

# **Atlantic Herring Fishery**

## **Specifications 2013-2015:**

### **Draft Discussion Document**

**Lori Steele, NEFMC Staff, Herring PDT Chair**

**NEFMC Meeting, November 13, 2012**

# 2013-2015 Specs Development YTD

- SAW/SARC 54 (June 2012) - Benchmark
- Herring PDT August 14, 2012
- Scientific and Statistical Committee (SSC) September 12/13, 2012
- Herring Committee/ASMFC Herring Section September 20, 2012
- NEFMC September 25-27, 2012 – Select *Preferred Alternative* for ABC and specify management uncertainty; add 2 alternatives for accountability measures (AMs)

# 2010-2012 Herring Specifications

<b>SPECIFICATION</b>	<b>2010-2012 ALLOCATION (MT)</b>
<b>Overfishing Limit (OFL)</b>	145,000 – 2010 134,000 – 2011 127,000 - 2012
<b>Acceptable Biological Catch (ABC)</b>	106,000
<b>Optimum Yield (OY)/Annual Catch Limit (ACL)</b>	91,200
<b>Domestic Annual Harvesting (DAH)</b>	91,200
<b>Domestic Annual Processing (DAP)</b>	87,200
<b>U.S. At-Sea Processing (USAP)</b>	0
<b>Border Transfer (BT)</b>	4,000
<b>Sub-ACL Area 1A*</b>	26,546
<b>Sub-ACL Area 1B</b>	4,362
<b>Sub-ACL 2</b>	22,146
<b>Sub-ACL 3</b>	38,146
<b>Research Set-Aside (RSA)</b>	None
<b>Fixed Gear Set-Aside (1A)</b>	295

# SAW/SARC 54 (June 2012)

	TRAC 2009	SAW/SARC 54
$F_{MSY}$	0.27	0.27
$B_{MSY}$	670,000 mt (1/2 $SSB_{MSY} = 335,300$ mt)	157,000 mt (1/2 $SSB_{MSY} = 78,500$ mt)
MSY	178,000 mt	53,000 mt

- 2011 SSB = 517,930 mt  
(not overfished; “rebuilt”)
- 2011  $F = 0.14$  (not overfishing)

# SSC Recommendations

September 12-13, 2012

**ABC Control Rule** – specified approach to setting ABC for stock as a function of scientific uncertainty (recommended by SSC)

- Reviewed two alternatives for specifying ABC and supports both approaches (constant catch, 75%  $F_{MSY}$ ) for 2013-2015
- Both approaches are nearly equivalent from a biological perspective (projected to result in similar SSB values in 2015)

# ABC/ABC Control Rule

1. Alternative 1 – No Action
2. Alternative 2 (“constant catch” Preferred Alternative)
3. Alternative 3 (75%  $F_{MSY}$ )

Preferred Alternative	2013	2014	2015
OFL (mt)	169,000	136,000	114,000
ABC (mt)	114,000	114,000	114,000
Mgmt. Unc. (mt)	6,200	6,200	6,200
ACL/OY (mt)	107,800	107,800	107,800

# Additional ABC Alternatives?

- October 8, 2012 correspondence submitted by EarthJustice
- Requests Council to consider a reasonable range of alternative ABC control rules (as per Amendment 4 lawsuit/court order)
- Includes two ABC/control rule alternatives based on recent scientific studies for forage fish for Council consideration
- Requests consideration of additional AM alternatives

# Proposed ABC Alternative (EJ)

*Lenfest Control Rule (“Little Fish, Big Impact”)*  
“Hockey Stick” Harvest Control Rule

- Conservative target  $F$  (suggested 50%  $F_{MSY}$ ) when stock biomass is above a target level and sets ABC as a function of biomass
- Decreases catch as biomass decreases (hockey stick control rule) to a cutoff biomass level, at which there would be no fishing



# Proposed ABC Alternative (EJ)

## *Pacific Coast Control Rule*

Harvest control strategy for forage fish used by  
Pacific Fishery Management Council

- Target F remains the same regardless of biomass, until B declines to a cutoff level, at which point fishing is ceased
- Target F set conservatively based on uncertainty and includes additional buffer to account for forage/ecosystem considerations (ex., 50%  $F_{MSY}$ )

# Herring PDT Recommendations

October 18, 2012

- Supports consideration of the two alternatives, but views them as long-term strategies, both requiring further evaluation (as well as other approaches)
- Based on assessments with static  $M$  – SAW 54 uses time/age-varying  $M$  – big difference re. accounting for predation and resulting reference points
- Setting ABC 2013-2015 based on 50%  $F_{MSY}$  (0.14) would achieve similar results if the Council supports a more conservative short-term approach to further account for forage/ecosystem considerations
- Development of long-term management strategy should be considered through an FMP amendment

# Herring Committee

November 7, 2012

## **MOTION:**

That the Council forward to the SSC the Lenfest Hockey Stick Harvest Control Rule for evaluation and possible inclusion in the specifications document

# Management Uncertainty

ABC– Management Uncertainty = ACL  
(Stock-wide ACL = U.S. OY)

<b>Preferred Alternative</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
OFL (mt)	169,000	136,000	114,000
ABC (mt)	114,000	114,000	114,000
Mgmt. Unc. (mt)	6,200	6,200	6,200
ACL/OY (mt)	107,800	107,800	107,800

# Management Area Sub-ACLs

**Atlantic herring** = multiple stock components (inshore and offshore) that mix seasonally

\*Inshore stock component also caught in Canadian (NB weir) fishery\*

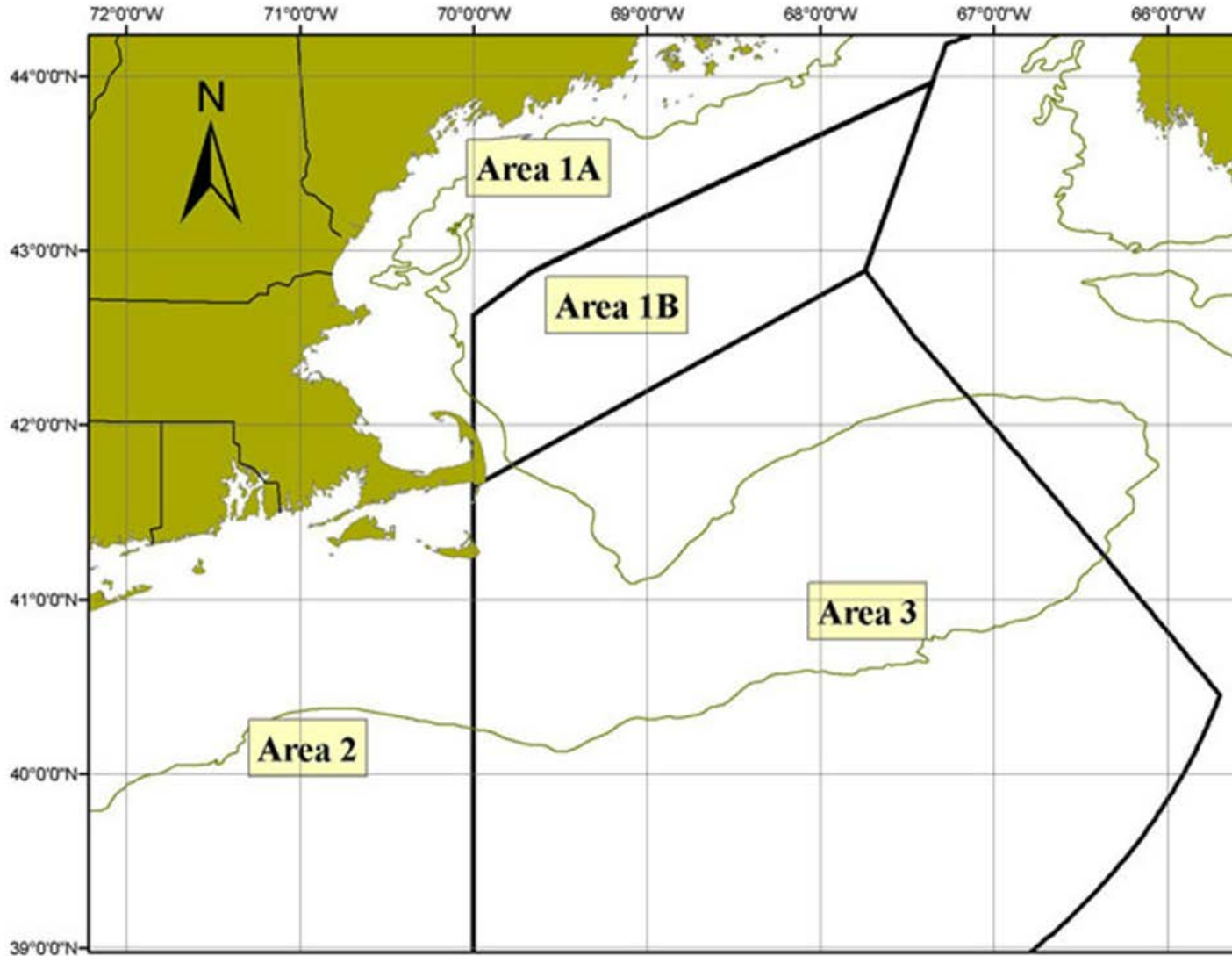
One annual catch limit (ACL) with sub-ACLs assigned to four management areas

**Area 1** = Gulf of Maine, divided into inshore (Area 1A) and offshore (Area 1B);

**Area 2** = southern New England/Mid-Atlantic;

**Area 3** = offshore (Georges Bank)

# Atlantic Herring Management Areas



# Management Area Sub-ACLs

- Stock complex is not overfished/not overfishing
- Separate assessments/reference points for stock components (inshore/offshore) not available
- Herring Advisory Panel and Committee developed several options for further analysis
- Committee recommends seasonal splits for some sub-ACLs – would require concurrent framework adjustment to implement the regulatory provision to allow splits

# Management Area Sub-ACLs

November 7, 2012

- Sub-ACL Options 5 and 6 eliminated
- One sub-option (Option 4) added – allocates sub-ACLs differently in 2013 due to late implementation of specs
- Options added – split Area 2 sub-ACL (67% Jan-Feb, 33% Mar-Dec) and Area 1B sub-ACL (0% Jan-Apr, 100% May-Dec)
- Recommendation – develop parallel FWA to allow for seasonal splits (two actions, same document; intent to not delay specs)



# Herring Committee

November 7, 2012

## **MOTION:**

That the Council initiate a framework adjustment to establish the mechanism to allow for seasonal splits of sub-ACLs (parallel action with 2013-2015 specifications package)

# Herring Committee

November 7, 2012

## **MOTION:**

That the Council include consideration of allowing sub-ACL rollovers of up to 10% in the herring fishery as part of the parallel framework adjustment to modify the specifications process

# Accountability Measures (AMs)

- Amendment 4 lawsuit/court order mandates consideration of wider range of alternatives for AMs in the herring fishery
- Council approved two AM alternatives at September 2012 Meeting
- Staff included AM alternatives considered but rejected in Am. 4 in Draft Specifications Document
- Council should approve range of AM alternatives for analysis at Nov 2012 Meeting

# Alternative 1 (AMs)

- ***Management Area Closure*** – directed fishery for herring closes in an area when 95% of the sub-ACL is projected to be reached (additional 5% for incidental catch at 2,000 lb. possession limit)
- ***Sub-ACL Overage Deduction*** – sub-ACL overages from Year 1 deducted in Year 3, determined by final catch tally during Year 2
- ***Haddock Catch Cap AM*** – directed herring fishery closes in haddock stock area when cap is reached

# Alternative 2/2A (AMs)

Adjust AM for closing directed fishery in an area

- Options to apply to stock-wide ACL

***Alternative 2A*** - require the directed fishery in an area to close when catch is projected to reach **92%** of a sub-ACL (not including RSAs) under the following conditions:

- The stock is overfished or overfishing is occurring; and
- The sub-ACL for the area has been exceeded in at least one of the preceding two years

# Alternative 2B (AMs)

***Alternative 2B*** – require the directed fishery in a given management area to close when catch is projected to reach **92%** (not including RSAs) of a sub-ACL (versus 95%); remaining 8% to account for incidental catch fishing under a 2,000 pound possession limit after closure

- Other thresholds (90%, for example) could be considered (not recommended by Committee);
- Different thresholds could be applied to different management areas (for example, 92% in Area 1A, 90% in Area 1B, and 95% in Areas 2/3);

# Alternative 2C (AMs)

**Alternative 2C** – Automatically reduce the percentage trigger for closing the directed herring fishery during the following year in any management area where a sub-ACL overage occurs

- Ex., under current provisions that close the directed fishery at 95% – if NMFS sub-ACL monitoring data indicate that a sub-ACL is exceeded by 3% during the fishing year, then the directed fishery in that area would close at 92% of the sub-ACL during the following year

# Alternative 3 (AMs)

***Alternative 3*** – Prohibit Possession of Herring  
When 100% of the Sub-ACL is Projected to be  
Reached

- Option to apply to stock-wide ACL



# Alternative 4 (AMs)

**Alternative 4** – Establish a Trigger for an In-Season Review and Possible Adjustment of the Sub-ACL

- A catch threshold (ex., % of sub-ACL for a management area) would be established and would trigger a review by the NMFS Regional Administrator; the RA would determine if in-season adjustments are necessary to ensure that the sub-ACL is not exceeded during the fishing year;
- Requires specification of a trigger for in-season review and identification of possible in-season adjustments that the RA could implement

# Alternative 5/5A (AMs)

***Alternative 5*** – Adjust the Sub-ACL Overage Payback Provisions

***Alternative 5A*** – pound-for-pound payback of a sub-ACL overage in a given management area would only be required if sub-ACL is exceeded by 5% or more – when the stock is rebuilt and overfishing is not occurring

# Alternatives 5B/5C (AMs)

**Alternative 5B** – direct deduction of a sub-ACL overage in the following fishing year (versus the current one-year lag); overages determined by sub-ACL monitoring (versus NMFS year-end accounting)

- Option to apply to stock-wide ACL

~~**Alternative 5C** – sub-ACL overage would trigger a review by the Herring PDT for negative biological impacts (one-year lag); overage deduction determined based on PDT recommendations~~

# Herring Committee

November 7, 2012

## MOTION:

That the Council consider all AM Alternatives except for Alternative 5C in the 2013-2015 herring specifications package

- *Alternative 4 needs additional detail*

# Herring Specifications Timeline

Action	Schedule
1. SAW/SARC 54	June 2012
2. Herring PDT Meeting	August 14, 2012
3. SSC recommend ABC	September 12, 2012
4. Herring Committee Meeting	September 20, 2012
5. NEFMC Meeting (Initial)	September 25-27, 2012
6. Herring PDT Meeting	October 18, 2012
7. Herring AP Meeting	November 6, 2012
8. Herring Committee Meeting	November 7, 2012
9. NEFMC Meeting	November 13-15, 2012
10. NEFMC Meeting (final decision)*	January 29-31, 2013*