

# 2021-2023 Atlantic Herring OFL/ABC Recommendation

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**SSC Webinar**  
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# TOR and Meeting Materials

*Review information provided by the Council's Herring Plan Development Team, the results of recent management track assessment (June 2020), and using the acceptable biological catch (ABC) control rule approved in Amendment 8, recommend the overfishing level (OFL) and the ABCs for Atlantic herring for 2021-2023.*

- 1–1i. 2020 management track assessment
2. Presentation slides, Dr. Jon Deroba
3. Herring PDT Report, 2020 (Draft)
4. Presentation slides, Ms. Deirdre Boelke
5. SSC Final Report from 2018
6. NEFMC Risk Policy (6a. Herring matrix)
7. NEFSC status of the ecosystem report

# Timeline

- 2020 Assessment not final yet, presentation in Sept.
- Council scheduled to take final action on 2021-2023 specs in Sept (Framework 8), implementation early 2021.
- If declared overfished, a rebuilding program would need to be developed.
- FW8 also includes measures to adjust measures in the herring plan that potentially inhibit access to the mackerel fishery.



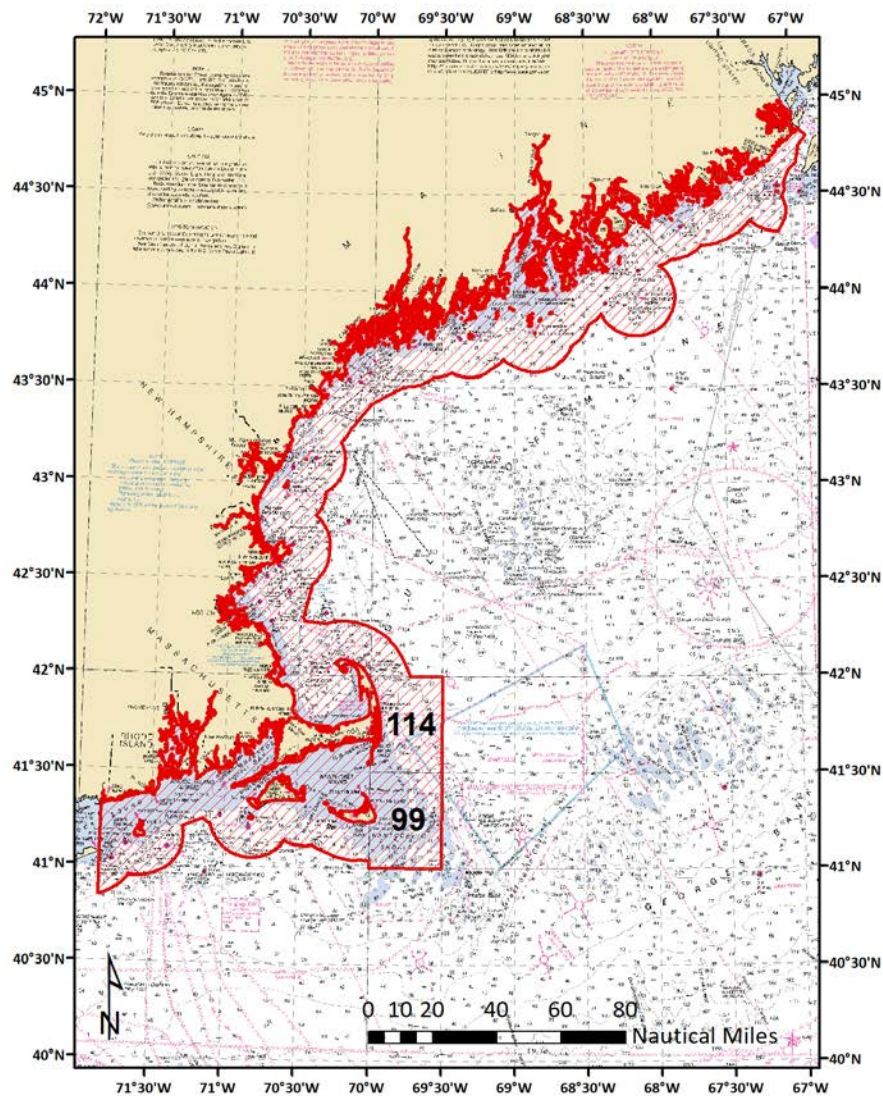
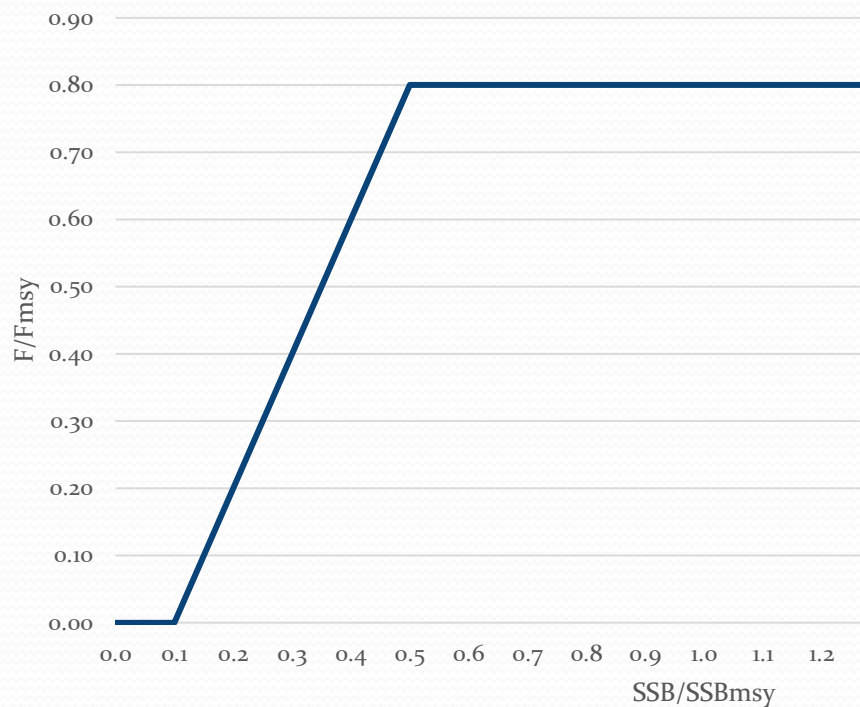
# Other Actions

- Amendment 8 approved in Nov 2019 – ABC control rule and inshore MWT gear restriction area - but no final rule yet.
- Industry Funded Amendment (IFM) implemented Spring 2020 – 50% monitoring coverage for herring fishery – mid-water trawl (MWT) vessels can use electronic monitoring (EM) and portside in place of human observers.
- Framework 7 – protect herring spawning and egg mats on Georges Bank - target implementation in 2021.



# Amendment 8 measures

Final Amendment 8 Control Rule



# **Part II**

## **Summary of PDT Report (Document #3)**

# Table of Contents

## **1.0 Summary of Management Track Assessment**

Trends, status, uncertainty

## **2.0 Herring Specifications**

Previous scientific uncertainty buffers - Table 2

## **3.0 OFL and ABC Projections**

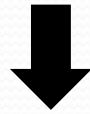
PDT recommendations

## **4.0 Recent catch and specifications**

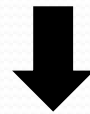
Fishery trends, recent catch limits



Herring OFL



Herring ABC



Herring ACL

**Scientific Uncertainty**

- ABC control rule\*

**Management Uncertainty**

- Canadian NB weir fishery
- State water catch
- Discards

Area 1A  
(28.9%)

Area 1B  
(4.3%)

Area 2  
(27.8%)

Area 3  
(39%)



# ABC Control Rule – as approved in A8

- **ABC CR** - When biomass is  $>0.5$  for the ratio of  $SSB/SSB_{MSY}$ , the maximum fishing mortality allowed is 80% of  $F_{MSY}$ . As biomass declines, fishing mortality declines linearly, and if biomass falls below 0.1 for the ratio of  $SSB/SSB_{MSY}$ , then ABC is set to zero.
- **Rationale** - Intended to explicitly account for herring as forage in the ecosystem by limiting  $F$  to 80 percent of  $F_{MSY}$  when biomass is high and setting it at zero when biomass is low. It is also intended to generate an ABC consistent with specific criteria identified by the Council, including low variation in yield, low probability of the stock becoming overfished, low probability of a fishery shutdown, and catch limits set at a relatively high proportion of MSY. Relative to other control rules considered by the Council, the proposed control rule is designed to more effectively balance the goal and objectives of the Herring FMP.

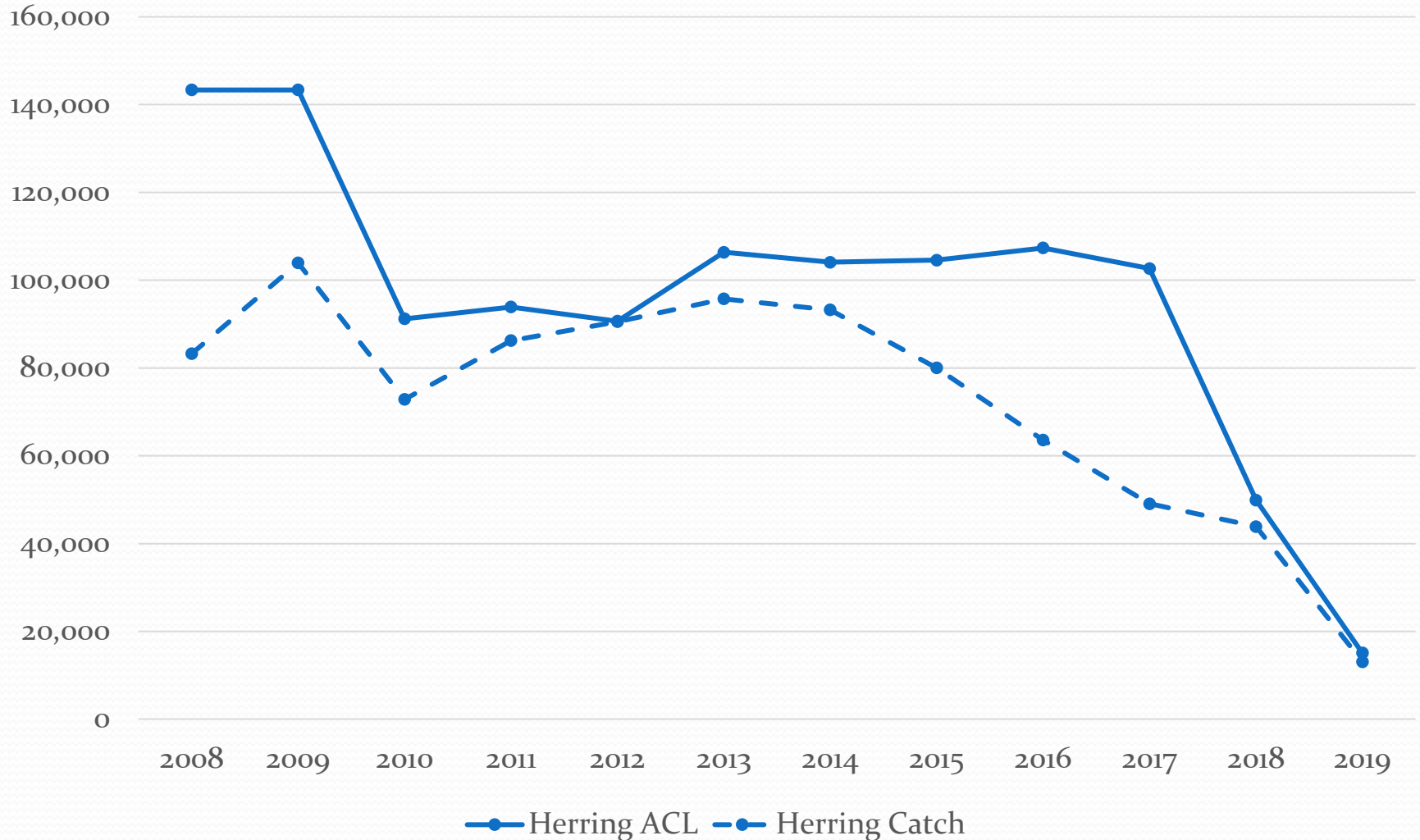
# Table 2

## Previous SSC Recs.

	2019-2021		
	2019	2020	2021
OFL	30,668	38,878	59,788
ABC	21,266	16,131	16,131
Total ACL/OY	15,065	11,471	11,471
Catch (U.S.)	12,782	N/A	N/A
Catch (NB Weir)	5,115	N/A	N/A
Stock Assessment	SAW/SARC 65 Benchmark Assessment, 2018		
Reference Points	SSBMSY proxy 189,000, FMSY proxy 0.51; MSY =112,000		
Status	Not overfished ( $F=0.45$ ) and overfishing not occurring ( $SSB=141,473$ )		
Uncertainty	(1) Natural mortality; (2) stock recruit relationship; (3) stock structure		
Rationale	<ul style="list-style-type: none"> <li>The SSC recommendation - 2019 and 2020 based on the ABC control rule but keep ABC in 2021 the same as 2020 due to the uncertainty in the projections.</li> <li>The SSC recommended the NEFMC request an update assessment in 2020 to verify projected trend in biomass and recruitment.</li> </ul>		



# Herring ACL vs. Herring Catch



# Table 3 – Short-term projections

	Mobile Fleet F	SSB	P(overfishing)	P(overfished)	OFL	ABC	SSB/SSBmsy
2020	0.243	56375	0.002	0.999	-	-	0.210
2021	0.119	48841	0.000	0.932	23423	9483	0.182
2022	0.089	45921	0.000	0.903	26292	8767	0.171
2023	0.077	130616	0.000	0.525	44600	11025	0.486



# PDT Recommendation

	OFL	ABC
2021	23,423	9,483
2022	26,292	8,767
2023	44,600	11,025

