

Amendment 4 to the Atlantic

Herring FMP:

Annual Catch Limits and Accountability Measures

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Acronyms

- TRAC – Transboundary Resource Assessment Committee
- SSC – Scientific and Statistical Committee
- PDT – Plan Development Team
- OFL – Overfishing Limit
- ABC – Acceptable Biological Catch (new)
- OY – Optimum Yield
- ACL – Annual Catch Limit
- DAH – Domestic Annual Harvesting
- DAP – Domestic Annual Processing
- TALFF – Total Allowable Level of Foreign Fishing
- JVP – Joint Venture Processing
- IWP – Internal Waters Processing
- USAP – U.S. At-Sea Processing
- BT – Border Transfer
- RSA – Research Set-Aside
- AM – Accountability Measure

Amendment 4 – ACLs/AMs

- ACLs/AMs identified as first priority for Am. 4, and work on range of alts generally complete
- Amendment 4 measures address the process for establishing ACLs/AMs
- Focus on fishery specification process – modifications proposed for MSA consistency with ACL/AM provisions
- OFL, ABC, ACLs themselves to be set through specifications process (3 years)
- AMs established in Amendment 4 but can be modified through specifications and other actions

Alternatives Under Consideration

- ACLs
 - Alternative 1 / No Action
 - Alternative 2
 - Definitions
 - **Options for Fishery Specifications**
 - Sub-ACLs
 - Specifications Process
- AMs
 - Alternative 1 / No Action
 - Alternative 2

ACL Alt. 1 / No Action

Section 4.1.1, p. 17 Draft Amendment 4

- Herring FMP would not be brought into compliance with the new provisions of the MSA
- ABC would remain defined as Allowable Biological Catch and OFL would not be established
- OY would not become a stock-wide ACL
- TACs would remain TACs and sub-ACLs would not be established

ACL Alt. 2 – Definitions

Section 4.1.2.1, p. 18 Draft Amendment 4

- Catch – total quantity of fish taken in commercial, recreational, subsistence, tribal, and other fisheries
 - Includes all retained and discarded fish
 - ACLs represent total catch and must account for discards
- Stocks in a Fishery – Atlantic Herring
 - Require status determination criteria
 - Guidelines do not require all target and non-target stocks – at the Council’s discretion
 - Other stocks may be included in the future, if appropriate
- Overfishing Level (OFL) – $F_{MAX} \times \text{Biomass}$
 - Can fluctuate above/below MSY depending on stock size

ACL Alt. 2 – Definitions – ABC

Section 4.1.2.1, p. 18 Draft Amendment 4

- Acceptable Biological Catch (ABC) – max catch recommended for harvest
 - New definition of ABC for Atlantic herring specifications
 - Considers/addresses scientific uncertainty
 - Council is bound by SSC recommendations

$$\text{OFL} \geq \text{ABC}$$

OFL - Scientific Uncertainty =
ABC (Determined by the SSC)

Scientific Uncertainty

- To be addressed primarily between the OFL and the ABC – ABC may be set lower than OFL to account for scientific uncertainty
- Stock assessment will identify/discuss sources of uncertainty
- Possible sources of scientific uncertainty:
 - Mixing of herring stock components
 - Retrospective pattern in stock assessment (over-estimates B and under-estimates F)
 - Predator/prey relationships and forage issues – amount of herring that is consumed for predation and impacts on natural mortality

ACL Alt. 2 – Definitions

Section 4.1.2.1, p. 18 Draft Amendment 4

- ABC Control Rule – specified approach for setting the ABC as a function of scientific uncertainty
 - Considers stock assessment issues, predator-prey issues, and projections
 - SSC advice on TRAC 2009 and 2010-2012 ABC specification will form basis of ABC control rule in Am 4
 - May be modified in the future through specs, framework, or amendment
- SSC unable to provide final guidance (2010-2012 Specifications)
 - No ABC control rule specified

ACL Alt. 2 – Definitions

Section 4.1.2.1, p. 18 Draft Amendment 4

- Annual Catch Limit (ACL) – catch level selected for harvest
 - Considers/addresses management uncertainty
 - The level of catch to determine whether accountability measures are necessary
 - One stock complex ACL for Atlantic herring (U.S. OY) and sub-ACLs for each management area (TACs)
 - Canadian catch, State waters catch, and possibly discards to be accounted for when specifying ACLs

ABC - Management Uncertainty =
Stock-wide ACL = OY

Management Uncertainty

- To be addressed primarily between the ABC and the ACLs – ACLs may be set lower than ABC to account for management uncertainty
- Level of uncertainty will depend on catch monitoring program and ability to monitor all catch against ACLs
- Possible sources of uncertainty:
 - Bycatch/Discards
 - Canadian/state waters catch
 - Impact of ASMFC management measures on fishing patterns

ACL Alt. 2 – Definitions – AMs

Section 4.1.2.1, p. 18 Draft Amendment 4

Accountability Measures (AMs)

- measures to ensure that the ACL will not be exceeded (precautionary) and mitigate/correct any ACL overages that may occur (consequential)

ACL Alt. 2 – Specs Option 1

CURRENT SPECIFICATIONS	PROPOSED (AMENDMENT 4) SPECIFICATIONS
Allowable Biological Catch (ABC)	Overfishing Limit (OFL)
	Acceptable Biological Catch (ABC)
U.S. Optimum Yield (OY)	U.S. Optimum Yield (OY) (Stock-Wide ACL)
Domestic Annual Harvesting (DAH)	Domestic Annual Harvesting (DAH)
Domestic Annual Processing (DAP)	Domestic Annual Processing (DAP)
Total Joint Venture Processing (JVpt)	Total Joint Venture Processing (JVpt)
Joint Venture Processing (JVP)	Joint Venture Processing (JVP)
Internal Waters Processing (IWP)	Internal Waters Processing (IWP)
U.S. At-Sea Processing (USAP)	U.S. At-Sea Processing (USAP)
Border Transfer (BT)	Border Transfer (BT)
Total Allowable Level of Foreign Fishing (TALFF)	Total Allowable Level of Foreign Fishing (TALFF)
RESERVE	RESERVE
TAC Area 1A	TAC Area 1A (sub-ACL)
TAC Area 1B	TAC Area 1B (sub-ACL)
TAC Area 2	TAC Area 2 (sub-ACL)
TAC Area 3	TAC Area 3 (sub-ACL)
Research Set-Aside	Research Set-Aside (and/or Other Set-Aside)

ACL Alt. 2 – Specs Option 2

CURRENT SPECIFICATIONS	PROPOSED (AMENDMENT 4) SPECIFICATIONS
Allowable Biological Catch (ABC)	Overfishing Limit (OFL)
	Acceptable Biological Catch (ABC)
U.S. Optimum Yield (OY)	U.S. Optimum Yield (OY) (Stock-Wide ACL)
Domestic Annual Harvesting (DAH)	Domestic Annual Harvesting (DAH)
Domestic Annual Processing (DAP)	Domestic Annual Processing (DAP)
Total Joint Venture Processing (JVPt)	N/A
Joint Venture Processing (JVP)	N/A
Internal Waters Processing (IWP)	N/A
U.S. At-Sea Processing (USAP)	U.S. At-Sea Processing (USAP)
Border Transfer (BT)	Border Transfer (BT)
Total Allowable Level of Foreign Fishing (TALFF)	N/A
RESERVE	N/A
TAC Area 1A	TAC Area 1A (sub-ACL)
TAC Area 1B	TAC Area 1B (sub-ACL)
TAC Area 2	TAC Area 2 (sub-ACL)
TAC Area 3	TAC Area 3 (sub-ACL)
Research Set-Aside	Research Set-Aside (and/or Other Set-Aside)

ACL Alt. 2 – Sub-ACLs

Section 4.1.2.3, p. 24 Draft Amendment 4

- ACL established for herring stock complex as a whole
- The Council will divide the ACL into sub-ACLs for the four management areas
- Allows for:
 - Catch limits to be established for each management area to ensure overfishing does not occur on individual stock components
 - Continuation of current process which establishes management area TACs
 - AMs for specific portions of the fishery which may be responsible for excessive catch
- AMs may apply to all sub-ACLs
- May be modified as part of the specifications process

ACL Alt. 2 – Specs Process

Section 4.1.2.4, p. 25 Draft Amendment 4

- Herring PDT will develop recommendations for ABC and ACLs – provide Discussion Document to SSC:
 - OFL estimates for next three years
 - ABC recommendation and related discussion re. scientific uncertainty (incl. projections)
 - Evaluation of whether ABC and ACLs have been exceeded in earlier years
 - Discussion of existing AMs and effectiveness
 - ACL discussion will address management uncertainty, including discussion of discards

ACL Alt. 2 – Specs Process

Section 4.1.2.4, p. 25 Draft Amendment 4

- SSC will review Discussion Document(s), recommend ABC and comment on other related issues as may be requested
- Council will be bound by ABC recommendation from SSC but may consider different options for sub-ACLs
- Sub-ACLs evaluated by the Herring PDT through specifications process (ex., risk analysis)
- AMs will be established in Amendment 4 but can be modified/adjusted through specs process as necessary

Accountability Measures (AMs)

Section 4.2.1, p. 29 Draft Amendment 4

AM Alternative 1 – No Action

- Existing AM
 - Closure when 95% of TAC is projected to be reached
 - 92% in some areas due to research set-aside
 - Minimizes risk of exceeding 100% of TAC

AM Alt. 2 – Option 1

Section 4.2.2, p. 30 Draft Amendment 4

OVERAGE PAYBACK

- Overage from one fishing year deducted in the year following the final tally (one-year lag)
- Final tally to include incidental catch from all fisheries – VTR data – so may take 3-4 months following end of fishing year
- Example:
 - 2011 – overage
 - 2012 – compilation
 - 2013 – overage deduction
- Overages likely to be small due to other AMs for directed herring fishery

AM Alt. 2 – Option 2

Section 4.2.2, p. 30 Draft Amendment 4

HADDOCK CATCH CAP

- Consistent with haddock sub-ACL for herring fishery established in Amendment 16
- Applies current regulations for closure when catch cap is reached, with additional language to allow herring vessels with multispecies permits to retain haddock when on a multispecies trip

Environmental Impacts – Biological

Section 6.1, p. 123,125,127 Amendment 4 Draft

- Impacts on the herring resource:
 - Alternatives mostly administrative
 - Should not have direct biological impact
- Impacts on Habitat and EFH
 - Potential effects of herring fishery on EFH evaluated as part of an EIS (NMFS 2005)
 - Impacts are minimal and temporary
- Impacts on Protected Species
 - Predicting positive/negative impacts on protected species difficult with lack of observer coverage
 - Threatened and endangered species would not be impacted further as a result of the measure

Environmental Impacts – Human

Section 6.2, p. 131,133 Amendment 4 Draft

- Economic Impacts:
 - Mainly procedural changes
 - No direct economic impact expected
 - Impacts of specifications themselves to be evaluated in specifications package
- Social and Community Impacts:
 - Difficult to predict social response to measures
 - Not expected to have a social impact
 - Impacts of specifications themselves to be evaluated in specifications package

Public Comments: Process for Establishing ACLs/AMs

- Importance of timing: begin as early in the year as possible.
- More comprehensive catch analysis is necessary to develop the appropriate ACL process
- Problematic split of Amendment 5 from Amendment 4
 - need for a catch monitoring system to be in place before implementation of ACLs and AMs.

Public Comments:

“Stocks in the Fishery”

- Non-target stocks should be identified as stocks and be subject to ACLs and AMs
 - River herring (both alewife and blueback)
 - Haddock
 - Atlantic mackerel

Sub-ACLs

- Clearer definitions of how stock mixing uncertainty is to be accounted for in specs
 - Specifically for sub-ACLs
 - Should be set by the SSC.
- Inadequate information and no reference points to evaluate of individual stock components (currently)

Public Comments:

SSC Involvement and the ABC

- Lack of ABC control rule troubling
 - Leads to conflict over process (2010-2012 specs as example)
 - Some suggestions provided for ABC control rule
 - Council, not the SSC, should set the ABC control rule
 - A “risk policy” should be established by Council to guide SSC in determining risk amount for ABC/ABC control rule.
- SSC not given adequate role/enough direction

Public Comments: Uncertainty

- Need for better incorporation of sources of uncertainty
 - Herring as forage fish and its role in the ecosystem
 - Am. 4 doesn't address role of predator needs in the specs process
 - More clarity: role of herring as forage during the ACL-setting process.
- Language that describing herring as forage species as a part of management uncertainty should be removed
 - Role of herring as forage already incorporated into stock assessments
 - Considered as part of scientific uncertainty.
- Discards in the herring fishery are not being adequately monitored or addressed
 - ACLs are really TALs at this time
- Approach to specify management uncertainty not clearly described
 - Role of catch monitoring program in ACL-setting process also questioned.

Public Comments: AMs

- First option (Alternative 2) may mean too much time between overages and subsequent deductions
 - Council should consider in-season adjustment AM
- AMs will not be properly enforced without better catch monitoring (Amendment 5)
- AM closure at 95% does not account for the unobserved and unreported discards
- A mechanism should be considered for addressing sub-ACL underages
 - carrying the underages into the next fishing year
- AMs are inadequate to address management uncertainty
 - inability of managers to constrain catch
 - deficiency of the monitoring system.

Public Comments: Other

- EIS needed for Amendment 4, not an EA
- Council should developing catch shares in the future
 - avoid potential issues associated with ACL overages.

Committee Motion 1/25/2010

- **Recommend that Alternative 2 for ACLs (with Specifications Option 2) and Alternative 2 for AMs (including both options 1 and 2) be the preferred alternative for Amendment 4, and to eliminate Section 4.1.2.5 from the document (Timing)**

Committee Motion 1/25/2010

- **That the Interim Control Rule for ABC be based on the SSC recommendations for the 2010-2012 specifications**

Minor Clarifications

Herring Committee 1/25/2010

- Doesn't change intent/proposed measures
 - ACLs include discards, and the process described in Am.4 will provide flexibility within specifications process, language will be clarified
 - Cannot implement new AMs through specifications, need Framework or Amendment
 - “Important considerations” discussion on pg 7 will be modified to reflect the importance of herring as forage relative to NS 1 and the specification of OY

Timeline

- ACL/AM provisions of Amendment 4 should be submitted no later than April/May 2010 to meet January 1, 2011 implementation
- Council selection of final measures Jan 26th, 2010 (Portsmouth, NH)
- Target submission April 1st, 2010