

Amendment 5 to the Atlantic Herring FMP: Update on Development

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Amendment 5 - Issues

1. Catch Monitoring Program
2. Measures to Address River Herring Bycatch
3. Criteria for Midwater Trawl Access to Groundfish Closed Areas
4. Measures to Address Interactions with Mackerel Fishery
5. Measures to Protect Spawning Fish

Catch Monitoring Program

Goals and Objectives, p. 3

1. Create a cost-effective and administratively-feasible program for accurate and timely records of catch of all species in the Atlantic herring fishery
2. Develop a monitoring program that will foster support by the industry and others (i.e., well-designed and credible)
3. Design a robust program for adaptive management
4. Evaluate bycatch estimates from sea sampling versus portside sampling

Catch Monitoring Alts (Restructured)

- Fishery Management Program – administrative/general provisions, permit provisions, notification and reporting requirements, carriers, transfers at sea, etc.
- Catch Monitoring At-Sea – observer coverage, measures to maximize sampling/address slippage, maximized retention alternative
- Catch Monitoring Portside – portside sampling priorities/sampling design, coverage/protocols, alternatives to verify self-reported landings
- Funding Options – moved to end of document, can specify any elements of the plan that may require additional funding

Fishery Management Program

1. Administrative/General Provisions – Adjustments to the Status Quo
 - Regulatory Definitions
 - Permit Provisions
 - VMS Provisions
 - Reporting Requirements
 - Requirements for Service Providers
2. Measures to Address Carrier Vessels and Transfers At-Sea

Fishery Management Program

3. Trip Notification Requirements

- Options for pre-trip and pre-landing notifications

4. Quota/Sub-ACL Monitoring Alternatives – IVR vs. VMS Reporting

5. Changes to Open Access Permit Provisions for Mackerel Vessels in Areas 2/3

- Options are linked to possession of a limited access mackerel permit

Quota/Sub-ACL Monitoring Alternatives

(Section 3.4, p. 27)

1. IVR Alternative

- Trip-by-trip IVR for limited access vessels
- Options to change reporting deadlines
- Options for open access vessels

2. VMS Alternative

- Eliminate IVR for limited access vessels
- Options for daily and trip-by-trip VMS catch reporting
- Option to incorporate carrier vessels into VMS program with trip declarations (increases flexibility for carriers)

Catch Monitoring – At-Sea

(Section 4.0, p. 39)

1. Requirements for Observer Program Service Providers
2. Options for Observer Coverage Levels
3. Options to Improve/Maximize Sea Sampling and Address Net Slippage
4. Maximized Retention Experimental Fishery

Catch Monitoring – Portside

(Section 5.0, p. 51)

To sample enough landing events to aide in accurate estimation of catch/bycatch in the Atlantic herring fishery

- Supplement/enhance/cross-check catch data collected at-sea
- Confirm the accuracy of self-reported catch
 - At the vessel-level
 - At the dealer-level

Catch Monitoring – Portside

1. Requirements for Portside Sampling Service Providers
2. Sampling Design (Sampling Priorities and Trip Selection Priorities)
3. Sampling Protocols
4. Sampling Coverage Levels
5. Alternatives for Verifying Self-Reported Landings

Portside Sampling Design

Sampling priorities, trip selection priorities, and target coverage levels should form the basis of the annual sampling design

- NMFS (NEFSC) consults with PDT, Council, ASMFC and develops sampling design/trip selection criteria annually based on priorities and targets identified by the Council
- Sampling design/trip priorities/coverage targets distributed to service providers
- Pre-landing notification used to identify trips that require portside sampling; NMFS communicates to vessel if service provider is needed

Portside Sampling Priorities

- Providing a third-party estimate of landings
- Sampling/sub-sampling offloads to estimate species composition and amount of landings on trips with observers on board
- Sampling/sub-sampling offloads to estimate species composition and amount of landings on trips subject to catch caps
- Collecting commercial catch samples to support stock assessments
- Collecting commercial catch samples to evaluate spawning condition

Trip Selection Priorities/Coverage Options

Trip Selection Priorities

- Trips in river herring monitoring/avoidance areas (if applicable)
- Trips in groundfish closed areas
- Trips with landings counting against a catch cap
- Trips with observers on board

Options for Target Coverage Levels

1. 10% of landings events
2. 25% of landings events
3. 50% of landings events
4. 100% target coverage

Verifying Self-Reported Landings

(Section 5.4, p. 61)

Alternative 1 – Vessel-Level Verification

- A/B Vessels and carriers required to seal/certify holds (standard unit = hogshead)
- Two options for C vessels that do not pump fish— (1) require herring to be stored in totes for estimating catch; (2) store herring separately and require portside sampler to estimate catch
- Would be incorporated into portside sampling program – general protocol for sounding tank and estimating catch to be developed

Verifying Self-Reported Landings

(Section 5.4, p. 61)

Alternative 2 – Dealer-Level Verification

- Require sealing/certification of trucks/transport vehicles
- Details TBD; unclear whether this would be incorporated into portside sampling program and/or who would be responsible for estimating/reporting landings based on volumetric capacity of trucks
- Administrative provisions/responsibilities remain unclear

Funding Options

(Section 10.0, p. 97)

- Alternative 1 – fund from Federal sources, industry funding when federal funds are inadequate
 - Industry would pay service providers for either at-sea or portside sampling
- Alternative 2 – fund from Federally-permitted dealers
 - Sub-option for dealers to contribute to portside sampling and vessels to contribute to sea sampling

Catch Monitoring – Outstanding Issues

“MAJOR”

May preclude completion of Draft EIS; must be addressed during development of range of alternatives and/or early during DEIS preparation

Category D (Open Access) Permit Holders—Council should clarify catch monitoring provisions and requirements for Category D (open access) permit holders

Federal Portside Sampling Program – administration/oversight and roles/responsibilities remain unresolved

Alternatives for Verifying Self-Reported Landings – process/requirements not well-defined; management objectives and data collection/utilization not clear

Funding Issues – important for thorough economic evaluation in DEIS; details regarding funding responsibilities and entities that may be subject to catch monitoring program requirements are needed

Portside Sampling Methodology/Protocols— not likely to preclude development of DEIS, but this is a significant technical issue that will take time to analyze/address during DEIS development

Catch Monitoring – Outstanding Issues

“MINOR”

Should not preclude development of Draft EIS but must be addressed during DEIS development, prior to approval/public hearings

Options for Observer Coverage Levels– details remain unclear (process, methods for determining coverage levels, responsibilities)

Closed Area I Sampling Provisions – Council should determine whether the provisions should reflect the new rule November 30, 2010

Maximized Retention Alternative (Experimental Fishery) – administrative/procedural details should be fleshed out

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Streamlined River Herring Alternatives

(Section 6.0, p. 68)

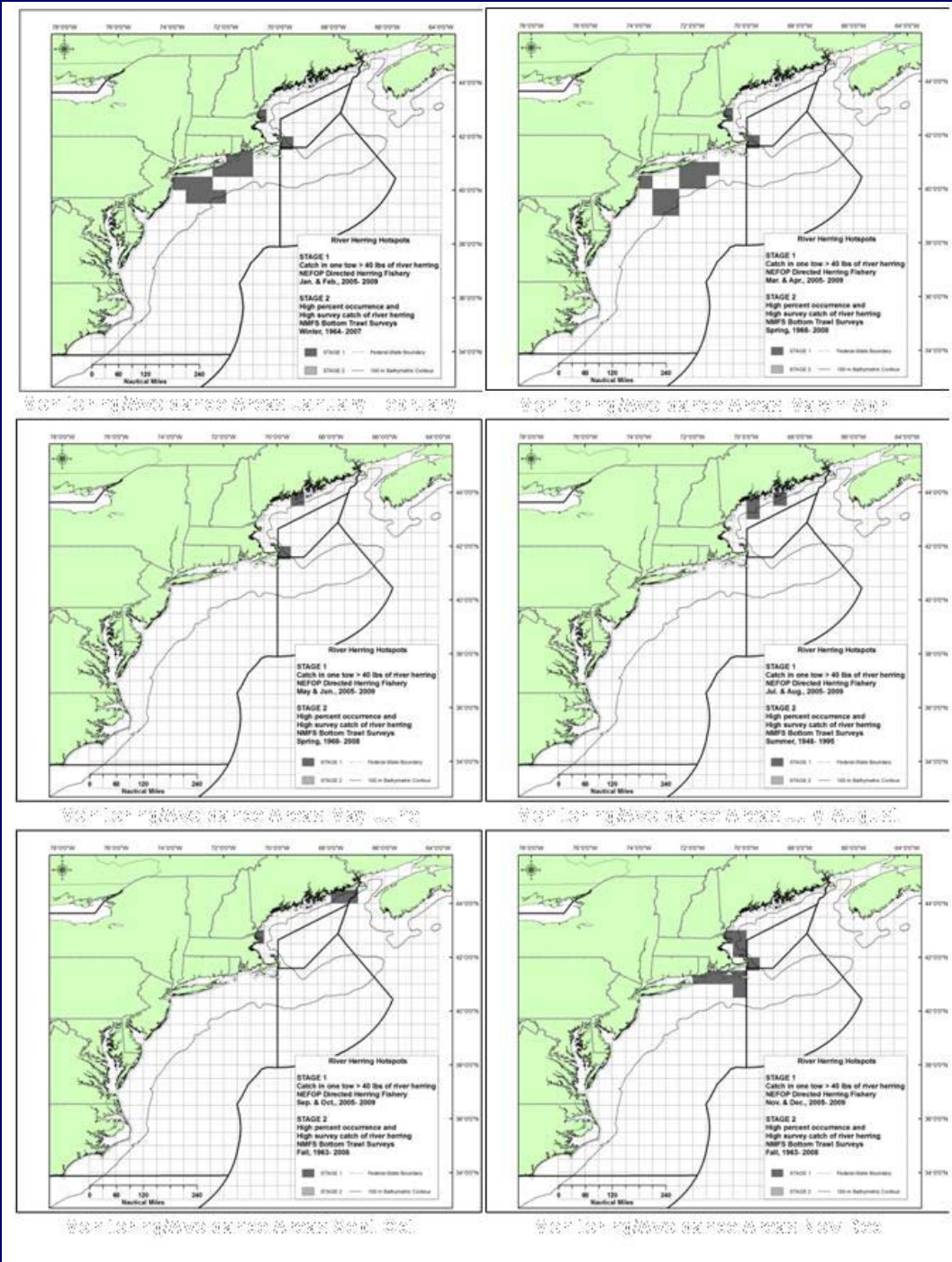
- Spatial Management Alternatives (hotspots) that are ecologically-based, simpler to understand, and enforceable
- Link to management goals and measures/options under consideration
- Different areas may be selected and different measures may be applied, depending on goals

Alternative 1 – No Action

Alternative 2 – RH Monitoring/Avoidance

Alternative 3 – RH Protection

Proposed RH Monitoring/ Avoidance Areas (Alternative 2)



Map 1: River Herring Hotspots for Jan. & Feb., 2005-2009

Map 2: River Herring Hotspots for Mar. & Apr., 2005-2009

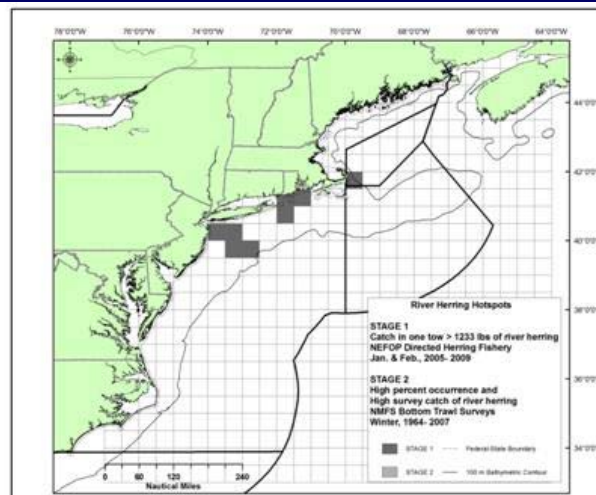
Map 3: River Herring Hotspots for May & Jun., 2005-2009

Map 4: River Herring Hotspots for Jul. & Aug., 2005-2009

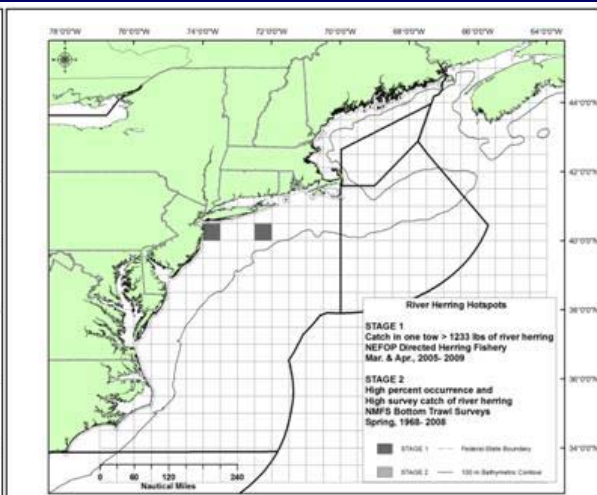
Map 5: River Herring Hotspots for Sep. & Oct., 2005-2009

Map 6: River Herring Hotspots for Nov. & Dec., 2005-2009

Proposed RH Protection Areas (Alternative 3)



Protection Areas January-February



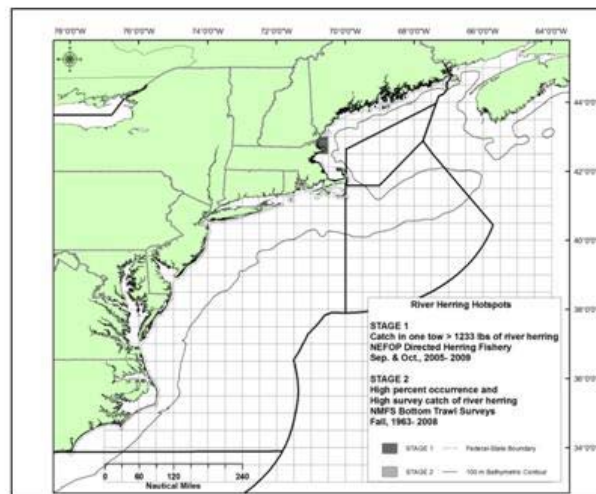
Protection Areas March-April

Protection Areas May-June

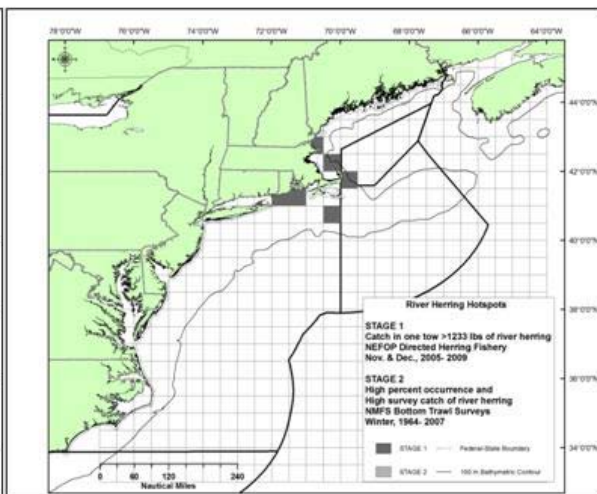
N/A

Protection Areas July-August

N/A



Protection Areas September-October



Protection Areas November-December

Mgmt. Goal	Spatial Mgmt. Alternative	Possible Mgmt. Options
Monitoring/ Avoidance	Alternative 2: River Herring Monitoring/Avoidance Areas	<ul style="list-style-type: none"> A. 100% observer coverage B. Closed Area I sampling provisions (with 100% observer coverage and without 100% observer coverage) C. Two-phase bycatch avoidance program based on SFC D. Move-along rule (with 100% observer coverage, without 100% observer coverage)] E. Other Options?
Protection	Alternative 3: River Herring Protection Areas	<ul style="list-style-type: none"> A. Closed areas (all herring permit holders fishing with small mesh) B. Other Options?

River Herring Catch Caps

See Herring PDT Discussion Paper and 12/20/10 OS/AP Summary

- Added for consideration at September 2010 Council meeting
- Herring PDT working group – review data/develop analysis
- Herring PDT Meeting December 2, 2010 – review/refine work and develop PDT recommendations
- Draft PDT Discussion Paper presented at December 20, 2010 Herring OS/AP Meeting
- Herring OS/AP discussed in detail but did not finalize recommendations

Catch Cap Analysis

1. Comparison of VTR vs. OBS catch reports
 - To better understand variability associated with expanding catch upwards
2. Expansion of OBS data to generate estimates of RH removals
 - Method 1: RH catch/AH catch
 - Method 2: Trip-Level extrapolation
3. Results – 2005-2009 annual estimates
 - Half years also provided (Jan-June, July-Dec)
 - Three areas – Gulf of Maine; Cape Cod (Statistical Area 521); Southern New England

Estimates of River Herring Removals

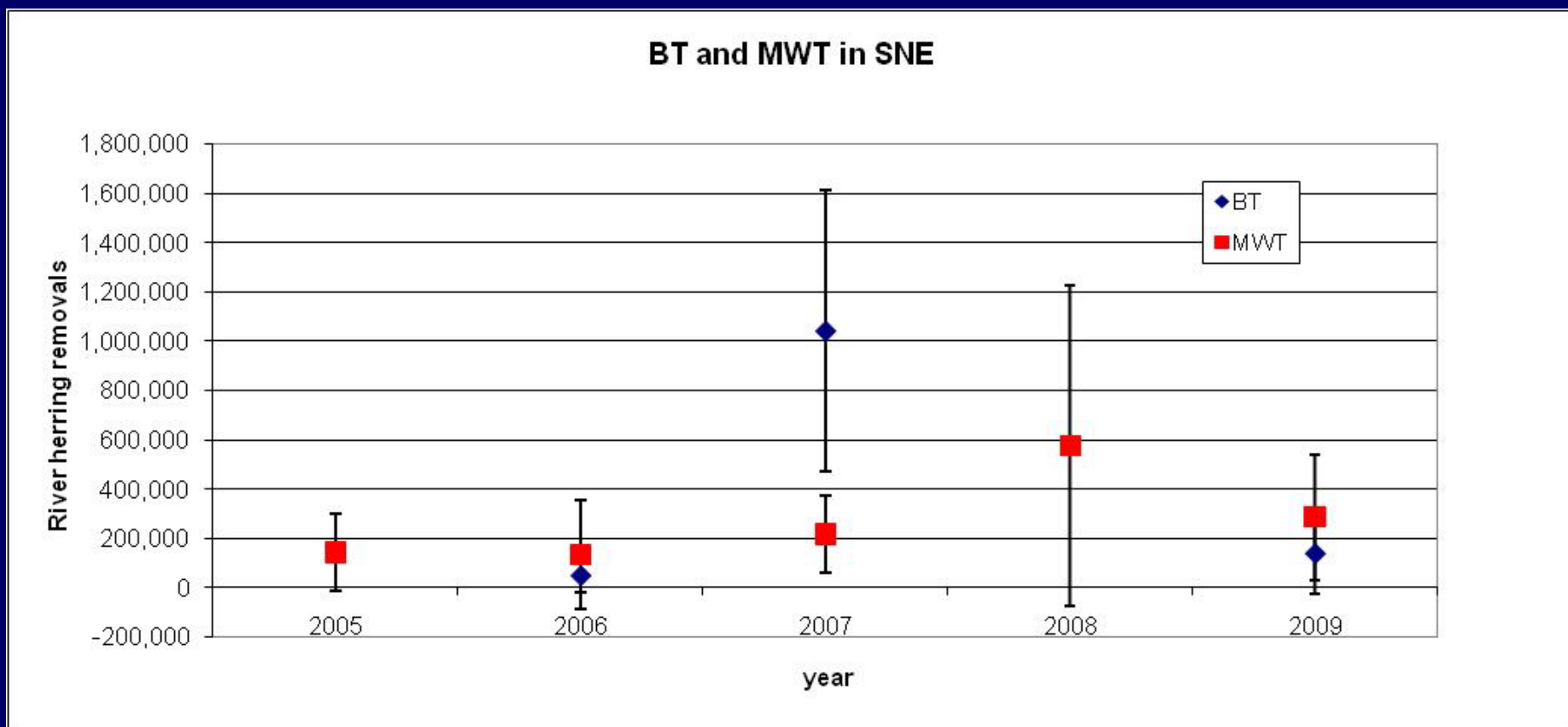
- 2009 more robust (higher coverage, better sampling)
- Removals highest in SNE
- Variability between methods and years makes comparisons less meaningful

2009 Estimates of RH Removals (Lbs, +/- 2 standard errors)

Area	METHOD 1	METHOD 2
CC	200 (-300 to 700)	200 (0 to 400)
GOM	173,900 (17,400 to 330,400)	163,400 (45,700 to 281,000)
SNE	422,100 (118,200 to 726,000)	603,300 (253,400 to 953,200)

Herring PDT Findings

- Removals by bottom trawl sector are of concern (smaller amounts but more frequent and consistent)
- 2005-2009 RH removals by bottom trawls in SNE – 48% of total, but only 16% of herring landings in SNE



Herring PDT Concerns

- Lack of specific goal/objective for catch cap
- Inability to relate cap to river herring population, mortality, or a reference point without a stock assessment
- Inability to accurately estimate river herring removals (and consequences of setting cap too high or too low)
- Inability to predict changes in fishing effort and river herring catch that may result from catch cap

Herring PDT Consensus

Given the variability, uncertainty, and challenges associated with sampling the Atlantic herring fishery, the Herring PDT cannot generate a precise enough estimate of river herring catch on which to base a cap. There may be some utility in applying a river herring catch estimate to trigger increased monitoring or other management approaches. However, the Herring PDT does not recommend developing quota-based approaches to river herring bycatch management in Amendment 5. Expected improvements to the catch monitoring program in Amendment 5 and completion of the forthcoming coast-wide river herring stock assessment by ASMFC may create the necessary link between the cap and some measure of river herring stock status or reference point, as well as the mechanisms to monitor a cap. Other management approaches under consideration in this amendment (catch monitoring and hotspot alternatives) are more appropriate to consider at this time to address bycatch to the extent practicable.

River Herring – Outstanding Issues

“MAJOR”

May preclude completion of Draft EIS; must be addressed during development of range of alternatives and/or early during DEIS preparation

Consideration of additional options for monitoring/avoidance alternative? (not required, but range of options must be finalized for DEIS)

Consideration of additional options for protection alternative? (not required, but range of options must be finalized for DEIS)

Move-Along Options – not feasible from an administrative/enforcement/compliance perspective; overly burdensome and complicated

Category D (Open Access) Permit Holders– Council should clarify which management measures will apply to Category D (open access) permit holders

River Herring – Outstanding Issues

“MINOR”

Should not preclude development of Draft EIS but must be addressed during DEIS development, prior to approval/public hearings

Details of Two-Phase Bycatch Avoidance Approach Based on SFC/SMAST/DMF Project

Management Coordination (NEFMC/MAFMC/ASMFC) and Overlap with Atlantic Mackerel Fishery

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Access to Groundfish Closed Areas

- Section 7.0, p. 89
- Five alternatives under consideration
 1. No Action (Status Quo)
 2. Status Quo (prior to Closed Area I provisions)
 3. 100% Observer Coverage
 4. Apply Closed Area I Sampling Provisions
 5. Closed Areas
- Council should consider which vessels would be subject to these provisions in Amendment 5 (midwater trawl only? permit categories?)
- Closed Area I provisions should be clarified

Groundfish Closed Area Access – Outstanding Issues

“MAJOR”

May preclude completion of Draft EIS; must be addressed during development of range of alternatives and/or early during DEIS preparation

Clarification regarding which herring vessels may be subject to the proposed criteria/provisions

Consideration of additional alternatives? (not required, but range of alternatives must be finalized for DEIS)

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Measures to Protect Spawning Fish

- Added to the Amendment 5 document as part of 2010 priorities
- Committee generally discussed this issue at the September 1-2 meeting (catch monitoring and river herring measures were top priority)
- No goals/objectives identified yet; no specific management alternatives have been developed
- See Draft Herring PDT Discussion Paper (January 2011)
- Council should consider if/how to move forward with developing alternatives to address this issue in Amendment 5

Spawning Measures – Outstanding Issues

Measures to Protect Spawning Fish (Section 8.0)

Measures/Options	Section	Goal/Obj	Ready for Draft EIS	Comments
Measures to Protect Spawning Fish	8.0		NO	Council has not identified specific goals/objectives to address this issue; Herring Committee has not discussed this issue in detail; see Draft Herring PDT Discussion Paper <i>Summary of Available Information and Management Approaches to Address Spawning Atlantic Herring (January 2011)</i>

Herring PDT Work in Progress

- Working group to review/discuss data issues, resolve portside sampling/observer variability and develop recommendations
- Portside sampling protocols (discuss/develop with States/ASMFC TC)
- Analysis of observer coverage (seasonality/accuracy)
- Develop model to evaluate costs of spatial management/closed areas
- Draft EIS development/supporting analysis

A5 Timeline – What's Next?

- Committee – pare down measures under consideration, address outstanding issues, identify RH alternatives and spawning measures now – January 2011
- Council – approve “range of alternatives” for development into Draft EIS January 2011
- Draft EIS prepared for June or September 2011 Council meeting
- Amendment 5 Public Hearings August or November 2011
- Final selection of measures September/November 2011 or January 2012
- Completion/submission ASAP