

Amendment 4 to the Atlantic

Herring FMP:

Annual Catch Limits

and

Accountability Measures

Lori Steele, NEFMC Staff, Herring PDT Chair

NEFMC Meeting, June 23, 2009

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 MSRA 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

ACL Alternatives

Am 4 Disc. Doc, p. 16

- ACL Alternative 1 – No Action
- ACL Alternative 2 – ACL/AM Process (Fishery Specifications)
 - Two Options for Fishery Specifications (Section 2.3.2, p. 19)
- **Herring Committee Motion** – Adopt the range of ACL Alternatives for consideration, including Options 1 and 2 for fishery specifications

ACLs/AMs – TERMINOLOGY

- 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

ACLs/AMs – TERMINOLOGY

- 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

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

- 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

ACLs/AMs – TERMINOLOGY

- 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
- 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/AM Process

- Measures in Amendment 4 are primarily process-related (fishery specifications)
- One stock-wide ACL to be established = OY
- Management Area TACs will be sub-ACLs, subject to accountability measures
- 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
 - ACL discussion will address management uncertainty

ACL/AM Process

- SSC will review Discussion Document(s), recommend ABC and comment on other related issues as may be requested
- PDT also to provide recommendations regarding ACL and sub-ACL options, including discussion of management uncertainty (SSC may comment if requested); PDT also to evaluate AMs and provide recommendations as appropriate
- 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

Specifications – 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)

Specifications – 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)

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

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

AM Alternatives

Am 4 Disc. Doc, p. 27

- AM Alternative 1 – No Action
- AM Alternative 2 – Additional AMs
 - Established in addition to existing AMs
 - Mix-and-match options
 - Several options proposed during development, two recommended for further consideration (overage payback and haddock catch cap AM)
- **Herring Committee Motion** – adopt AM Alternatives 1 and 2, with Options 3A and 4 (as modified/described in Disc. Doc.)

Accountability Measures

- **AM ALT 1 – EXISTING AMs
(No Action)**
 - In-Season Adjustments (Precautionary, but vague and requires time for public comment)
 - 95% Closure (Precautionary; 92% in some areas due to research set-aside)
 - Framework Adjustment Process (Precautionary/Consequential)
 - ASMFC Measures (indirect; days out of the fishery and spawning restrictions)

Accountability Measures

- **AM ALT 2 – ADDITIONAL AMs
(Two Options Proposed)**

- **OPTION 1 – OVERAGE PAYBACK (Consequential)**

- Described as Option 3A, p. 32
- 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
- Overages likely to be small due to other AMs for directed herring fishery

Accountability Measures

- **AM ALT 2 – ADDITIONAL AMs
(Two Options Proposed)**

OPTION 2 – HADDOCK CATCH CAP AM

- Described as Option 4, p. 33
- 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

TIMING CONSIDERATIONS

- To be effective by January 1, 2011 for Atlantic herring fishing year, ACL/AM provisions must be submitted no later than May 2010
- 2010-2012 specifications must address ACL/AM provisions for 2011 and 2012 – submission scheduled for Fall 2009
- TRAC Stock Assessment June 2009
- ABC recommendation required by SSC for 2010 – 2012 and beyond

2008-2009 Fishery Specifications

	2007	2008/2009
ABC	194,000	194,000
U.S. OY	145,000	145,000
DAH	145,000	145,000
DAP	141,000	141,000
JVPt	0	0
JVP	0	0
IWP	0	0
USAP	20,000 (Areas 2 and 3 only)	20,000 (Areas 2 and 3 only)
BT	4,000	4,000
TALFF	0	0
RESERVE	0	0
TAC Area 1A	50,000 (5,000 Jan-May)	45,000 (43,650 fishery; 5,000 Jan-May)
TAC Area 1B	10,000	10,000 (9,700 fishery)
TAC Area 2	30,000	30,000 (29,100 fishery)
TAC Area 3	55,000	60,000 (58,200 fishery)
Research Set-Aside	N/A	Area 1A RSA 1,350 Area 1B RSA 300 Area 2 RSA 900 Area 3 RSA 1,800

Updated Fishery Information

Total 2008 Catch from IVR

Management Area	IVR Catch (mt)	% of TAC
Area 1A (Jan 1 st – May 31 st)	0	NA
Area 1A (June 1 st – Dec 31 st)	41,640	NA
Area 1A TOTAL	41,640	92.5% of 45,000
Area 1B	8,104	81% of 10,000
Area 2	19,256	64.2% of 30,000
Area 3	11,800	19.7% of 60,000
Total	80,800	55.7% of 145,000

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