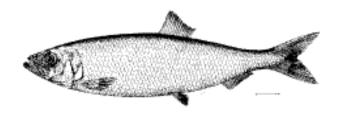
for Amendment 8 to the Atlantic Herring



Fishery Management Plan

(Atlantic Herring ABC Control Rule)

Prepared by the

New England Fishery Management Council

DATE: DRAFT HERRING AP/COMMITTEE JANUARY 15-16, 2015

Schedule of Herring Amendment 8 Scoping Meetings

The Council is scheduling XXX scoping meetings for this amendment (see below). There may also be opportunities for providing scoping comments on Amendment 8 during any Herring Committee or Advisory Panel meetings that may be scheduled between XXX and XXX, 2015.

Date and Time

Location

DATE	Hotel Name
TIME	Address
	Number
DATE	Hotel Name
TIME	Address
	Number
DATE	Hotel Name
TIME	Address
	Number
DATE	Hotel Name
TIME	Address
	Number

You may attend any of the above scoping meetings to provide oral comments, or you may submit Amendment 8 scoping comments by email to XXX, or written comments by the end of the day on XXX to:

John Bullard, Regional Administrator NMFS Greater Atlantic Regional Fisheries Office 55 Great Republic Drive Gloucester, MA 01930 Fax: (978) 281-9135

Please note on your correspondence; "Atlantic Herring Amendment 8 Scoping Comments." Scoping comments may also be accepted via fax at the above fax number.



NEW ENGLAND FISHERY MANAGEMENT COUNCIL

SEEKS YOUR COMMENTS ON THE MANAGEMENT OF THE ATLANTIC HERRING FISHERY

Your comments are invited

The New England Fishery Management Council (Council) is initiating the development of an amendment to the Fishery Management Plan (FMP) for Atlantic Herring (*Clupea harengus*) under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). In accordance with the National Environmental Policy Act (NEPA), the Council may prepare an Environmental Impact Statement (EIS) that will analyze the impacts of this amendment (Amendment 8) on the affected biological, physical, and human environment.

This scoping document is to inform you of the Council's intent to gather information necessary for the preparation of the EIS and ask for your specific suggestions and input on the range of alternatives that should be considered in Amendment 8 to the Atlantic Herring FMP.

Why is the Council proposing to take action?

The Council is proposing to take action to establish a long-term control rule for specifying acceptable biological catch (ABC) for the Atlantic herring fishery. A *control rule* is a policy for establishing an annual limit or target fishing level that is based on the best available scientific information. An *ABC control rule* (ABC CR) is a specified approach to setting ABC in a fishery as a function of scientific uncertainty. The ABC CR is utilized by the Council's Scientific and Statistical Committee (SSC) when developing its recommendations regarding the annual specification of ABC for every Council-managed fishery.

The ABC control rule articulates how to set ABC compared to the overfishing limit (OFL) based on scientific uncertainty associated with the estimate of OFL, the stock assessment, or any other sources of scientific uncertainty. The ABC control rule should be based, when possible, on the probability that actual catch equal to the stock's ABC would result in overfishing. It should incorporate the Council's risk tolerance and should account for scientific uncertainty related to factors such as stock assessment results, time lags in updating assessments, the degree of retrospective pattern in assessment results, and projections. The ABC CR can also account for important environmental factors, including the role of Atlantic herring as a forage species and its importance to the ecosystem. The National Marine Fisheries Service (NMFS) National Standard 1 Guidelines recognize the need to consider the importance of forage species in the ecosystem, stating that consideration should be given to managing forage stocks for higher biomass than B_{MSY} to enhance and protect the marine ecosystem (50 CFR § 600.310).

Why is the Council proposing to take action (cont.)?

What actions have already been taken?

Following the re-authorization of the MSA in 2007, the Council developed Amendment 4 to the Atlantic Herring FMP and implemented a process for establishing annual catch limits (ACLs) and accountability measures (AMs) in the Atlantic herring fishery. Amendment 4 generally defined the Atlantic herring ABC CR as the specified approach to setting the ABC for a stock or stock complex as a function of scientific uncertainty in the estimate of OFL and any other scientific uncertainty. The ABC control rule will consider uncertainty in factors such as stock assessment issues, retrospective patterns, predator-prey issues, and projection results. Amendment 4 also included a more specific interim ABC CR (described below).

During the development of Amendment 4 (2009-2010), there was considerable uncertainty surrounding the most recent Atlantic herring stock assessment (Transboundary Resource Assessment Committee, 2009). As part of the 2010-2012 Atlantic herring fishery specifications process, the SSC recommended that the Council specify an interim ABC based on recent catch until a new benchmark stock assessment for Atlantic herring could be completed. Consistent with the SSC advice, the Council specified Atlantic herring ABC for 2010-2012 as the three-year average catch level (2006-2008). This specification was adopted as the interim ABC control rule in Amendment 4, to serve as a placeholder until a benchmark stock assessment could be completed and a more appropriate long-term ABC control rule for Atlantic herring could be developed.

Following a benchmark stock assessment for Atlantic herring (54^{th} Northeast Region Stock Assessment Workshop, SAW 54, July 2012), the Council considered several alternatives for establishing an ABC control rule for Atlantic herring (to replace the interim ABC CR) during the 2013-2015 fishery specifications process. Ultimately, based on SSC advice, the Council adopted an ABC CR that specifies a constant ABC for three years based on the annual catch that is projected to produce a probability of exceeding F_{MSY} in the third year that is less than or equal to 50%. For the 2013-2015 fishing years, this ABC value is 114,000 mt.

The Council and its SSC evaluated a number of characteristics of the Atlantic herring fishery and stock assessment before selecting the ABC CR in the 2013-2015 specifications, including two ABC CR alternatives based on control rules for other forage fish. At that time, the SSC recommended that the reference points and projections associated with the forage fish alternatives receive further evaluation prior to implementation in a long-term strategy for managing the Atlantic herring fishery. During the 2013-2015 specifications process, the SSC and Council both emphasized that the three-year constant catch approach should not be expected to be continued in perpetuity. Rather, the Council noted that alternative ABC CRs would be considered either during the next specifications process and/or that a long-term harvest strategy would be developed through a more comprehensive management action.

Why is the Council proposing to take action (cont.)?

At its November 2014 meeting, the Council passed the following motion regarding the 2015 management priorities:

That for herring priorities, the Council prioritize an amendment to consider control rules for the Atlantic herring fishery that account for herring's role as forage in the ecosystem. The Council should also task the EBFM PDT* and Committee with developing ecological guidance for the Herring PDT on managing forage fish within an ecosystem context by the June 2015 NEFMC Council meeting, and participating in the development of an appropriate control rule and reference points within an EBFM context for the herring fishery during this amendment.

*Note: EBFM stands for Ecosystem-Based Fisheries Management.

Purpose and Need for Action

The purpose of Amendment 8 is to establish a control rule for specifying ABC for the Atlantic herring fishery. The ABC CR is needed to provide guidance to the Council's Scientific and Statistical Committee regarding how to specify an annual ABC for Atlantic herring based on scientific uncertainty, stock status, and the Council's risk tolerance. Moreover, the ABC CR is needed to create a buffer between the overfishing limit (OFL) and ABC to account for scientific uncertainty such that there is a low risk in any given year that the OFL for Atlantic herring will be exceeded. Establishing an ABC CR is consistent with National Standard 1 Guidelines for implementing the provisions of the Magnuson-Stevens Act (50 CFR §600.310). By law, the ABC CR cannot result in a probability of overfishing that is greater than 50%, but it may result in a probability that is less than 50% depending on the Council's risk tolerance and other factors that may be accounted for in the ABC CR.

The purpose of this amendment is also to address the biological needs of the Atlantic herring resource as well as the ecological importance of Atlantic herring to the greater Atlantic region in a manner that is consistent with the requirements and intent of the MSA. The importance of Atlantic herring as a forage species is underscored by the Council's specified intent to consider a wide range of alternatives for the ABC CR in this amendment, including those that account for Atlantic herring's role in the ecosystem.

Addressing this purpose and need requires the development of an amendment to the Atlantic Herring FMP to fully consider and analyze an appropriate range of management alternatives. The Council is seeking comments and input from the public on this specific issue.

What action is the Council considering?

The Council will consider a range of ABC CR alternatives to address the purpose and need of Amendment 8 to the Atlantic Herring FMP, including alternatives that account for Atlantic herring's role in the ecosystem in this amendment. The Council has tasked its Ecosystem-Based Fisheries Management (EBFM) Plan Development Team (PDT) and EBFM Committee with developing ecological guidance for the Herring PDT on managing forage fish within an ecosystem context (anticipated at the June 2015 Council meeting), and with participating in the development of an appropriate control rule and reference points within an EBFM context for the Atlantic herring fishery during this amendment.

To date, Atlantic herring has been assessed and the Atlantic herring fishery managed in Federal waters using an MSY-based approach similar to other fish stocks, with consideration given to its role in the ecosystem during the stock assessment process. A quota-based approach relying on age-structured assessment models and F_{MSY}/B_{MSY} reference points have been applied to specify an overfishing limit (OFL), acceptable biological catch (ABC), and annual catch limits (ACLs) for the Atlantic herring fishery. In this amendment, alternative approaches that more explicitly account for Atlantic herring's role in the ecosystem will be considered. Several management approaches for forage species have been generally discussed with respect to Atlantic herring, and additional approaches that have been applied in other regions may warrant further exploration. The Council is seeking your comments on what kinds of alternatives should be considered for establishing an ABC control rule for Atlantic herring.

The long-term management of forage fish in an ecosystem context depends on evaluating the tradeoffs between their direct market value and other ecosystem-related values, which is very complicated. Atlantic herring serve as an important prey species for many animals, including commercially-valuable fish like Atlantic cod and bluefin tuna, recreationally-valuable species like striped bass, and many protected species and seabirds. Additionally, Atlantic herring serves as an important commercial fishery and the primary bait for the highly valuable American lobster fishery. Managing these tradeoffs will require implementing a control rule that is based on in-depth knowledge of both Atlantic herring ecology and other species' ecology, as well as knowledge about the economy and substitutes for these species within the marketplace. Furthermore, managing these tradeoffs will involve making risk-based choices based on ecological, economic, cultural, and social preferences. The Council is seeking your comments regarding these tradeoffs and preferences.

Why should I comment?

The scoping process is an extremely important part of the amendment development process. This is the first and best opportunity for members of the public to raise issues and concerns for the Council to consider during the development of Amendment 8 to the Atlantic Herring FMP. The Council needs your input to identify important issues and develop a complete range of alternatives that meet the purpose and need for this amendment. Your comments early in the amendment development process will help the Council address your concerns more thoroughly and ensure that an adequate range of alternatives is considered to address this important issue.

What should my comments address?

Management measures developed by the Council and implemented by NMFS must comply with all applicable Federal laws and Executive Orders. In particular, management measures must comply with ten National Standards specified in the MSA. During the Amendment 8 scoping process, the Council is particularly seeking comments regarding how to develop alternatives for an ABC control rule for Atlantic herring that are consistent with National Standard 1 Guidelines and how to consider the importance of Atlantic herring in an ecosystem context. While your comments may address any aspect of the purpose and need for this action, the Council is seeking your input on the following:

- What alternatives for ABC control rules should the Council consider for Atlantic herring in Amendment 8?
- How should the Council account for the role of Atlantic herring in the ecosystem when it develops the ABC control rule?
- What specific issues are most important when evaluating the tradeoffs associated with managing the Atlantic herring fishery in an ecosystem context?

What is the process?

The Council, its Herring Committee, Herring Advisory Panel, and Herring PDT have held preliminary public discussions on the purpose and need for Amendment 8 to the Atlantic Herring FMP and the range of alternatives that may be considered/analyzed. The publication of this scoping document and an announcement in the *Federal Register* of the Council's intent to consider management measures for the Atlantic herring fishery is the first part of the formal Amendment 8 process. XXX scoping hearings for Amendment 8 will be held to provide additional opportunity for input from the public (see meeting dates and locations on the back of the cover page).

After information is gathered through the Amendment 8 scoping process, a range of alternatives will be developed by the Herring Committee, with input from the Herring Advisory Panel, PDT, and SSC, through a series of public meetings during 2015. In addition, the Council's Risk Policy Working Group, EBFM PDT, and EBFM Committee will provide guidance regarding the application of the Council's Risk Policy and ecosystem considerations for developing the range of alternatives

What is the process? (cont.)

in Amendment 8; feedback from these groups is currently anticipated at the June 2015 Council meeting.

Once all input and guidance has been considered and a range of alternatives has been developed by the Council for further consideration (late 2015), the impacts of the alternatives will be analyzed by the Herring PDT, and a Draft EIS for Amendment 8 may be published and sent out for public review and comment. At that time (mid-2016), the public will have more specific alternatives and analyses on which to comment. Following a review of comments received on the Amendment 8 Draft EIS, the Council will choose final management measures to submit to the Secretary of Commerce for implementation. If no further delays are encountered, Amendment 8 would become effective by the 2017 fishing year, although consideration may be given to coordinating the implementation of the ABC CR with the next Atlantic herring stock assessment and/or fishery specifications process.

How do I comment?

The Council is scheduling XXX scoping meetings for this amendment. Public meetings will be held in XXX (see location and dates of meetings on the back of the cover page). You may attend any of the scoping meetings to provide oral comments, or you may submit comments by email to XXX, or written comments by the end of the day on XXX to:

John Bullard, Regional Administrator NMFS Greater Atlantic Regional Fisheries Office 55 Great Republic Drive Gloucester, MA 01930 Fax: (978) 281-9135

Please note on your correspondence; "Atlantic Herring Amendment 8 Scoping Comments." Comments may also be accepted via fax at the above fax number.

There may also be opportunities for providing comments on Amendment 8 during any Herring Committee or Herring Advisory Panel meetings that may be scheduled between XXX and XXX, 2015. If you wish to be on the mailing list for future meetings of the Herring Committee, please contact the Council office at 978-465-0492.