

Herring Committee Report

September 2020 Council Meeting



New England
Fishery Management Council

Framework 8 – Part I

2021-2023 Specifications

Purpose

Review analyses and identify preferred alternative recommendations

5 Committee Motions

Relevant documents

- 2 – AP and Cmte motions
- 3 – Alternatives and AE
 - 3a – Draft Impacts
 - 3b – Appendices
 - 3c – Decision Document

Framework 8 – Section 2.2

- **GOAL 1 - Manage the Atlantic herring fishery at long-term sustainable levels consistent with the MSA.**

Objective – set specifications for 2021-2023 to prevent overfishing etc.

- **GOAL 2 - Consider adjustments to the herring plan that potentially inhibit the mackerel fishery from achieving OY.**

Objectives - 1) consider an increase in the incidental herring possession limit up to 40,000 pounds; and 2) modify the seasonal closure of Area 1B, which is currently closed January through April.



Fishery Specification Alternatives (3.1)

1. OFL and ABC (*#1: No Action, #2 SSC Recommendation based on ABC CR*)
2. Management uncertainty (*4 options: No Action, 3-year, 5-year and 10-year average of New Brunswick weir catch*)
3. Border transfer (*#1: 100mt, #2: 0 to 250mt*)
4. Research set-aside (*#1: 3% all years, #2: 3% 2021 only*)
5. Carryover (*3 options: up to 10%, prohibit carryover, up to 5%*)

AP and
CMTE
preferred

Status Quo (Section 3.3)

- DAH, sub-ACLs, seasonal closures
- Fixed gear set-aside (30mt)
- River herring/shad sub-ACLs (*Table 7, p. 17*)



Rec. 1: OFL/ABC (3.1.1)

	Year	OFL	ABC
OFL / ABC Alternative 1 (No Action)	2021	30,668	16,131
	2022	30,668	16,131
	2023	30,668	16,131
OFL / ABC Alternative 2	2021	23,423	9,483
	2022	26,292	8,767
	2023	44,600	8,767

AP: Alt. 1

CMTE: Alt. 2

- Table 2 and 3 – 2021-2023 Projections (p.4)
- No Action has higher Poverfishing, but both relatively small (0-10%).
- Low positive biological impacts under Alt 2, but differences are small.
- ST economic impacts are negative for both – revenues range from \$20M to \$5M. Some businesses may fail, impacts vary based on herring dependence (Table 9, p. 20).
- Other actions expected to reduce revenues as well (e.g. A8, IFM).
- SSC had reservations, concerned about assumptions regarding future recruitment. Projected increase in biomass in 2023 is uncertain.

Summary of Impacts - Recommendation 1

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 1: OFL/ABC	Alt. 1 – No Action	Low +	Low + to neutral	Low – (interactions) to Low + (forage)	Neutral	Short term: Negative Long term: Mixed
	Alt. 2 – ABC CR (SSC Rec.)	Low +	Low + to neutral	Low – (interactions) to Low + (forage)	Neutral	Short term: Negative Long term: Mixed

Rec. 2: Management Uncertainty (MU) (3.1.2)

	Herring catch (mt)
No Action (Option 1)	4,560
3-year average (Option 2)	6,244
5-year average (Option 3)	4,587
10-year average (Option 4)	4,669

AP: Option 3
5-year avg.

CMTE: Option 4
10-year avg.

Sources of MU in Herring FMP

1. Canadian catch from NB weir
2. Uncertainty around estimate of state water catch
3. Uncertainty around estimate of discards

NMFS can reallocate 1,000 mt of this buffer to Area 1A if Canada lands less than a specified amount through October 1. Council has recommended trigger at 0.645 of MU – See Table 4 on p. 10 for details.

Is Council still comfortable with these trigger values? Can be adjusted.

Draft Impacts - MU

Table 31, p. 61

Year	NB Weir catch
2010	10,958
2011	3,711
2012	504
2013	6,431
2014	2,149
2015	146
2016	4,060
2017	2,103
2018	11,574
2019	5,054

- NB weir fishery is very variable with no apparent trends, impacts relatively uncertain.
- Table 5 on page 6 has projections for 4 different MU buffers combined with OFL/ABC Alt. 2. Essentially no differences in Poverfishing, Poverfished, SSB, etc.
- Low + economic impacts overall from reduced risks of overfishing in general; options with higher buffers have low negative ST economic impacts.



Summary of Impacts - Recommendation 2

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 2: Management Uncertainty	Option 1 – No Action	Low +	Low + to neutral	Low –	Neutral	Low +
	Option 2 – 3-year average	Low +	Low + to neutral	Low –	Neutral	Low +, Low – compared to No Action
	Option 3 – 5-year average	Low +	Low + to neutral	Low –	Neutral	Low +, Negligible compared to No Action
	Option 4 – 10-year average	Low +	Low + to neutral	Low –	Neutral	Low +, Low – compared to No Action

Rec. 1 and 2: Table 6 – Summary of specs (p. 13)

						Area Sub ACLs			
	Year	OFL	ABC	Management Uncertainty Buffer Options	ACL = DAH	Area 1A (28.9%)	Area 1B (4.3%)	Area 2 (27.8%)	Area 3 (39%)
OFL / ABC Alternative 1	2021	30,668	16,131	4,560	11,571	3,344	498	3,217	4,513
				6,244	9,887	2,857	425	2,749	3,856
				4,587	11,544	3,336	496	3,209	4,502
				4,669	11,462	3,313	493	3,186	4,470
	2022	30,668	16,131	4,560	11,571	3,344	498	3,217	4,513
				6,244	9,887	2,857	425	2,749	3,856
				4,587	11,544	3,336	496	3,209	4,502
				4,669	11,462	3,313	493	3,186	4,470
	2023	30,668	16,131	4,560	11,571	3,344	498	3,217	4,513
				6,244	9,887	2,857	425	2,749	3,856
				4,587	11,544	3,336	496	3,209	4,502
				4,669	11,462	3,313	493	3,186	4,470
OFL / ABC Alternative 2	2021	23,423	9,483	4,560	4,923	1,423	212	1,369	1,920
				6,244	3,239	936	139	900	1,263
				4,587	4,896	1,415	211	1,361	1,909
				4,669	4,814	1,391	207	1,338	1,877
	2022	26,292	8,767	4,560	4,207	1,216	181	1,170	1,641
				6,244	2,523	729	108	701	984
				4,587	4,180	1,208	180	1,162	1,630
				4,669	4,098	1,184	176	1,139	1,598
	2023	44,600	8,767	4,560	4,207	1,216	181	1,170	1,641
				6,244	2,523	729	108	701	984
				4,587	4,180	1,208	180	1,162	1,630
				4,669	4,098	1,184	176	1,139	1,598

Rec. #3: Border Transfer (BT) – Section 3.1.3

- **Alt. 1 - No Action – maintain 100mt**
- **Alt 2. Set at 0 to 250** (*if adopted Council must specify the amount within this range*)
- US caught herring transshipped to Canada via vessel used for human consumption.
- Not a set-aside, within US fishery ACL.
- Table 24, p. 47; has been omt since 2016.
- Incentives still low for this activity – not expected to occur.

DRAFT IMPACTS:

No impacts on resource, negligible to low positive economic impacts if BT set above omt.

AP and CMTE : Alt. 2 (omt)



Summary of Impacts - Recommendation 3

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 3: Border Transfer	Alt. 1 – No Action	No impact	No impact	No impact	No impact	Low +
	Alt. 2 – 0 to 250 mt	No impact	No impact	No impact	No impact	At 0mt: negligible to Low – Above 0mt: Low +



Rec #4: RSA – Section 3.1.4

- Alt 1 – 3% all years
- Alt 2 – 3% in 2021 and 0% for 2022 and 2023
- Table 5 on p.12 has range of RSA allocation options (0mt to 148mt for OFL/ABC Alt. 2).
- In 2019 RSA allocation was about 450mt, and 350mt in 2020.
- RSA timing is out of sync with current specifications cycle; several possible adjustments from RSA Program Review.
- Programs difficult to run when quotas small, admin burden may outweigh benefits.
- Negative economic impacts if set-aside not harvested but removed from ACL.

Table 26 on p.54

Year	Number of Vessels (all areas)	Awarded (MT, all areas)	Landed (MT, all areas)	% landed (all areas)
2014	7	1,974	767	39
2015	8	1,974	739	37
2016	10	2,196	698	32
2017-2019	6	4,843	227	5

Source: GARFO IVR database as of August 2020.

AP:
No preferred

CMTE:
Alt. 2

Summary of Impacts - Recommendation 4

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 4: Research Set-aside	Alt. 1 – No Action – 3% all years	Indirect Low +	Indirect Low +	Negligible impact	Negligible impact	Low – if set-aside not harvested, only Low + for participating vessels, indirect low + from research and partnerships
	Alt. 2 – 3% in 2021 only	Indirect Low +	Indirect Low +	Negligible impact	Negligible impact	Low + compared to No Action from higher ACL for directed fishery, some negative impacts to researchers, opportunity costs difficult to quantify.

Rec. #5: Carryover – Section 3.4

- Alt. 1 – No Action – up to 10% carryover from 2019, 2020 or 2021
- Alt. 2 – prohibit carryover from 2019 and 2020
- Alt. 3 – up to 5% carryover from 2019 or 2020
- About 1,100 mt may be available for carryover in 2021 at 10% and 575 mt at 5%.

Preliminary 2019 catch (mt)

Area	Quota	Catch	%	Remaining catch	10%
1A	5,184	4,689.5	90.5%	494.5	518.4
1B	628	140.6	22.4%	487.4	62.8
2	4,062	4,737.3	116.6%	-675.3	
3	5,700	3,144.7	55.2%	2,555.3	570
Total	15,574	12,712.1	81.6%		1151.2

AP: Alt. 1
Up to 10%

CMTE: Alt. 3
Up to 5%

Summary of Impacts - Recommendation 5

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 5: Carryover	Alt. 1 – No Action – up to 10% carryover	Neutral, some spatial effects possible if more fishing in one area	Neutral, overall ACL still in place	Low -, increased risks to PR not expected	Negligible impact	Low +
	Alt. 2 – Prohibit carryover	Low +	Low + if overall effort levels lower	Low + if overall effort levels lower	Negligible impact	Low - , pressure to “use or lose”
	Alt. 3 – up to 5% carryover	Neutral, some spatial effects possible if more fishing in one area	Neutral, impacts between Neutral to Low +	More neutral, impacts between Low – to Low +	Negligible impact	Low + compared to Alt 2 and Low – compared to Alt 1

Final Recommendations

Any Questions? Hold Discussion.

See AP and Committee input in Decision Document (Doc. 3c.)

1. OFL and ABC (*#1: No Action, #2 SSC Recommendation based on ABC CR*)
2. Management uncertainty (*4 options: No Action, 3-year, 5-year and 10-year average of New Brunswick weir catch*)
3. Border transfer (*#1: 100mt, #2: 0 to 250mt*)
4. Research set-aside (*#1: 3% all years, #2: 3% 2021 only*)
5. Carryover (*3 options: up to 10%, prohibit carryover, up to 5%*)

Framework 8 – Part II

Adjust measures that potentially inhibit mackerel fishery from achieving OY

Purpose

Review analyses and identify preferred alternative recommendations

2 Committee Motions

Relevant documents

- 2 – AP and Cmte motions
- 3 – Alternatives and AE
 - 3a – Draft Impacts
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Increase incidental herring possession limit Options (3.5.1)

Option A (All Areas)	Sub-ACL	Total ACL
No Action	2,000 lb at 92%	2,000 lb at 95%
Option B (Areas 1B, 2 and 3)		
Step 1	40,000 lb at 92%	40,000 lb at 95%
Step 2	2,000 lb at 95%	2,000 lb at 98%
Option C (Areas 1B, 2 and 3)		
Step 1	5,000-20,000 lb at 90%	N/A
Step 2	2,000 lb at 95%	2,000 lb at 95%
Option D (Area 2 only)		
Step 1	40,000 lb at 90%	N/A
Step 2	5,000 lb at 98%	2,000 lb at 95%
Option E (Areas 2 and 3)		
Step 1	40,000 lb at 85%	N/A
Step 2	5,000 lb at 98%	2,000 lb at 95%

AP and CMTE:
Option D Modified

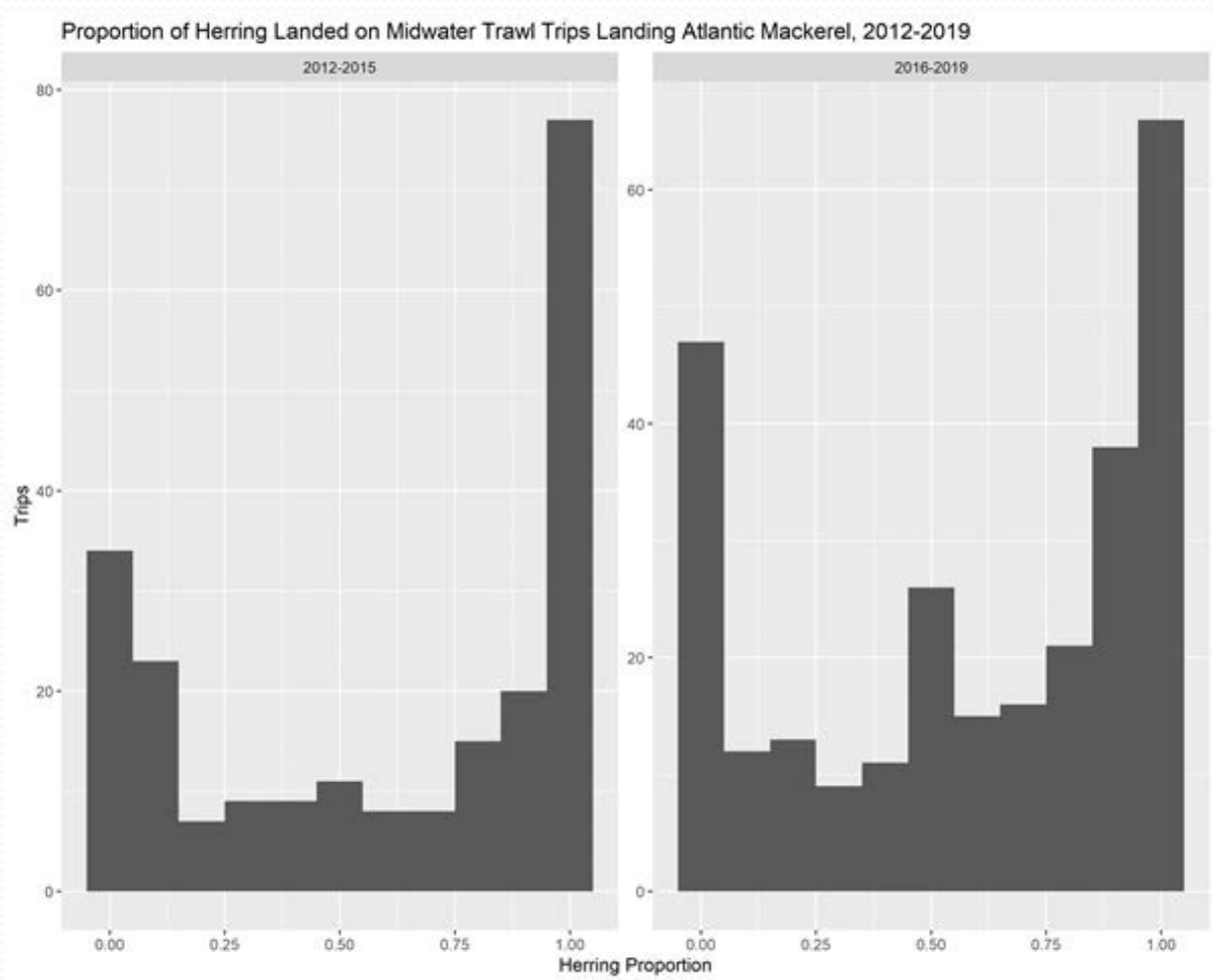
- Step 2 – 2,000 lbs.
- Areas 2 and 3

Challenging topic to evaluate

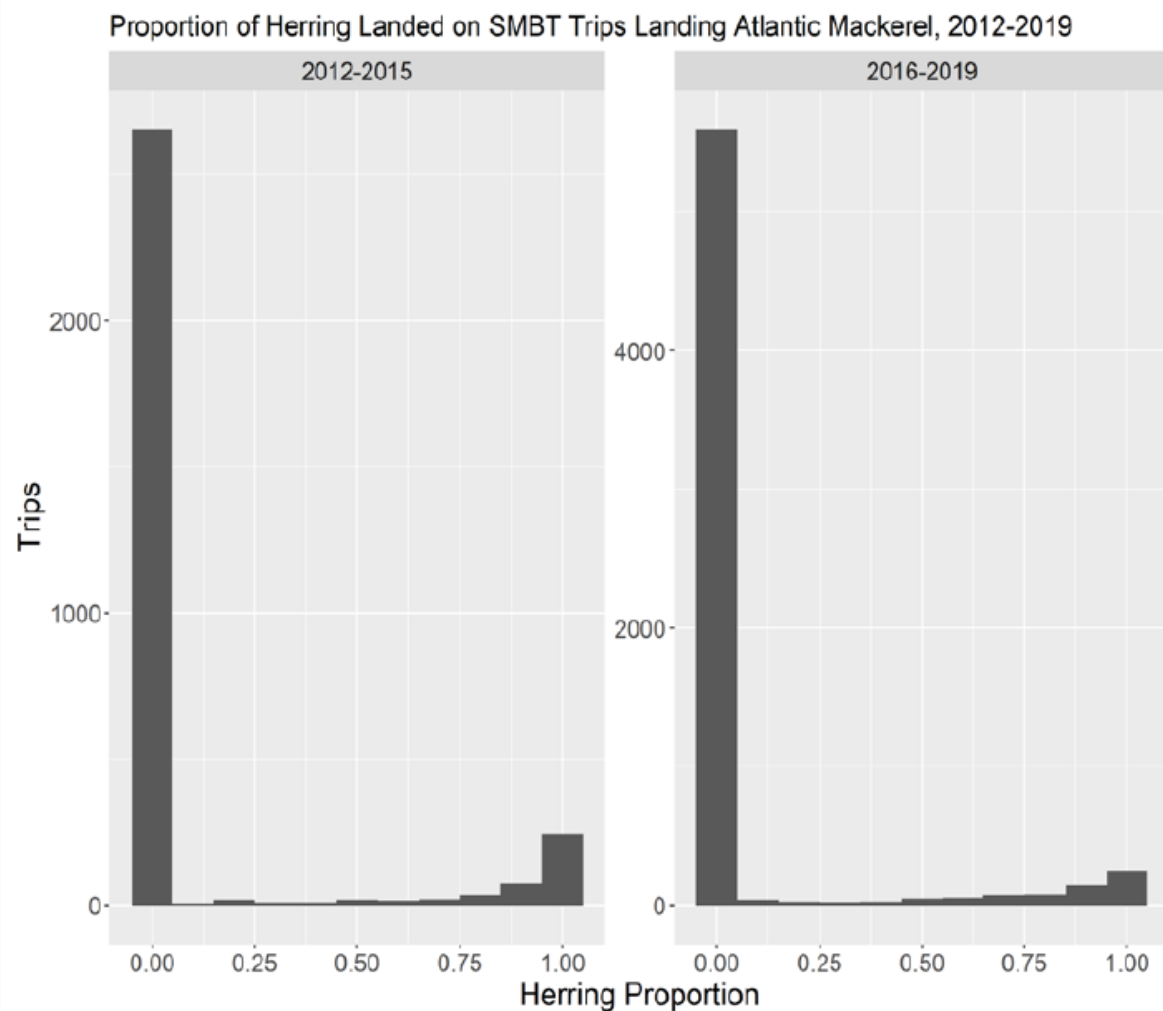
- Vessels participate in herring and mackerel fisheries at different levels. One size (i.e. possession limit) will not fit all.
- Positive economic impacts if more revenue can be generated from trips that target other species with lower triggers (e.g. 85%), but that could close directed herring fishery “early” with negative economic impacts. Up to 10% carryover of unused quota can help reduce negative impacts of closing directed fishery.
- Relatively uncertain how vessels will operate under various scenarios, hard to use past behavior trends to tell us about the future when quotas are so low..
- Both herring and mackerel highly migratory – can’t assume trips will happen later in the season.
- Under low quotas, 2-step process very challenging since the difference in total quota between closure targets is relatively small. In practice possession limit notices may come very close together, or Step 1 may be skipped entirely.

Proportion of Herring : Mackerel

MWT (2012-2015 vs. 2016-2019)



SMBT (2012-2015 vs. 2016-2019)



Low quotas present additional challenges

Options in FW8

	Areas	Poss. Limit (lb.)	Sub-ACL trigger
A	All	2,000	92%
B	1B, 2, 3	40,000	92%
C	1B, 2, 3	5-20,000	90%
D	2	40,000	90%
E	2 and 3	40,000	85%

Table 10 – Estimated remaining trips for different herring possession limit options by area under both lower herring quotas (2021) compared to higher herring quotas (2017)

Closure Target	Area	5,000	20,000	40,000
85%	2017 (HIGH)			
	1B	319	80	40
	2	2,065	516	258
	3	2,902	725	363
	2021 (LOW)			
	1B	12	3	2
	2	80	20	10
	3	113	28	14
90%	2017 (HIGH)			
	1B	213	53	27
	2	1,377	344	172
	3	1,934	484	242
	2021 (LOW)			
	1B	8	2	1
	2	54	13	7
	3	75	19	9
92%	2017 (HIGH)			
	1B	170	43	21
	2	1,101	275	138
	3	1,548	387	193
	2021 (LOW)			
	1B	7	2	1
	2	43	11	5
	3	60	15	7

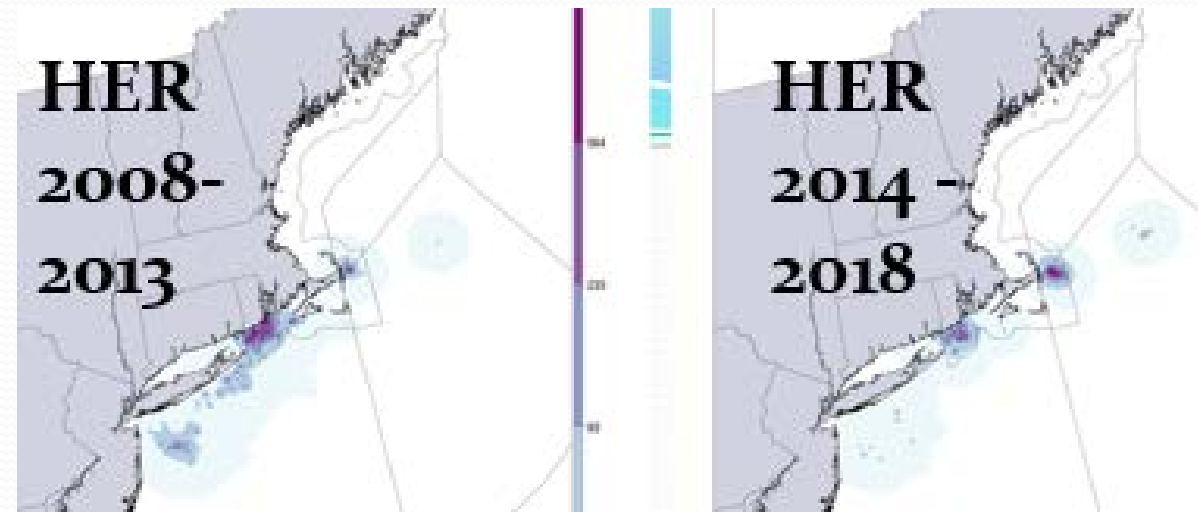
Summary of Impacts - Rec. 6

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 6: Increase incidental herring possession limits	Option A – No Action	Low +, has helped keep fishery under total ACL	Low +, effort levels in herring and other fisheries may be lower after triggers met	Low + to Low – Still risk of interaction, but if triggers met during the year total effort may be reduced	Low +, directed herring and mackerel trips more constrained	Low -, 2,000 lb limit not sufficient for most vessels to target mackerel.
	Option B – 2-step 40,000 and 2,000 for Areas 1B, 2, and 3	Neutral, some increased risk of exceeding ACL if limits not triggered soon enough	Low – to neutral, more fishing may occur to target other species but bycatch caps in place to limit impacts on RH/S and GB haddock.	Low – More fishing may occur to target other species so risk of interaction could be higher.	Low –, if more trips occur, SMBT gear can have adverse impacts on EFH, but magnitude constrained by ACLs in place.	Positive, more consistent with mackerel plan, more flexibility to target other species when herring quota approaching limits
	Option C – 2-step 5-20,000 and 2,000 for Areas 1B, 2, and 3					Positive, but more mixed across the fishery. Fewer vessels may be able to target other species under lower herring possession limits (MWT) so more negative than Option B, but for SMBT vessels the lower poss limits may be more feasible..
	Option D – 2-step 40,000 and 2,000 for Area 2 only					Low +, more consistent with mackerel plan, but only addresses Area 2.
	Option E – 2-step 40,000 and 2,000 for Areas 2 and 3 only					Low +, more consistent with mackerel plan and addresses Area 2 and 3. More trips could occur that target on other species under this lower trigger (85%), but increased risk of closing directed fishery too soon with negative revenue impacts.

Modify the seasonal closure of Area 1B (3.5.2)

- Alt 1. No Action – maintain closure Jan-April
- Alt 2. Eliminate seasonal closure of Area 1B
- Appendix II – Section 3.0 – Monthly herring and mackerel revenue maps
- *Original intent: boost landings when bait market needed it most, since sub-ACL small and overages had happened a delayed start allowed for more time for catch accounting.*

Herring Revenue - January



**AP and CMTE: Alt. 2
Eliminate closure**

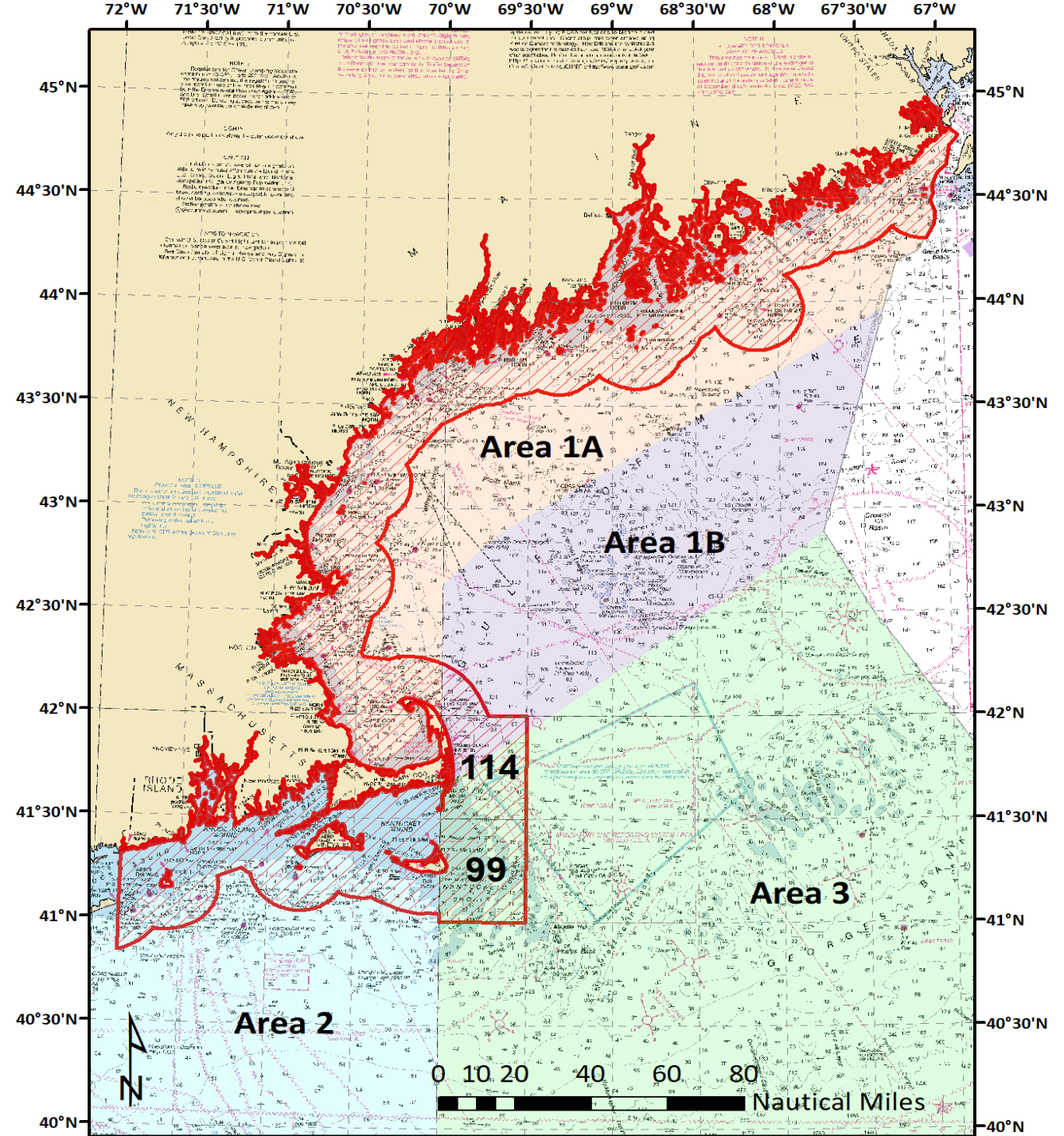
Summary of Impacts - Recommendation 7

Actions & Alternatives		Direct and indirect impacts				
		Target Species	Non-target Species	Protected Resources	Physical Env. (EFH)	Human Communities
Action 7: Modify Area 1B seasonal closure	Alt. 1 – No Action – Area 1B closed Jan-Apr	No impacts – sub ACL controls mortality	Neutral – bycatch caps control impacts on non-target species	Low -, Risk for interaction still there, but relatively low.	Neutral	Low – to Low +, mixed impacts: + for herring fishery - for mackerel Low - for lobster Uncertain for predator fisheries but may be low – from user conflicts in that area in the late spring / early summer.
	Alt. 2 – Eliminate seasonal closures of Area 1B	No impacts – sub ACL controls mortality. Not an important area for spawning so timing of fishing activity not a factor.	Low – to neutral RH/S impacts could increase if effort shifts inshore in winter. Bycatch caps in place. Haddock impacts neutral.	Neutral	Neutral	Low – to Low +, mixed impacts: - for herring fishery + for mackerel Low + for lobster Uncertain for predator fisheries but may be low + if effort shifts earlier.

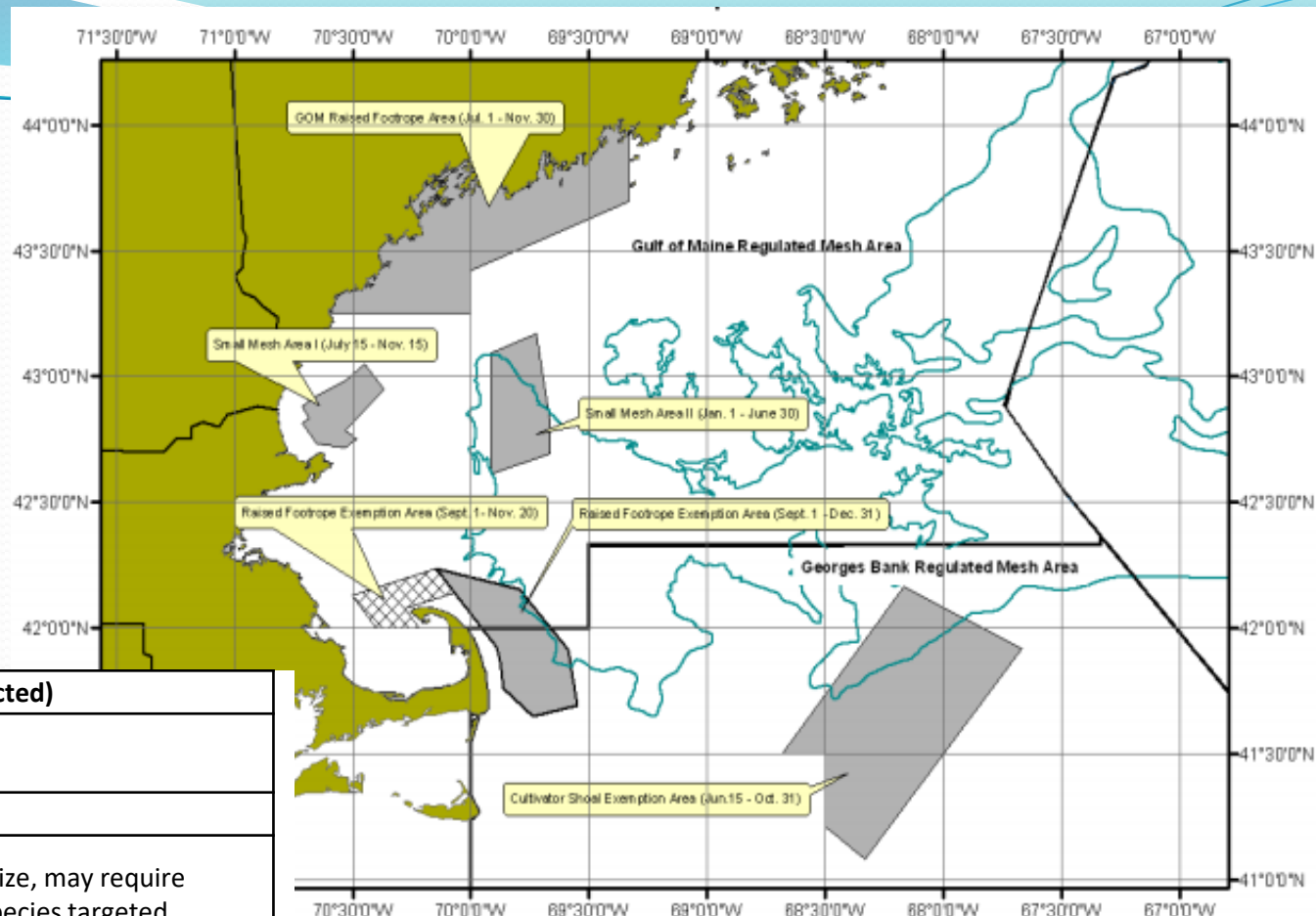
Alternative 10

Approved in Amendment 8
Nov 2019

Final rule not published yet.



Small mesh exemption areas



Area	Season	Requirements (selected)
Gulf of Maine Grate Raised Footrope Trawl	July 1 - Nov. 30	2.5 inch, grated raised footrope trawl
Cultivator Shoal	June 15 - Oct. 31	3 inch, LOA required
Small Mesh Area 1	July 15 - Nov. 15	Possession limit dependent on mesh size, may require raised footrope trawl depending on species targeted
Small Mesh Area II	Jan. 1 - Jun. 30	Possession limit dependent on mesh size, may require raised footrope trawl depending on species targeted
Raised Footrope Trawl – Eastern Portion	Sept. 1 - Nov. 20	Possession limit dependent on mesh size, raised footrope trawl and LOA required
Raised Footrope Trawl – Western Portion	Sept. 1 - Dec. 31	Possession limit dependent on mesh size, raised footrope trawl and LOA required
SNE & MA Exemption Areas	Year-round	Possession limit dependent on mesh size, other gear requirements

Source: GARFO (2018).

Final Recommendations

Any Questions? Hold Discussion.

See AP and Committee input in Decision Document (Doc. #3c)

1. Increase incidental herring possession limit (*5 options*)
2. Modify seasonal closure of Area 1B (*#1 No action – closed Jan-Apr and #2 Eliminate closure*)

Initial Discussion of 2021 Herring Work Priorities

Update on Framework 7 and other herring work

Priority Item	Status
<i>Already on the list</i>	
Framework 7 - Action to consider GB spawning closures	Committee has made progress developing alternatives for spawning areas and seasons. Still not clear which fisheries will be included for consideration (i.e. outside the herring fishery or not).
Rebuilding plan	If herring is declared overfished the Council is required to develop a rebuilding plan.
<i>Potential items for 2021</i>	
RSA Program Review	Report finalized in April 2019. Council still discussing next steps.
<i>Other work items for 2021</i>	
Coordinate with ASMFC and MAFMC , including support for RH/S TEWG	Uncertain what ASMFC herring or MAFMC mackerel work is planned for 2021 yet.

CMTE Input:

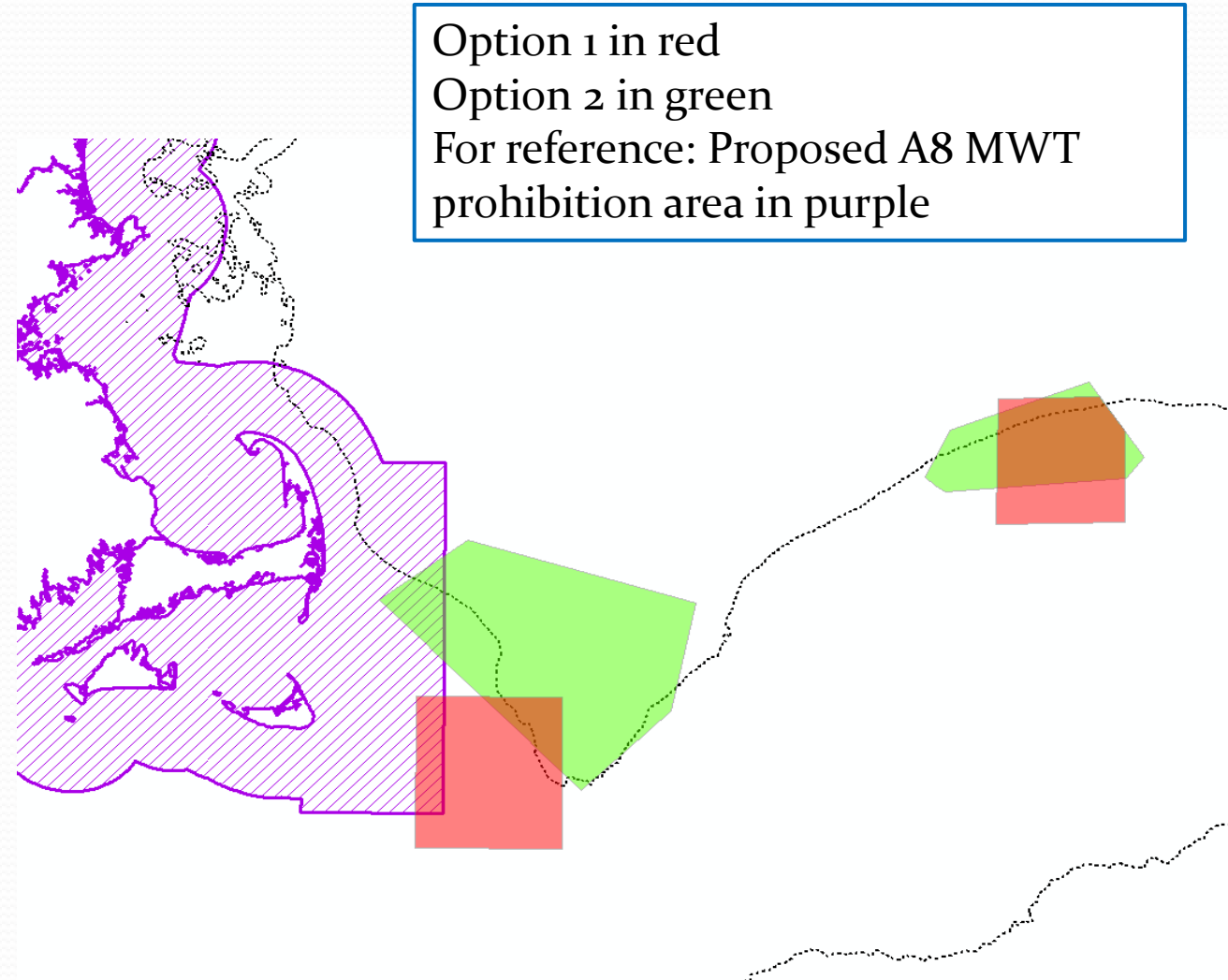
- Prioritize FW7 and rebuilding plan into one action.
- New priority: Review and potentially adjust herring AMs

Framework 7 Update

- **GOAL** - Protect spawning adults of Atlantic herring and/or Atlantic herring egg mats to increase overall herring biomass.
- *Still unclear which fisheries could be under consideration – herring fishery only or other fisheries?*
- *Will rebuilding program be added to Framework 7 or separate action?*
- Initial Committee input on seasons:
 - Option 1 – Sept 14 - Oct 25 (6 weeks)
 - Option 2 – Sept 7 – Nov 1 (8 weeks)



- Continue development of spatial options 1 and 2 only.
- Include alternative for a required review – more development needed



ASMFC/NEFMC Herring Management Coordination

- Technical work group met over the summer to discuss concerns about the coordination, efficiency, and consistency of herring management in the region.
- Final report forwarded to ASMFC/NEFMC Leadership with several recommendations for improved collaboration and coordination.
- Under review, feedback may be available at Sept Council meeting and Oct ASMFC meeting, or later if more time is needed.

Other Business

- GARFO explained that questions come up about whether MWT vessels can fish for mackerel during the Area 1A MWT prohibition (June 1 – September 30).
- Amendment 1 prohibited fishing for herring in Area 1A (2007).
- Definition of fishing includes possession.
- To date, NMFS has interpreted that restriction to mean vessels cannot fish for mackerel because likelihood is high those species cooccur and vessels could be in violation.
- The MWT restriction proposed in Amendment 8 is clear that it would prohibit fishing for mackerel.
- GARFO requesting the Council weigh in and provide input if it agrees with the way NMFS is interpreting the MWT restriction in Area 1A.
- Committee decided to have this conversation at the full Council meeting.