DECISION DOCUMENT

Atlantic Herring Framework Adjustment 9

This document was developed to help the Council select final preferred alternatives for Framework 9.

September 28, 2021

Anticipated Council Action:

1. Prior to selecting final preferred alternatives, the Council will receive a presentation on measures under consideration in Herring Framework 9 and their analyzed impacts on target species, non-target species, protected resources, the physical environment including EFH, and human communities (economic and social impacts).

   This presentation will highlight a handful of issues that have been clarified about the alternatives under development. Some require additional Council input, and some do not. These items have been identified in red, track-change text in the Draft Framework 9 document.

2. Select the preferred alternatives under the following actions:

   Action 1 – Rebuilding Plan

   Action 2 – Overage Accountability Measures (AMs)

3. Approve submission of Framework Adjustment 9 to NOAA/NMFS for review and approval.

Section 4.1	Rebuilding Plan	Preferred by	
		AP	Committee
Alternative 1 (No Action) *(4.1.1)*	The Council would not recommend implementing a rebuilding plan for Atlantic herring. The Council would continue to set fishery specifications two fishing years at a time with default measures identified for a third year. The Council would likely use the ABC control rule approved in Amendment 8 to set OFL/ABC and other relevant fishery specifications.		
Alternative 2 (ABC CR) *(4.1.2)*	A rebuilding plan would be established. The fishing mortality target for the rebuilding plan would be consistent with the ABC control rule approved in Amendment 8. Projections for this alternative suggest that Atlantic herring can rebuild in 5 years, or FY 2026 under current assumptions. $F_{rebuild}$ for this alternative would vary based projected biomass, current projections estimate $F_{rebuild}$ would vary between F=0.09 to F=0.43 over the course of the rebuilding plan.		
Alternative 3 (7yr constant) *(4.1.3)*	A rebuilding plan would be established. The fishing mortality target of the rebuilding plan would be constant, $F_{rebuild}$ would be set at F=0.48, about 89% of F_{MSY}. This value was determined from the projections based on identifying the fishing mortality rate that would achieve a probability of rebuilding the resource ($P_{rebuild} \geq 50\%$) in year seven (FY 2028) using current projection assumptions.		
Alternative 3A (constant F more conservative than 7yr constant) *(4.1.3.1)* *****NEW ALTERNATIVE***	A rebuilding plan would be established. The fishing mortality target of the rebuilding plan would be constant, $F_{rebuild}$ would be set at F=0.358, about 66% of F_{MSY}. This value was determined from the projections based on identifying the fishing mortality rate that would achieve a probability of rebuilding the resource ($P_{rebuild} \geq 50\%$) in year 7 (FY2028) but using the projection results from the autocorrelated recruitment (AR) scenario compared to assuming average recruitment.	X	

Decisions/Questions/Information to Consider

- Alternative 3A is a new alternative. The Committee passed a motion to consider it on September 15, 2021. The PDT has prepared initial analyses of this alternative (Document #3A).
- This action does not include fishery specifications. Focus of this action is selecting the $F_{rebuild}$ policy that would be used in future specification packages while the resource is rebuilding. Specifications approved in Framework 8 for FY 2022 would remain in place.
- If reference points, assessment model parameters and/or assumptions used for fishery projections are adjusted in the future, the $F_{rebuild}$ policy for Alternative 3 (and 3A if it is included) needs clarification in terms of how to set fishing mortality. Draft text has been developed, but the Council may want to set F differently if reference points and/or assessment/projection methods are adjusted in the future.

Other important Considerations/Draft EA References

Analyses of impacts are in a separate Council meeting binder document: (Document #3, https://s3.amazonaws.com/nefmc.org/3_FW9_Draft-EA_Final-Council-Meeting.pdf)

- Impacts on Target Species (Herring): Section 6.1.2
- Impacts on Non-target Species: Section 6.2.2
- Impacts on Protected Resources: Section 6.3.1
- Impacts on Physical Environment: Section 6.4.2
- Impacts on Human Communities: Section 6.5.2

Summary of Potential Impacts for Action 1:

Actions & Alternatives		Direct and indirect impacts				
		Target Species	**Non-target Species**	**Protected Resources**	**Physical Env. (EFH)**	**Human Communities**
Action 1: Rebuilding Plan	**Alt. 1 – No Action**	Slight negative impacts if no rebuilding plan in place. Moderate positive impacts if rebuilding F from the ABC CR is used and supports rebuilding.	Despite possible variations in fishing effort between these alternatives, and because this action maintains the use of catch caps for both haddock and river herring/shad to control impacts on bycatch, these alternatives are expected to have negligible impacts relative to one another and non-target species.	***Interaction risk***: Impacts are expected to result in slight negative to slight positive impacts to MMPA (non-ESA listed) protected species of marine mammals, and negligible impacts to ESA listed species. ***Forage:*** None of the alternatives have the potential to result in herring catch to exceed the total ACL. Therefore, none of the alternatives will result in the fishery removing herring at levels that go above and beyond current conditions.	Given the minimal and temporary nature of adverse effects on EFH in the Atlantic herring fishery, these alternatives are expected to have negligible impacts relative to one another on the physical environment and EFH.	Slight negative if no formal plan in place – may result in distrust in management process. If ABC CR used in absence of rebuilding plan – likely continue negative impacts.
	Alt. 2 – ABC CR	Moderate positive impacts if reduces F when biomass low – rebuilding faster. Lower risks than Alt. 3 if recruitment below average.				Slight positive to have a rebuilding plan in place – provides mechanism for measuring rebuilding and more trust in process. Continue negative impacts with some constancy and predictability. Long-term revenue estimates (2022-2032) are $170 – 214 million. Moderate positive impacts for other industries that rely on herring as prey.
	Alt. 3 - 7yr constant F (F=0.48)	Slight positive because it would establish formal rebuilding plan. Compared to Alt 2 slight negative if recruitment is average to moderate negative if recruitment below average. In the long-term the impacts are more similar across alternatives.				Slight positive to have a rebuilding plan in place. Continue negative impacts with some constancy and predictability. More positive than Alt 1 and 2 with higher ABCs earlier in plan. But Prebuild longer and P closure higher, especially if recruitment is below average.

Actions & Alternatives		Direct and indirect impacts				
		Target Species	**Non-target Species**	**Protected Resources**	**Physical Env. (EFH)**	**Human Communities**
	Alt 3A – Lower constant F (F=0.358)	Slight positive because it would establish formal rebuilding plan. Compared to Alt 2 slight negative if recruitment is average to slight negative if recruitment below average. Slight positive compared to Alternative 3. In the long-term the impacts are more similar across alternatives.				Slight positive to have a rebuilding plan in place. Continue negative impacts with some constancy and predictability. More positive than Alt 1 and 2 with higher ABCs earlier in plan, slight negative compared to Alt. 3.

Action 2 – Overage Accountability Measures (AMs)

Section 4.2	Overage Accountability Measures (AMs)		Preferred by	
			AP	Commi-ttee
Alternative 1 (No Action) *(4.2.1)*	No changes to the proactive, in-season, or reactive AMs to minimize overages and prevent overfishing. Reduced possession limits are implemented in-season if the fishery is approaching a sub-ACL or total ACL. Pound for pound payback measures are implemented to account for any sub-ACL or total ACL overages.			
Alternative 2 *(4.2.2)*	Catch from a management area that exceeds the sub-ACL by less than 10% of the sub-ACL is not deducted from the ACL and respective sub-ACL in a subsequent year unless total catch also exceeds the total ACL. If catch is equal to or greater than 10% of the sub-ACL, there would be an overage deduction from the sub-ACL and total ACL in a subsequent fishing year. If the total ACL is exceeded, the current requirement for a pound-for-pound payback of any sub-ACL overage (in addition to the total ACL overage) would remain in place. *Clarification recommended by the Committee (See Motion #1):* *If an overage is greater than 10%, the pound for pound overage deduction would be for catch over 10% only.*		X	X
Alternative 3 *(4.2.3)*	Herring catch from a management area that exceeds the sub-ACL would be deducted from the total ACL and respective sub-ACL in a subsequent year, only if total catch also exceeded the ACL. Catch can exceed a sub-ACL by any amount so long as the total ACL is not exceeded			

Decisions/Questions/Information to Consider

- Alternative 2 was clarified that if an overage is greater than OR EQUAL TO 10%, than a future deduction would apply [*was not previously clear what happens if the overage equals 10%*].
- Committee recommends that Alternative 2 be clarified that a pound for pound deduction be for any amount OVER 10%, the first 10% of an overage is allowed without the payback provision, so long as the total ACL is not exceeded.

Other important Considerations/Draft EA References

Analyses of impacts are in a separate Council meeting binder document: Document #3, https://s3.amazonaws.com/nefmc.org/3_FW9_Draft-EA_Final-Council-Meeting.pdf)

- Impacts on Target Species (Herring): Section 6.1.3
- Impacts on Non-target Species: Section 6.2.3
- Impacts on Protected Resources: Section 6.3.2
- Impacts on Physical Environment: Section 6.4.3
- Impacts on Human Communities: Section 6.5.3

Summary of Impacts for Action 2

Actions & Alternatives		Direct and indirect impacts				
		Target Species	**Non-target Species**	**Protected Resources**	**Physical Env. (EFH)**	**Human Communities**
Action 2: Overage AMs	**Alt. 1 - No Action**	Moderate positive. Preventing overfishing and keeps fishery accountable for overages.	Despite possible variations in fishing effort between these alternatives, and because this action maintains the use of catch caps for both haddock and river herring/shad to control impacts on bycatch, these alternatives are expected to have negligible impacts relative to one another and non-target species.	***Interaction risk***. Impacts are expected to result in slight negative to slight positive impacts to MMPA (non-ESA listed) protected species of marine mammals, and negligible impacts to ESA listed species. ***Forage:*** None of the alternatives have the potential to result in herring catch to exceed the total ACL. Therefore, none of the alternatives will result in the fishery removing herring at levels that go above and beyond current conditions.	Given the minimal and temporary nature of adverse effects on EFH in the Atlantic herring fishery, these alternatives are expected to have negligible impacts relative to one another on the physical environment and EFH.	Negligible to slight negative Delay of consequences. Because reductions even if ACL not exceeded - difficult to achieve OY every year so slight negative impacts.
	Alt. 2 - Up to 10% overage allowed if total ACL not exceeded	Slight negative impacts compared to No Action. Minimal risks in terms of overfishing since total ACL cannot be exceeded. If one area consistently fished above target levels some limited risks.				Slight positive – Based on 2016-2020 data, average of $160,000* per year from overage deductions. Increased flexibility for vessels to reach OY.
	Alt. 3 - Overage of sub-ACL allowed, by any amount, if total ACL not exceeded	Moderate negative impacts compared to No Action. Potential negative impacts may be greater than Alt. 2 if one area consistently fished above target levels.				Slight positive – In the short-term more positive – OY more likely to be achieved each year. Based on 2016-2020, data average of $264,000* per year from overage deductions. But less incentive to prevent sub-ACL overages so higher risk of negative distributional impacts if one area consistently fished over target levels. In long-term less certain and slight negative if one area consistently fished over target levels.

* calculated assuming the entire overage would be deducted, not just the portion ≥%10.