

Herring Amendment 5 Monitoring Alternatives Discussion Material Additional Options to Maximize Sampling and Address Net Slippage (Including Trip Termination Options)

Introduction:

The NEFMC has spent considerable time discussing the issue of net slippage in the herring fishery. Slippage, also referred to as dumping, is the practice of discarding fish straight from the net while it is still in the water, without bringing the fish aboard for inspection, and may refer to the dumping of all or part of the contents of a net. It is widely acknowledged that it is not possible to collect accurate and complete third-party catch estimates (quantity and species composition) on these discards. This is basic common sense: the only way to really know what is in the net is to bring the fish aboard for inspection so an onboard observer can estimate the volume and composition of the catch.

Fish can be brought aboard permanently i.e. they are pumped from the net, sampled, and then put in the hold and retained. Or, they can be brought aboard temporarily i.e. they are pumped or otherwise removed from the net, sampled, and then diverted or discarded over the rail. The only other option is to allow the captain to estimate what is in the net prior to dumping, which is not an acceptable option. There are serious stakeholder concerns over the unknown impacts of this un-quantified dumping on both the target species (Atlantic herring) and various bycatch species.

Furthermore, if we simply allow fishermen to dump without penalty then there is no incentive to fish clean or to provide all the fish to the observer for inspection. If, on the other hand, we require vessels to terminate their trip if unobserved fish are dumped then the boats will have an incentive to try to avoid tows that need to be dumped (by applying precautionary measures like test tows, sampling by jigging, sharing info with other boats in the area etc.) and an incentive to show the observer the contents of the net by either putting the catch in the hold or pumping it over the rail and back into the water so as to avoid the trip termination.

Exceptions can and should be available: dogfish are un-pumpable in high-enough concentrations, mechanical failures can occur, and safety could be an issue; but, at the same time, all these exceptions can also be used as excuses to just dump. Therefore, any meaningful solution to the dumping problem must include accountability measures to ensure that exceptions are not abused.

Solution:

This basic regulatory framework has already been discussed, developed and approved for parts of the herring fishery in the form of new regulations for midwater and midwater pair trawl access to groundfish Closed Area I (CAI). Amendment 5 should include this important foundational work in the form of monitoring alternatives that consider expansion of the CAI model to other parts of the herring fishery.

Recent Background:

At its meeting in Portland, ME on 3/30 and 3/31, the NEFMC Herring Oversight Committee (OSC) discussed measures to maximize sampling and address net slippage, including potential application of measures that would require herring vessels to terminate a trip and return to port in the event of a slippage event. The OSC voted to task the Plan Development Team (PDT) to *“develop trip termination options for slippage events, applicable to different gear types, vessel sizes, and observer rates.”* (NEFMC, DRAFT Herring Committee Meeting Summary, 3/30-31/2010)

At its meeting on 4/8 in Mansfield, MA the PDT discussed this directive from the OSC and was unable to develop options. The PDT, while acknowledging that trip termination may have utility for trips with observers onboard, also expressed a need for further clarification and guidance from the OSC regarding the following elements of any suite of measures based on trip termination: objective(s) of those measures, role of observers, definition of a slippage event, impact on test tows, impacts on discard survivability, and relation of trip termination to any maximized retention provisions. (NEFMC, Final Herring PDT Report 4/8/10).

Document Purpose:

- Provide the requested clarifications and guidance to the PDT
- Outline a set of options for addressing net slippage and maximizing sampling to be added to those already in Am 5
- Describe the measures in sufficient detail to facilitate analysis by the PDT, including suggested angles of analysis.
- This suite of management measures should include trip termination in the context of the CAI rulemaking, and should include options to apply the measures to different gear types, vessel sizes, and observer rates.

Clarifications/Guidance:

- Objective(s):
 - The objective of a trip termination measure is to maximize sampling, as evidenced by the appropriate placement of the trip termination placeholder in the maximized sampling section of the Am 5 document i.e. Section 1.6.3.2 (NEFMC, Draft Am 5 Catch Monitoring Alts, 3/30-31/2010).
 - In other words this measure is intended to minimize the amount of fish dumped (slipped) directly from the net into the ocean without being first brought aboard for inspection.
 - The intent is not punitive, it is preventive. It is meant to function as a disincentive to prevent unnecessary slippage events in the first place, as well as any others on the same trip. It is essentially an accountability measure.
- Role of Observers
 - Trip termination measures, especially if meant to maximize sampling, have little utility on non-observed trips and as such should probably only be applied to observed trips
 - The role of observers will not change and will not cross any line into the enforcement arena.

- As they do now, observers would simply record what they observe during fishing operations. Any decision about whether to terminate a trip in order to comply with any trip termination regulation will lie with the vessel captain. Observer data and other trip documentation would be used in subsequent analyses and/or investigations to determine whether all regulations were complied with, for instance in the same manner as will take place under the new regulations in Closed Area I
- Definition of a Slippage Event
 - Slippage is already defined in the Am 5 document as “the dumping of catch directly from the codend without it being brought onboard.” (NEFMC, Draft Am 5 Catch Monitoring Alts, 3/30-31/2010, Section 1.6)
 - For the purposes of a trip termination accountability measure, additional detail should be developed to flesh out this definition including gear-specific components and provisions to ensure appropriate sampling of operational discards (small amounts of fish left in the net at the conclusion of pumping operations)
 - The Closed Area I rules offer some preliminary work on such definitions, although they are incomplete especially with respect to operational discards.
 - Additional discussion below under suggested management options
- Impact on Test Tows
 - NMFS has previously acknowledged, in the Closed Area I rule, that test tows can and should be either a) brought aboard for sampling or b) set back without any release of net contents insuring that the test tow catch is eventually sampled.
 - As such, test tows would be neither prohibited nor compromised under any measures to require trip termination.
- Impacts on Discard Survivability
 - Requirements to bring all catch aboard, either permanently (i.e. for sampling and retention) or temporarily (i.e. for sampling only), necessarily contemplate a trade-off between the desire to acquire complete and accurate data (i.e. to maximize sampling) and the desire to release fish that might live (i.e. maximize discard survivability)
 - Analyses of any and all available discard survivability information relative to proposed maximized sampling objectives and trip termination measures will be necessary and valuable
- Relation to Maximized Retention Provisions
 - Trip termination, while originally incorporated into the document as a component of a maximized retention program, has since been moved through the Am 5 monitoring restructuring, to a separate section on maximized sampling and slippage. This move is highly appropriate as trip termination clearly has broad utility beyond the narrow application within a maximized retention program.
 - This utility is demonstrated by the inclusion of trip termination options in the Closed Area I rulemaking, which did not address maximized retention in any way.

Suggested Management Options for Trip Termination:

General design of options to address slippage that would include trip termination:

Option 1: Develop and analyze options, including differential applications for different gears, vessel sizes and observer rates, for the prohibition of slippage, and associated exceptions and accountability measures, that are based on the 2009 Closed Area I rulemaking and that include trip termination as an accountability measure.

This option would clarify that trip termination would be considered as part of an overall consideration of the CAI rulemaking framework rather than just as a stand-alone measure or just as part of a maximized retention program. It would also not preclude consideration of other measures to maximize sampling and address slippage such as net handling requirements, slippage caps etc.

Definition of a herring trip with regards to slippage

Option 1: Trips which land 2,000 pounds or more of Atlantic herring

This is the typical definition used in most data summaries and analyses to date

Option 2: Trips by Limited Access herring vessels which may harvest, possess, and land Atlantic herring

This is the definition of a herring trip for the purposes of trip declaration and pre-trip notification to the observer program found in Section 2.3.3.1

Option 3: Trips by Category A and B herring vessels with pelagic gear

This is a modification of Option 2 which may effectively ensure that over 95% of herring fishery catch is included in a program to minimize slippage

Definition of a slippage event with regards to trip termination

Option 1: Define slippage as the dumping of catch directly from the codend without it being brought on board

This is the definition from Section 1.6 of the current catch monitoring alternatives document. Note that it may be useful to also clarify this definition by modifying it slightly, to define slippage in a manner such that terminology is consistent with all pelagic gears. This could be done by adjusting terminology to be consistent with all gears, for instance by substituting “net” for “codend” in Option 1.

Option 2: Expand upon the definition in Option 1 by defining slippage in a manner based on the 2009 Closed Area I rulemaking

This option would examine the various definitions of slippage in the Proposed and Final Rules for CAI recently promulgated including the pros and cons of each. It would also consider the definitions of the various exceptions which would allow slippage under the CAI framework.

For instance, this option can and should be fleshed out to address concerns about bycatch, including pre-sorted bycatch (i.e. large-bodied fish or mammals prevented from entering the pump by the pump-intake guard, or stratified net contents, or both) that may be discarded through slippage **after some pumping has occurred**. This slippage of partial net contents after pumping is sometimes called operational discards, especially when it refers to small amounts of fish that are left in the net at the conclusion of normal pumping operations.

Measures for consideration under this option should define slippage as all release of unsampled catch, both whole and partial slippage including operational discards. These measures should specify that all catch that cannot be brought aboard using the fish pump must be brought aboard for sampling through means other than the fish pump, unless the estimated weight is too high to allow it to be brought aboard. In the latter case, the discard event would be classified as slippage and trip termination would apply. Preliminary conversations with herring fishermen indicate that except in the case of spiny dogfish or other hard-to-pump species such as scup, under normal pumping operations the net can be pumped down as low as approximately 500 pounds, an amount that can easily be lifted or dragged aboard for sampling.

Gear related application of slippage accountability measures including trip termination:

Option: Consider slippage prohibitions and slippage accountability measures including trip termination, and other management measures based on the CAI rulemaking for all gear types in the herring fishery

Option: Consider exemptions from slippage prohibitions for purse seine gear

This option would limit the scope of maximized sampling measures in a manner that recognizes a) the greater discard survivability of purse seine discards and thus the different cost to benefit ratio of maximized sampling, and b) the greater bycatch concerns associated with the midwater trawl and pair trawl fishery. These options would enable managers to assess the costs and benefits of maximized sampling for different gear types in terms of different bycatch rates and specific bycatch species of concern, different discard survivability rates, different operational impacts, and different rates of slippage.

Vessel size related application of slippage accountability measures including trip termination:

Option 1: Consider slippage prohibitions and slippage accountability measures including trip termination, and other management measures based on the CAI rulemaking to all vessel sizes in the herring fishery

Option 2: Consider slippage prohibitions and slippage accountability measures including trip termination, and other management measures based on the CAI rulemaking to vessel sizes in the herring fishery differentially based on vessel size bins to be determined

Option 3: Consider slippage prohibitions and slippage accountability measures including trip termination, and other management measures based on the CAI rulemaking to vessel sizes in the herring fishery using permit category as a proxy for vessel size

Observer rate related application of a slippage accountability measures including trip termination:

Option 1: Consider slippage prohibitions and slippage accountability measures including trip termination, and other management measures based on the CAI rulemaking to all trips in the herring fishery

Option 2: Consider slippage prohibitions and slippage accountability measures including trip termination, and other management measures based on the CAI rulemaking to only observed trips in the herring fishery

This option recognizes a) the intent of trip termination, which is to ensure accurate and complete sampling by ensuring access to all catch for onboard observers and b) the futility of requiring trip termination when there is only fisherman self-reporting upon which to base any compliance analysis

Analysis suggestions:

PDT analysis should focus on all available past slippage data to determine how many trips might potentially be terminated under the various scenarios described above. Data collected by NEFOP observers since approximately 2005 include basic information that has allowed for past analyses that describe slippage events in terms of estimated size, estimated stock composition, and reported reasons. Careful examinations of this data including a) any catch on tows with slippage that was actually brought aboard, b) observer comment fields, c) catch on any subsequent tows on the trip etc. should help derive rough projections of potential impacts.

Such analysis would need to also consider that some past slippage events would presumably not occur under these measures because they were unnecessary in the first place and the disincentive of trip termination would likely prevent the event from taking place. For instance, a tow slipped due to high-grading or other subjective market driven considerations might not be replicated in the future under these measures. Slippage events resulting from test tows will not likely be replicated since fishermen would either retain or bring aboard for sampling the catch on these tows. Likewise slippage events that occur because the vessel's capacity was filled would not result in any additional trip terminations, since these trips would by necessity terminate anyway.