### EXECUTIVE SUMMARY

### ACKNOWLEDGEMENTS/ FOREWORD

### TABLE OF CONTENTS

### LIST OF TABLES

### LIST OF FIGURES

## 1.0 INTRODUCTION

### 1.1 Background Information

#### 1.1.1 Statement of the Problem

#### 1.1.2 Benefits of Implementation

##### 1.1.2.1 Social and Economic Benefits

##### 1.1.2.2 Ecological Benefits

### 1.2 Description of the Resource

#### 1.2.1 Species Life History

#### 1.2.2 Stock Assessment Summary

#### 1.2.3 Abundance and Present Condition

### 1.3 Description of the Fishery

#### 1.3.1 Commercial Fishery

#### 1.3.2 Recreational Fishery

#### 1.3.3 Subsistence Fishing

#### 1.3.4 Non-Consumptive Factors

#### 1.3.5 Interactions with Other Fisheries, Species, or Users

### 1.4 Habitat Considerations

#### 1.4.1 Habitat Important to the Stocks

##### 1.4.1.1 Description of the Habitat

##### 1.4.1.2 Identification and Distribution of Habitat and Habitat Areas of Particular Concern

##### 1.4.1.3 Present Condition of Habitats and Habitat Area of Concern

##### 1.4.1.4 Ecosystem Considerations

### 1.5 Impacts of the Fishery Management Program

#### 1.5.1 Biological and Environmental Impacts

#### 1.5.2 Social Impacts

##### 1.5.2.1 Recreational Fishery

##### 1.5.2.2 Commercial Fishery

##### 1.5.2.3 Subsistence Fishery

##### 1.5.2.4 Non-consumptive Factors

#### 1.5.3 Economic Impacts

- 1.5.3.1 Recreational Fishery
- 1.5.3.2 Commercial Fishery
- 1.5.3.3 Subsistence Fishery
- 1.5.3.4 Non-Consumptive Factors
- 1.5.4 Other Resource Management Efforts
  - 1.5.4.1 Artificial Reef Development/Management
  - 1.5.4.2 Bycatch
  - 1.5.4.3 Land/Seabed Use Permitting
- 1.6 Location of Technical Documentation for FMP (*refers reader to citations only*)
  - 1.6.1 Review of Resource Life History and Biological Relationships
  - 1.6.2 Stock Assessment Document
  - 1.6.3 Social Assessment Document (*if available*)
  - 1.6.4 Economic Assessment Document (*if available*)
  - 1.6.5 Law Enforcement Assessment Document (*if available*)
  - 1.6.6 Habitat Background Document (*if available*)
- 2.0 GOALS AND OBJECTIVES
  - 2.1 History and Purpose of the Plan
    - 2.1.1 History of Prior Management Actions
    - 2.1.2 Purpose and Need for Action
  - 2.2 Goals
  - 2.3 Objectives
  - 2.4 Specification of Management Unit
    - 2.4.1 Management Areas
  - 2.5 Definition of Overfishing
  - 2.6 Stock Rebuilding Program (*if appropriate*)
    - 2.6.1 Stock Rebuilding Targets
    - 2.6.2 Stock Rebuilding Schedules
    - 2.6.3 Maintenance of Stock Structure
  - 2.7 Resource Community Aspects
  - 2.8 Implementation Schedule
- 3.0 MONITORING PROGRAM SPECIFICATIONS/ELEMENTS
  - 3.1 Assessment of Annual Recruitment
  - 3.2 Assessment of Spawning Stock Biomass
  - 3.3 Assessment of Fishing Mortality Target and Measurement
  - 3.4 Summary of Monitoring Programs
    - 3.4.1 Catch and Landings Information
    - 3.4.2 Biological Information
    - 3.4.3 Social Information
    - 3.4.4 Economic Information
    - 3.4.5 Observer Programs
  - 3.5 Stocking Program (*if appropriate*)
  - 3.6 Bycatch Reduction Program
  - 3.7 Habitat Program
- 4.0 MANAGEMENT PROGRAM IMPLEMENTATION
  - 4.1 Recreational Fisheries Management Measures
  - 4.2 Commercial Fisheries Management Measures
  - 4.3 For-Hire Fisheries Management Measures
  - 4.4 Habitat Conservation and Restoration
    - 4.4.1 Preservation of Existing Habitat
    - 4.4.2 Habitat Restoration, Improvement, and Enhancement
    - 4.4.3 Avoidance of Incompatible Activities (*see sturgeon FMP*)

- 4.4.4 Fisheries Practices (*see sturgeon FMP*)
- 4.5 Alternative State Management Regimes
  - 4.5.1 General Procedures
  - 4.5.2 Management Program Equivalency
  - 4.5.3 *De minimis* Fishery Guidelines
- 4.6 Adaptive Management
  - 4.6.1 General Procedures
    - 4.6.1.1 Procedural Steps
  - 4.6.2 Circumstances Under Which Change May Occur
  - 4.6.3 Measures Subject to Change
  - 4.6.4 Schedule for State Implementation
- 4.7 Emergency Procedures
- 4.8 Management Institutions (*Policy Bd, Mgmt Bd, TC, AP, etc.*)
- 4.9 Recommendations to the Secretaries for Complementary Actions in Federal Jurisdictions
- 4.10 Cooperation with Other Management Institutions (*i.e. Atl. herring – Cooperates with Canada*)
- 5.0 COMPLIANCE
  - 5.1 Mandatory Compliance Elements for States
    - 5.1.1 Mandatory Elements of State Programs (*as applicable*)
      - 5.1.1.1 Regulatory Requirements
      - 5.1.1.2 Monitoring Requirements
      - 5.1.1.3 Research Requirements
      - 5.1.1.4 Law Enforcement Requirements
      - 5.1.1.5 Habitat Requirements
    - 5.1.2 Compliance Schedule
    - 5.1.3 Compliance Report Content
  - 5.2 Procedures for Determining Compliance
  - 5.3 Recommended (Non-Mandatory) Management Measures
  - 5.4 Analysis of Enforceability of Proposed Measures
- 6.0 MANAGEMENT AND RESEARCH NEEDS
  - 6.1 Stock Assessment and Population Dynamics
    - 6.1.1 Biology/Community Ecology
  - 6.2 Research and Data Needs
    - 6.2.1 Biological
    - 6.2.2 Social
    - 6.2.3 Economic
    - 6.2.4 Habitat
- 7.0 PROTECTED SPECIES
  - 7.1 Marine Mammal Protection Act (MMPA) Requirements
  - 7.2 Endangered Species Act (ESA) Requirements
  - 7.3 Protected Species with Potential Fishery Interactions
  - 7.4 Protected Species Interactions with Existing Fisheries
    - 7.4.1 Marine Mammals
    - 7.4.2 Sea Turtles
    - 7.4.3 Seabirds
  - 7.5 Population Status Review of Relevant Protected Species
    - 7.5.1 Marine Mammals
    - 7.5.2 Sea Turtles
    - 7.5.3 Seabirds
  - 7.6 Existing and Proposed Federal Regulations/Actions Pertaining to Relevant Protected Species
  - 7.7 Potential Impacts to Atlantic Coastal State and Interstate Fisheries
  - 7.8 Identification of Current Data Gaps and Research Needs

8.0 REFERENCES  
9.0 APPENDICES

## **APPENDIX 2. CONDENSED HABITAT FMP OUTLINE**

The following is a quick reference for all of the habitat related sections within the Commission's FMP outline.

### 1.0 INTRODUCTION

#### 1.4: Habitat Considerations

##### 1.4.1: Habitat Important to the Stocks

##### 1.4.1.1: Description of the Habitat

- A. Spawning Habitat
- B. Eggs & Larvae Habitat
- C. Juvenile Habitat
- D. Sub-Adult Habitat
- E. Adult Habitat

##### 1.4.1.2: Identification and Distribution of Habitat and Habitat Area of Particular Concern

##### 1.4.1.3: Present Condition of Habitats and Habitat Area of Particular Concern

##### 1.4.1.4: Ecosystem Considerations

#### 1.5: Impacts of the Fishery Management Program

##### 1.5.4: Other Resource Management Efforts

##### 1.5.4.1: Artificial Reef Development/Management

### 3.0 MONITORING PROGRAM SPECIFICATIONS/ELEMENTS

#### 3.7: Habitat Monitoring Program

### 4.0 MANAGEMENT PROGRAM IMPLEMENTATION

#### 4.4: Habitat Conservation and Restoration

##### 4.4.1: Preservation of Existing Habitat

##### 4.4.2: Habitat Restoration, Improvement, and Enhancement

##### 4.4.3: Avoidance of Incompatible Activities

##### 4.4.4: Fisheries Practices

##### 4.4.5: Habitat Monitoring

### 5.0 COMPLIANCE

#### 5.1: Mandatory Compliance

##### 5.1.1: Mandatory Elements of State Programs (*as applicable*)

##### 5.1.1.5: Habitat Requirements

### 6.0 MANAGEMENT AND RESEARCH NEEDS

#### 6.2: Research and Data Needs

##### 6.2.4: Habitat

## **APPENDIX 3. DEVELOPING AND/OR UPDATING HABITAT SECTIONS OF ASMFC FMPS**

The numbering of the following sections corresponds to the ISFMP Outline for FMPs. Please note that this numbering is subject to change in any given FMP depending upon the included sections.

### **1.0 INTRODUCTION**

#### **1.4: Habitat Considerations**

##### **1.4.1: Habitat Important to the Stocks**

###### **1.4.1.1: Description of the Habitat**

This subsection should describe the habitats, including the associated biological community, which are typically used by the species. Habitats should be classified by life stage to include spawning, egg/larvae, juvenile, sub-adult, and adult resident and migratory habitats.

General descriptions of the functional habitat types (e.g., intertidal marsh, SAV beds, oyster reefs, etc.) that the species uses should be presented, along with a description (narrative, maps, and figures) of the distribution of these habitats. Overall range maps are appropriate, and the use of GIS is encouraged. General migratory pathways should also be identified. Some states have classified/identified areas with important habitat attributes and/or functions for fish such as, “Outstanding Florida Waters” and “Aquatic Preserves” in Florida, and “Primary Nursery Areas”, “Strategic Habitat Areas,” and “Outstanding Resource Waters” in North Carolina. These areas have significance in the states’ permitting programs, and should be integrated here if they overlap with habitat where the species is found. Additionally, the seasonality of the species should be addressed.

Information on biological, ecological, physical, and chemical habitat variables should be included in this subsection. Ecological variables include the biological community upon which the species depends (e.g, preferred prey species, or preferred or obligate habitats such as shell beds or submerged aquatic vegetation) or with which the species is associated. Characteristics such as substrate preference, dissolved oxygen levels, temperature, salinity and other pertinent variables should be identified. If habitat “dependence” has not been documented, then habitat utilization or association should be presented in this subsection. Where possible, documented linkages between habitat and species production should be described.

#### ***Approaches***

A number of approaches have been used to identify species-specific fisheries habitats. Approaches should be combined in order to present the best information with the widest geographic coverage, on a local scale.

Species distribution and/or relative abundance as indicated by fishery independent surveys has been proposed as a surrogate for habitat preference. This approach is useful; however, it is limited by the geographic and technical bounds of the fishery independent survey and possibly by selectivity of the gear employed for the survey, and should be augmented by additional information.

Important habitats for managed species have also been identified by local technical experts. Peer reviewed information of this type, including a review of relative abundance and distribution data, has been assembled for most Atlantic estuaries by the National Ocean Service.

In most cases, species-specific information is not available for all local habitats. In these instances, alternative information should be presented. Examples of alternative information include habitat suitability modeling, identification of usable habitats, and presentation of information for similar species. The limitations of each of these approaches should be clearly stated, and multiple approaches should be considered.

A method applied to coastal fisheries habitats that may have more significant use in the future is habitat suitability (HSI) modeling (USGS: <http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintro.htm> ). This methodology includes the identification of specific habitat variables that are significant to the distribution of the species. The coexistence of these variables can then be identified regionally and used to predict species presence in areas where species distribution is unknown. HSI modeling is limited by both the number of developed and tested models and the geographic range over which the assumptions are valid.

The identification of usable habitats is similar to habitat suitability modeling, although somewhat less refined. It simply includes the regional identification of all habitat types that are used by the species or with which the species is associated in other regions.

Finally, for species for which a paucity of information exists, identification of habitats used by similar species (i.e., species of the same genus or with similar life history characteristics) should be used as a surrogate.

### ***Elements and format***

1. A narrative description of important habitats, including the elements discussed above. Information should be presented using the following outline:

I. Description of Habitats (including residence and migration routes)

- A. Spawning Habitat
- B. Eggs & Larvae Habitat
- C. Juvenile Habitat
- D. Sub-Adult Habitat
- E. Adult Habitat

2. Maps describing local and regional habitats, migratory routes, and seasonal species ranges.

3. A table that includes any significant environmental factors affecting the species at different life stages such as, but not limited to, habitat bottlenecks<sup>5</sup>, ecological functions, changing predator/prey niches, climate change, etc. with citations for all information included.

---

<sup>5</sup> A habitat bottleneck is defined as a constraint on a species' ability to survive, reproduce, or recruit to the next life stage that results from reductions in available habitat extent and/or habitat capacity and reduces the effectiveness of traditional fisheries management options to control mortality and spawning stock biomass.



#### **1.4.1.2: Identification and Distribution of Habitat Area of Particular Concern**

The intent of this subsection is to identify habitat areas or habitat area of concern that are unequivocally essential to the species in all their life stages, since all used habitats have already been identified in Subsection 1.4.1.1.

Habitat Areas of Particular Concern, or HAPCs, are areas within EFH that may be designated according to the Essential Fish Habitat Final Rule (2002) based on one or more of the following considerations: (i) the importance of the ecological function provided by the habitat, (ii) the extent to which the habitat is sensitive to human-induced environmental degradation, (iii) whether, and to what extent, development activities are, or will be, stressing the habitat type, or (iv) the rarity of the habitat type. Descriptions of EFH are not currently being included in FMPs prepared for species solely under Commission management. The definition of HAPC is therefore modified to be areas within the species' habitat that satisfy one or more of the aforementioned criteria. *When an HAPC is described for a species solely under the management of the Commission, the designation does not have any regulatory authority. Please refer to the ASMFC HAPC document for a list of species under Commission management only and description of the corresponding HAPC (ASMFC 2013b).*

A HAPC is a subset of the "habitats" described in Subsection 1.4.1.1, and could include spawning habitat (e.g., particular river miles or river reaches for striped bass populations), nursery habitat for larvae, juveniles and subadults, and/or some amount of foraging habitat for mature adults. HAPCs are geographic locations which are particularly critical to the survival of a species. Determination of the amount of habitats (spawning, nursery, subadult, adult residence, and adult migration routes) described in Subsection 1.4.1.1 that should be classified as HAPC may be difficult.

Examples of HAPC include: any habitat necessary for the species during the developmental stage at which the production of the species is most directly affected; spawning sites for anadromous species; benthic areas where herring eggs are deposited; primary nursery areas; submerged aquatic vegetation in instances when species are determined to be "dependent" upon it; and inlets such as those located between the Atlantic Ocean and bays or sounds, which are the only areas available for providing ingress by larvae spawned offshore to their estuarine nursery areas.

The extent of habitats or HAPC for a species may depend on factors such as habitat bottlenecks, the current stock size and/or the stock size for which a species Management Board and Technical Committee establishes targets, etc. Given the current state of knowledge with regard to the relationship between habitat and production of individual species, this information may not be available for many species.

If known, the historical extent of HAPC should also be included in this subsection, in order to establish a basis for Subsection 1.4.1.3. Use of GIS is encouraged to depict the historical and current extent of HAPCs, and determine the amount of loss/degradation, which will assist in targeting areas for potential restoration.

#### **1.4.1.3: Present Condition of Habitats and Habitat Area of Particular Concern**

This subsection should include, to the extent the information is available, quantitative information on the amount of habitat and HAPCs that are presently available for the species, and information on current habitat quality. Reasons for reduction in areal extent (either current or historical), should be

addressed, for example, “dam construction has eliminated twenty percent of historical spawning habitat” (ASMFC, 2008), “forage habitat bottleneck has reduced the young-of-year populations by thirty percent”, or “fishing gear continues to disturb fifty percent of the forage habitat”, etc.

Any habitats or HAPCs that have diminished over time due to habitat bottlenecks should be incorporated to the extent information is available. Habitat bottlenecks can occur due to natural disasters, fishing disturbance, impacts of development, or other complex processes that can cause habitat shifts. This subsection can further address options to reverse or restore current known habitat bottlenecks.

All current threats to the species’ habitat should be discussed in this subsection. If known, relative impacts from these activities should be identified and prioritized. For example, addressing hydrological alterations and their impacts are a high priority for anadromous species. These may include freshwater inflow/diversions; changes in flows due to hydropower, flood control, channel modifications, or surface/aquifer withdrawals; and saltwater flow or salinity changes due to reductions in freshwater inflows or deepening of navigation channels, which facilitate upstream salinity increases. Threats should also be assessed for their effect on the ability to recreationally and commercially harvest, consume, and market the species (e.g., heavy metals or chemical contamination which results in the posting of consumption advisories, or prohibition of commercial fisheries for a species, e.g. striped bass in the Hudson River, NY).

This subsection will serve as a basis for the development of recommended or required actions to protect the species’ habitat, which will be outlined in Section 4.4. For example, the effectiveness of water quality standards should be reviewed in this subsection. If they are ineffective or inappropriate at protecting water quality at a level appropriate to assure the productivity and health of the species, then a recommendation should be included under the recommendations section (Section 4.4) for improvement of water quality standards.

### ***Elements and format***

This subsection should include separate segments for each different type of habitat that was identified in Subsection 1.4.1.1. The following outline should be used:

#### **I. Habitat Type 1**

- A. Estimates of habitat quantity and any changes over time, such as but not limited to aerial extent and trends over time, availability to the species and changes in availability, etc.
- B. Description of habitat quality and any changes over time, such as but not limited to water quality, functional ability of wetlands, etc.
- C. Description of current threats, including:
  - a. What is the magnitude of the impact, especially in light of the use by the species?
  - b. What is the length in time of the impact and does it occur when the habitat is used by the species?
  - c. Are the impacts irreversible?
  - d. How can the impacts be avoided, minimized, or mitigated? (This information will be especially important for Section 4.4)
  - e. Estimates of cumulative and secondary impacts to the habitat.

- f. Known or suspected habitat bottlenecks.
- D. Any affects of degradation or loss of this habitat on the ability to harvest and/or market the species.

## II. Habitat Type 2 (etc.)

### **1.4.1.4: Ecosystem Considerations**

There are increasing attempts to incorporate ecosystem management into fisheries management, currently referred to as ecosystem based fisheries management. Ecosystem based fisheries management can be interpreted as: a) the incorporation of the protection and enhancement of habitat features that contribute to fish production into the fishery management process; and b) the consideration of how the harvest of one species might impact other species in an ecosystem and incorporating that relationship into management decisions (i.e., forage considerations). The process of considering more than one species in fisheries management decisions is also called multi-species management. For the purposes of this section, the focus would be on the important habitat features that contribute to fish production. To address part b) multispecies management, the Management & Science Committee should be consulted.

Human activities can influence habitats or entire ecosystems by altering one or multiple elements contributing to such systems at any time. Given that the flow of energy and nutrients between organisms and their environment provide the framework for understanding ecosystems, a focus on ecological function and how abiotic structure and other habitat elements affect the biotic community structure and vice versa is essential. Abiotic factors include the space providing connectivity between specific life history stage habitats, spatial and temporal uses of those habitats, water quality and quantity, and the physical changes to these factors over time. Biotic factors include the position of these species within the food web (i.e., forage species, predator/prey), community dynamics, biotic engineering of habitat, etc.

In addition, the spatial and temporal resiliency of the system (the measure of the ability of a system to withstand stresses and shocks, and recover to pre-stress characteristics) is another consideration to include in this section.

This section should focus on ecosystems functions on a landscape scale rather than duplicating habitat use information contained in the preceding sections of this document. Changes in ecological functions, shifts, or dynamics resulting in or from habitat bottlenecks may be discussed within this section if not previously addressed.

## **3.0 MONITORING PROGRAM SPECIFICATIONS/ELEMENTS**

### **Section 3.7: Habitat Monitoring Program**

The purpose of this section is to outline habitat monitoring considerations for a given FMP. Building upon the baseline information covered in Section 1.4, FMP developers are encouraged to identify specific habitat variables (e.g., spatial extent and type of SAV beds) that should be monitored that are significant to the distribution of the species. This section may also include information on existing habitat monitoring programs. The goal of habitat monitoring programs should be to provide guidance

to achieve integration of fish management activities with management of habitat and Habitat Area of Particular Concern.

It is recommended that population monitoring surveys and stock assessments be coordinated with existing state, federal, and regional habitat monitoring programs to achieve cost benefits and allow for synthesis of water quality, aquatic habitat, and watershed information to better assess whether declines in fishery stocks are caused by degraded habitats or ecosystems.

Section 1.4 provides a strong foundation for the establishment of a robust monitoring plan. FMP authors and managers are encouraged to use all available information to determine those limiting factors that can best serve as timely indicators of habitat loss or degradation. It is recommended that documented linkages between habitat and species production and/or mortality be described.

The identification, distribution, and present condition of habitat and HAPC (Subsections 1.4.1.3 and 1.4.1.3) requires extensive background information to determine what areas are unequivocally essential to the species. These subsections will already describe many of the currently reported habitat variables that are applied by state, federal, regional, and other fishery management entities to monitor habitat condition. By maximizing the use of existing data and monitoring programs, FMP developers may recommend that certain factors be periodically observed and documented to detect changes in habitat quality or quantity.

With the emerging need and challenges for developing new indicators for specific habitat bottlenecks/limitations for species any new improved methodology or modern/cutting edge monitoring tools should be identified to help developing monitoring plans. Inadequate or missing data are bottlenecks in and of themselves. Identify inadequately specified or insufficiently quantified causes or data relating to bottlenecks to help managers plan the most effective ways for monitoring. Identify any developed approaches for enhancing bio-complexity and key habitat features (e.g., seagrass, connectivity, etc.) required to boost habitat rehabilitation processes.

Elements of a monitoring program should include the following:

1. Development of a monitoring plan based on historic and existing habitat quality and quantity records/data.
2. Designation of reference sites based on life stage requirements.
3. Determination of appropriate spatial and temporal scales for monitoring specific habitat types and locations.
4. Coordination of monitoring of essential habitat across all life stages.
5. Enhanced coordination of fish stock assessment and management with habitat monitoring.

As the Atlantic Coast fisheries community moves toward ecosystem-based adaptive management that is more integrated with coastal habitat, existing monitoring programs on local and regional scales should be better coordinated to provide efficient and meaningful monitoring to quantify and track changes in quality habitat for the life stages of all fishes. A broad overview of existing monitoring programs has revealed common approaches, issues, and needs for a future Atlantic Coast monitoring program. An author may want to consider reviewing the design elements of and recommendations from the National Estuary Program (NEP) and the corresponding jurisdictions' Comprehensive

Conservation and Management Plans (CCMPs) (e.g. APNP 2012). Below are elements that should be considered for such a monitoring program:

### **1. Issues and options associated with monitoring programs**

- A. Scale:
  - 1. Regional vs. site specific - broad indicators/remote sensing tools vs. single indicators
  - 2. Regional approaches – existing landscape approaches e.g. river basin/coastal association or Commission data
  - 3. Species range approach – monitor on a species by species FMP approach
- B. Frequency: Cost-benefit
- C. Prediction: Quantify/track cumulative effects of climate change, habitat bottlenecks, and continued watershed and coastal development on aquatic habitat
  - 1. Land use/management plans to select landscape indicators
  - 2. Climate prediction models to select precipitation/storm surge effects to monitor
- D. Location: Overlay all life-stage habitat types for all species with FMPs and develop coordinated monitoring by location
- E. Existing fish stock information: Coordinate with collection and analysis of habitat information

### **2. Monitoring indicators: Referenced with natural variation and analyzed spatially/temporally**

- A. Large-scale: Remote sensing and existing monitoring programs- coordinate and fill gaps
  - 1. Land use – include infrastructure (roads, etc.), water, development, dredging, channelization, riprap, etc.
  - 2. Specific habitat types (quantity and quality)
  - 3. Temperatures of rivers, tributaries, estuaries, and oceans – ridge to reef
  - 4. Sediment movement and changes
  - 5. Water quality and quantity
  - 6. Other known habitat bottlenecks indicators
- B. Intermediate-scale: Aquatic communities, species numbers, diversity, and distributions

### **3. Integration of habitat and water quality data with fishery monitoring data through Geographic Information System (GIS) analysis**

## **4.0 MANAGEMENT PROGRAM IMPLEMENTATION**

### **4.4: Habitat Conservation and Restoration**

This section should emphasize that each state should implement identification and protection of habitat for the given species within its jurisdiction, in order to ensure the sustainability of important life history stages that either are produced or reside within its boundaries. It should also be noted that such efforts should inventory historical habitats, identify habitats presently used, and specify those that are targeted for recovery, and impose or encourage measures to retain or increase the quantity and quality of essential habitats for the given species.

Information from previous sections, including EFH (for joint Commission/federal plans), HAPCs, and other known habitat used by the species, should all be considered in crafting recommendations for fish habitat conservation and restoration. This will ensure protection of all values and benefits of habitat

for fisheries, and aid in making decisions on setting priorities for fish habitat restoration. This section of the plan should integrate the discussion from Subsections 1.4.1.1 through 1.4.1.4, in developing the recommendations for habitat conservation/restoration. These recommendations should come from an assessment of the qualitative and quantitative information on habitat, the health of the stock, and the status of the fishery.

Recommendations should be directed to the state marine fisheries agency, since these are the agencies involved in development of FMPs. Often the objective of habitat related recommendations will be carried out by another entity such as a state water quality agency. In these cases, the recommendation should be worded so that it directs the state marine fisheries agency to either communicate the recommendation to the other entity, or, to the best of its ability, ensure that the other entity meets the recommended objective. The recommendation must be clearly stated and may require substantial explanation in order to facilitate its implementation, especially when the objective may be met by another entity.

A number of habitat-related recommendations are listed below which may be appropriate for many FMPs and should be considered for inclusion in the habitat section. These recommendations should be considered in addition to the species-specific recommendations that should be identified from Subsections 1.4.1.1 through 1.4.1.4.

#### **4.4.1: Preservation of Existing Habitat**

##### ***Example Recommendations***

1. States containing spawning and other essential habitats, such as nursery areas, for the given species, should notify the appropriate federal and state regulatory authorities, in writing, of the locations of habitats utilized by the species.
2. Regulatory agencies should be advised of the types of threats to populations of the given species, and recommended measures that should be employed to avoid, minimize, or eliminate any threat to current habitat extent or quality.
3. Where sufficient knowledge is available, states should seek to designate essential habitats for the given species for special protection. These locations should be designated “High Quality Waters” or “Outstanding Resource Waters,” and should be accompanied by requirements for non-degradation of habitat quality, including minimization of non-point source runoff, prevention of significant increases in contaminant loadings, and prevention of the introduction of any new categories of contaminants into the area.
4. State marine fisheries agencies should coordinate with state water quality agencies and state coastal zone management agencies to ensure that Clean Water Act Section 319 non-point source control plans and Coastal Zone Act Reauthorization Amendment Section 6217 coastal non-point source control plans are developed and implemented so as to minimize adverse impacts of non-point source pollution on the species. In particular, marine fisheries agencies should consider whether areas merit designation as critical coastal areas under state 6217 programs (non-point source pollution control under the Coastal Zone Management Act amendments of 1990) due to water quality impacts to fish habitat, and should provide input to the 6217 lead agencies.
5. State marine fisheries agencies should coordinate with and provide input to the state water quality agency in development and updating of the Clean Water Act section 303(d) list (priority

list of water not meeting state water quality standards). In addition, state marine fisheries agencies should review the adequacy of water quality standards to protect the species of concern and should participate in the triennial review of the state water quality standards.

6. State fishery regulatory agencies should develop protocols and schedules for providing input on water quality state regulations to the responsible agency, to ensure to the extent possible that water quality needs for the given species are restored, met, and maintained.
7. State fishery regulatory agencies should develop protocols and schedules for providing input on Federal permits and licenses required by the Clean Water Act, Federal Power Act, and other appropriate vehicles, to ensure that habitats are protected for the given species.
8. Water quality criteria for spawning and nursery areas should be established or existing criteria should be upgraded to levels which are sufficient to ensure successful reproduction. Any action taken should be consistent with Federal Clean Water Act guidelines and specifications.
9. All state and federal agencies, including regional fishery management councils, responsible for reviewing impact statements and permit applications for projects or facilities which may impact spawning and nursery areas should provide appropriate recommendations or mandate measures to ensure that those projects will have no or only minimal impact on spawning stocks. Any project which would result in the elimination or significant degradation of essential habitat should be avoided.
10. State marine fisheries agencies should identify the state permitting and planning agencies that regulate those activities identified in Subsection 1.4.1.3 as likely to adversely affect HAPCs and habitats, either by destruction of habitat or degradation of quality. The marine fisheries agency should work with the relevant permitting or planning agency in each state to develop permit conditions and planning considerations to avoid or mitigate adverse impacts on HAPCs or other habitats necessary to sustain the species. Standard permit conditions and model policies that contain mitigation techniques should be developed. The development of Memoranda of Understanding (MOUs) with other state agencies are recommended for joint review of projects and planning activities to ensure that habitat protections are adequately incorporated. North Carolina passed the North Carolina Fisheries Reform Act in 1997, which requires the state to develop Coastal Habitat Protection Plans (CHPP). These CHPPs could be used a model for the implementation of planning process to protect HAPCs (e.g. Deaton et al. 2010). When impacts to a habitat or species are expected to occur from an activity described in Subsection 1.4.1.3, actions should be initiated to eliminate or substantially reduce these impacts. This could be in the form of limiting the time frame the activity could be done (e.g., establishing dredging windows to avoid impacts to susceptible life stages) or other acceptable alternative approaches that can be demonstrated to avoid or minimize harm.
11. State marine fisheries agencies should coordinate with appropriate state agencies to strengthen compliance with National Pollutant Discharge Elimination System (NPDES) or State Pollutant Discharge Elimination System (SPDES) permits.
12. State marine fisheries agencies should work with state coastal zone management agencies to determine whether:
  - a. additional state policies for habitat protection should be adopted under the state coastal management program
  - b. additional federal activities should be added to the state coastal management programs list of activities subject to state consistency review

- c. the state is fully utilizing the Coastal Zone Management Act federal consistency process for protection of fish habitats

#### **4.4.2: Habitat Restoration, Improvement, and Enhancement**

##### ***Example Recommendations***

1. Each state should review existing literature and data sources to determine the historical extent of occurrence of and habitat use by the given species within its jurisdiction. Further, an assessment should be conducted of areas historically but not presently used by the given species, for which restoration is feasible.
2. Every effort should be made to eliminate existing contaminants from habitats where a documented adverse impact occurs to the given species.
3. States should work in concert with the USFWS, Divisions of Fisheries and Ecological Services, and NOAA Fisheries, Office of Habitat Conservation, to identify hydropower dams that pose significant threat to maintenance of appropriate freshwater flows to, or migration routes for, spawning and/or nursery areas, and target them for appropriate recommendations during Federal Energy Regulatory Commission (FERC) relicensing evaluation.
4. When states have identified habitat restoration as a need, state marine fisheries agencies should coordinate with other agencies to ensure that habitat restoration plans are developed and funding is actively sought for plan implementation and monitoring.
5. State marine fisheries agencies should work closely with water quality agencies in the development or revision of river basin plans to identify degraded or threatened resources and recommend preventative, remedial, or mitigation measures.
6. State marine fisheries agencies should work with the appropriate agencies to develop contaminated sediment remediation plans or active sediment pollution prevention programs for areas with or susceptible to sediment contamination.
7. State marine fisheries agencies should coordinate with appropriate National Estuary Programs (NEP), National Wildlife Refuges (NWR), and National Estuarine Research Reserves (NERR) to ensure that NEP, NWR, and NERR Comprehensive Conservation and Management Plans identify and implement habitat protection and restoration needs.

#### **4.4.3: Avoidance of Incompatible Activities**

##### ***Example Recommendations***

1. Federal and state fishery management agencies should take steps to limit the introduction of compounds that are known or suspected to accumulate in fish tissue and that pose a threat to human health or fish health [see Table 10.1 in Taub (1990)].
2. Each state should establish windows of compatibility for activities known or suspected to adversely affect life stages and habitats of the given species, such as navigational dredging, bridge construction, and dredged material disposal, and notify the appropriate construction or regulatory agencies in writing.
3. Projects involving water withdrawal from spawning or nursery habitats (e.g. power plants, irrigation, water supply projects) should be scrutinized to ensure that adverse impacts resulting from larval/juvenile impingement, entrainment, and/or modification of flow, temperature and



salinity regimes due to water removal will not adversely impact spawning stocks, including early life stages.

4. Each state which contains spawning and nursery habitat areas within its jurisdiction should develop water use and flow regime guidelines which are protective of spawning and nursery areas and that will ensure to the extent possible the long-term health and sustainability of the stock. States should endeavor to ensure that proposed water diversions/withdrawals from rivers tributary to spawning and nursery habitats will not reduce or eliminate conditions favorable to use of these habitats by the given species.
5. When impacts are expected to occur from an activity described in Subsection 1.4.1.3, but probably not above some *de minimus* level, prohibition of the activity may not be warranted, but the marine fisheries agency should request that the appropriate agency consider requiring application of Best Management Practices for the activity.
6. State marine fisheries agencies should review oil spill prevention and response plans for preventing accidental release and recommending prioritized response in HAPCs.
7. State marine fisheries agencies should work closely with the appropriate United States Coast Guard District Office in the development, amendment, and implementation of area-wide oil spill contingency plans.

#### **4.4.4: Fisheries Practices**

##### ***Example Recommendations***

1. The use of any fishing gear or practice which is documented by management agencies to have an unacceptable impact on the given species (e.g., habitat damage, or bycatch mortality) should be prohibited within the effected essential habitats (e.g., trawling in spawning areas or primary nursery areas should be prohibited).

#### **4.4.5: Habitat Monitoring**

##### ***Example Recommendations***

1. States already conducting monitoring of estuarine, coastal, and marine habitats (for any reason) that are listed as HAPCs in the FMP should seek to coordinate habitat monitoring with ISFMP fishery data collection.
2. States already conducting monitoring of estuarine, coastal, and marine habitats (for any reason) that are listed as HAPCs in the FMP should seek to coordinate monitoring activities, including indicator selection, sampling methods, and spatial and temporal approaches.
3. Every effort should be made to eliminate duplication of effort among state, regional, and federal monitoring programs, and to coordinate monitoring across the species range and life history.
4. States should work with regional and federal programs to coordinate monitoring of estuarine, coastal, and marine HAPCs.
5. State agencies conducting restoration activities in HAPCs should work with all other agencies responsible for implementation of the FMP to develop a monitoring program that measures the effectiveness of restoration efforts.

## **5.0 COMPLIANCE**

### **5.1: Mandatory Compliance**

#### **5.1.1: Mandatory Elements of State Programs (*as applicable*)**

##### **5.1.1.5: Habitat Requirements**

FMP recommendations and requirements differ in that **requirements** are mandatory actions under the Atlantic Coastal Fishery Cooperative Management Act (P.L. 103-206 et. seq.), which may result in penalties if not implemented. An example of an issue that is appropriate to address as an FMP requirement is a significant impact to a HAPC from fishing gear. ISFMP staff species coordinators should be consulted for further information on the use of required measures in FMPs, and the appropriateness of habitat-related requirements that may be considered for inclusion in this section.

## **6.0 MANAGEMENT AND RESEARCH NEEDS**

### **6.2: Research and Data Needs**

#### **6.2.4 Habitat**

This section should contain any recommendations, preferably in priority order, for research that the Commission views as necessary for the sound management of the species and its habitat. This may include basic life history information, which will result in the more complete identification of the habitat requirements or bottlenecks of the species for all life stages, tagging studies for determination of migratory pathways and habitat use patterns, and other habitat related information.

Recommendations should be developed by reviewing Subsections 1.4.1.1 through 1.4.1.4, and identifying topics requiring further information.

Research recommendations should provide for the comprehensive identification of the habitat requirements of the species, or species assemblages, that define the interrelationship between the species, its environment, potentially perturbing natural and human activities, and habitat bottlenecks. Research is encouraged at an appropriate spatial and temporal scale that is directed at determining and reasonably predicting the impacts of natural and human activities on HAPCs. The habitat research plan of the NOAA Fisheries may be a useful reference, since it provides a framework to conduct coastal and estuarine research, and, most importantly, transfers results to those management components involved in permit reviews and development of habitat sections of FMPs.

#### **APPENDIX 4. REFERENCES**

Albemarle-Pamlico National Estuary Partnership (APNEP). (2012). Comprehensive Conservation and Management Plan. Raleigh, NC. [http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=e6600731-daed-4c5f-9136-253f23c9bbcf&groupId=61563](http://portal.ncdenr.org/c/document_library/get_file?uuid=e6600731-daed-4c5f-9136-253f23c9bbcf&groupId=61563)

ASMFC. 2009. Interstate Fisheries Management Program Charter. Washington (DC): ASMFC. 27 p.

ASMFC. 2008. Addendum II to the Fishery Management Plan for American Eel. Washington (DC): ASMFC. 7 p.

ASMFC. February 2013a. Committee Guidance and Assessment Process. Washington (DC): ASMFC. 59 p.

ASMFC. 2013 pending. ASMFC Habitat Areas of Particular Concern (HAPCs). Washington (DC): ASMFC.

Deaton, A.S., W.S. Chappell, K. Hart, J. O'Neal, B. Boutin. 2010. North Carolina Coastal Habitat Protection Plan. North Carolina Department of Environment and Natural Resources. Division of Marine Fisheries, NC. 639 pp. [http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=4cb3ec6a-a5d8-4851-bef0-314ab0d8787c&groupId=38337](http://portal.ncdenr.org/c/document_library/get_file?uuid=4cb3ec6a-a5d8-4851-bef0-314ab0d8787c&groupId=38337)

General Assembly of North Carolina 1997 Session – Session Law 1997-400, House Bill 1097. <http://www.ncga.state.nc.us/EnactedLegislation/SessionLaws/HTML/1997-1998/SL1997-400.html>

NOAA Fisheries. Habitat Research Plan.

[http://www.st.nmfs.noaa.gov/st4/documents/habitatAssesmentImprovementPlan\\_052110.PDF](http://www.st.nmfs.noaa.gov/st4/documents/habitatAssesmentImprovementPlan_052110.PDF)

[http://www.habitat.noaa.gov/pdf/2009\\_habitat\\_strategic\\_plan.pdf](http://www.habitat.noaa.gov/pdf/2009_habitat_strategic_plan.pdf)

Taub, S.H. 1990. Fishery Management Plan for Atlantic Sturgeon. Atlantic States Marine Fisheries Commission, Washington, D.C. Fisheries Management Report No. 17. 73 pp.