Industry-Funded Monitoring Omnibus Amendment

Mackerel Coverage Target Alternatives

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Purpose and Need

- Allow Councils to implement IFM programs with available Federal funding
- Allow Councils and NMFS to prioritize available Federal funding among FMPs
- Establish monitoring coverage targets for the herring and mackerel fisheries

Goals of Monitoring

Increased monitoring in the mackerel fishery address the following goals:

- Accurate estimates of catch (retained and discarded),
- Accurate catch estimates for incidental species for which catch caps apply, and
- Effective and affordable monitoring for the mackerel fishery

Gear Type	MWT	SMBT	SMBT	SMBT
Permit Categories	All Tiers	Tier 1	Tier 2	Tier 3
Alt 1: No Coverage Target for IFM Programs (No Action)	SBRM	SBRM	SBRM	SBRM
Alt 2: Coverage Targets Specified for IFM Programs -- On trips that land > than 20,000 lb of mackerel Includes Sub-Options: (1) Waiver Allowed, (2) Wing Vessel Exemption, (3) 2 Year Sunset, (4) 2 Year Re-Evaluation, and (5) 25 mt threshold				
Alt 2.1: NEFOP-Level Coverage	100% NEFOP	100% NEFOP	50% NEFOP	25% NEFOP
Alt 2.2: ASM Coverage	25% - 100% ASM	25% - 100% ASM	SBRM	SBRM
Alt 2.3: Combination Coverage	EM & Portside	25% - 100% ASM	SBRM	SBRM
Alt 2.4: EM and Portside Coverage	EM & Portside	SBRM	SBRM	SBRM

Coverage Target Considerations

- Type of information collected and program cost are two major considerations with industry-funded monitoring
- Benefits of increased monitoring should equal or outweigh the costs of monitoring
- If Sub-Option 1 is not selected and fishing effort is reduced to match available monitoring, ability of the fishery to harvest mackerel may be limited

How Current Mackerel Data Used

- Dealer data are used to estimate landed catch
- SBRM Observer data are used to estimate mackerel discards
- SBRM Observer data are used to estimate the catch of river herring and shad and track catch against catch caps

Summary of Biological Impacts of Mackerel Coverage Target Alternatives

- Mackerel Alternative 1 – Low Positive
- Mackerel Alternative 2 – Positive
  - Catch and bycatch data collected - Positive
  - Just bycatch data collected - Low Positive
  - Coverage allocated by permit - Low Positive
  - Coverage allocated by fleet - Positive

Updated Economic Analysis

- Previous economic analysis was based on NEFOP data
- Concern that NEFOP data on trip costs underestimated vessel costs
- A survey was offered to mackerel and herring vessels to collect more detailed cost information
- Survey requested information on total trips cost in 2014
- Surveys were completed for 16 of the 26 selected vessels

Estimates of Trip Costs

Cost Category	Average Percent of 2014 Gross Revenue for Mackerel and Herring Vessels	Average Percent of 2014 Gross Revenue for Squid Vessels
Variable Costs	25%	35%
Crew Share	28%	26%
Repair, Maintenance, Upgrades, Haulout (RMUH)	13%	11%
Fixed Costs	19%	21%
Return to Owner (RTO)	15%	7%

Estimates of Monitoring Costs

	NMFS Cost per Seaday	Industry Cost per Seaday
NEFOP-Level Observer	$479	$818
At-Sea Monitor	$530	$710
Electronic Monitoring	Year 1: $36,000 startup + $97 per seaday Year 2: $97	Year 1: $15,000 startup + $325 per seaday Year 2: $325
Portside	$479-$530	$0.002/lb ($5.12 per mt)

Estimated Impacts on Paired MWT Trips

	Gear Type	Paired MWT – Mackerel			
	Return-to-owner (RTO)	$213,005 to 204,514		Seadays	
Alternative	Potential reduction to RTO from coverage	> 20,000 lb	> 25 MT	> 20,000 lb	> 25 MT
2.1	100% NEFOP-level	5.0%	4.1%	13	11
2.2	100% ASM	4.3%	3.6%	13	11
	75% ASM	3.4%	2.8%	10	8
	50% ASM	2.4%	2.0%	7	6
	25% ASM	1.6%	1.4%	5	4
2.3	EM/Portside Year 1	11.1%	10.5%	13	11
	EM/Portside Year 2	3.7%	3.5%	13	11
2.4	EM/Portside Year 1	11.1%	10.5%	13	11
	EM/Portside Year 2	3.7%	3.5%	13	11

Estimated Impacts on Single MWT and SMBT Vessels

	Gear Type	Single MWT and SMBT - Mackerel			
	Return-to-owner (RTO)	$141,169 to $134,205	$149,714 to $141,169	Seadays	
Alternative	Potential reduction to RTO from coverage	> 20,000 lb	> 25 MT	> 20,000 lb	> 25 MT
2.1	100% NEFOP-level	4.6%	3.4%	14	13
	50% NEFOP-level	No mackerel landings > 20,000 lbs by SMBT Tier2 vessels			
	25% NEFOP-Level	No mackerel landings > 20,000 lbs by SMBT Tier3 vessels			
2.2	100% ASM	4.0%	3.0%	14	13
	75% ASM	3.2%	2.5%	11	11
	50% ASM	2.5%	2.1%	9	9
	25% ASM	1.9%	1.7%	7	7
2.3	EM/Portside Year 1	8.4%	7.5%	10	9
	EM/Portside Year 2	3.0%	2.8%	10	9
	25% - 100% ASM	Cannot show SMBT values due to data confidentiality			
2.4	EM/Portside Year 1	8.4%	7.5%	10	9
	EM/Portside Year 2	3.0%	2.8%	10	9

Estimated Impacts on Herring Paired MWT Vessels

	Gear Type	Paired MWT - Herring			
	Return-to-owner (RTO)	$163,080		Seadays	
Alternative	Potential reduction to RTO from coverage	≥ 1 lb	> 25 MT	≥ 1 lb	> 25 MT
2.1	100% NEFOP-level	51.6%	41.5%	103	83
2.2	100% ASM	44.9%	36.1%	103	83
	75% ASM	33.7%	27.1%	77	62
	50% ASM	22.6%	18.1%	52	42
	25% ASM	11.4%	9.2%	26	21
2.3	EM/Portside Year 1	43.3%	39.3%	103	83
	EM/Portside Year 2	35.1%	30.1%	103	83
	100% ASM	N/A			
	75% ASM				
	50% ASM				
	25% ASM				
2.4	EM/Portside Year 1	43.3%	39.3%	103	83
	EM/Portside Year 2	35.1%	30.1%	103	83

Estimated Impacts on Herring Single MWT Vessels

	Gear Type	Single MWT - Herring			
	Return-to-owner (RTO)	$141,169 to $134,205	$149,714 to $141,169	Seadays	
Alternative	Potential reduction to RTO from coverage	≥ 1 lb	> 25 MT	≥ 1 lb	> 25 MT
2.1	100% NEFOP-level	16.3%	11.2%	28	19
2.2	100% ASM	14.2%	9.7%	28	19
	75% ASM	10.6%	7.3%	21	15
	50% ASM	7.2%	5.0%	14	10
	25% ASM	3.9%	2.8%	8	6
2.3	EM/Portside Year 1	23.7%	20.3%	23	17
	EM/Portside Year 2	12.5%	10.3%	23	17
	100% ASM	N/A			
	75% ASM				
	50% ASM				
	25% ASM				
2.4	EM/Portside Year 1	23.7%	20.3%	22	17
	EM/Portside Year 2	12.5%	10.3%	22	17

Estimated Impacts on Herring SMBT Vessels

	Gear Type	SMBT - Herring			
	Return-to-owner (RTO)	$200,564 to $139,994	$200,564 to $163,329	Seadays	
Alternative	Potential reduction to RTO from coverage	≥ 1 lb	> 25 MT	≥ 1 lb	> 25 MT
2.1	100% NEFOP-level	12.1%	9.8%	21	20
2.2	100% ASM	10.5%	8.5%	21	20
	75% ASM	8.1%	6.4%	16	15
	50% ASM	5.9%	4.4%	12	10
	25% ASM	3.9%	2.8%	8	6
2.3	EM/Portside Year 1	N/A			
	EM/Portside Year 2				
	100% ASM	9.8%	7.6%	21	20
	75% ASM	7.6%	5.8%	16	13
	50% ASM	5.6%	4.1%	11	9
	25% ASM	3.8%	2.6%	8	6
2.4	EM/Portside Year 1	N/A			
	EM/Portside Year 2				

Conclusions of Economic Analysis

- Potential reduction to RTO is driven by monitoring costs and number of seadays
- EM and Portside can be less expensive than Observers and ASM in Year 2 but not Year 1
- Exempting trips that catch < 25 mt of mackerel reduces monitoring costs, up to 30% for Mackerel Alternatives 2.1 and 2.2 and up to 23% for Mackerel Alternatives 2.3 and 2.4
- Annual revenue sources differ across gear types, between 25% - 65% is not from mackerel

Possible Ways to Reduce Cost of Mackerel Alternative 2.4

- Reduce the amount of EM footage recorded, record only around haulback rather than throughout trip
- Reduce the amount of EM footage review, less than 100%
- Reduce the portside sampling coverage, less than 100%

Monitoring Set-Aside Alternative

- Include as an omnibus alternative to allow individual FMPs to establish a monitoring set-aside via future framework adjustment
- Example:
  - Reserve X% of ACL
  - If a vessel is selected to carry an observer, then vessel granted a certain amount of extra lbs to land above possession limit
  - Revenue from sale of extra fish helps offset cost of observer
- No direct or indirect biological or economic impacts associated with establishing a process to establish a monitoring set-aside

Important considerations for Monitoring Set-Asides

- Value of Resource
- Management measures and fishery operations
- ACL allocation within fishery
- Shared Burden/Benefit
- Availability of resources
- Enforcement issues

Framework process for Implementing a Monitoring Set-Aside

Details for set-aside program would be developed in a subsequent framework or amendment to FMPs, and should include:

1. The basis for the monitoring set-aside;
2. The amount of the set-aside (e.g., quota)
3. How the set-aside is allocated to vessels paying for monitoring (e.g., an increased trip limit, additional trips, an allocation of the quota);
4. The process for vessel notification;
5. How funds are collected and administered from the industry; and
6. Any other necessary measures.

Future action would implement and analyze biological and economic impacts of a monitoring set-aside.

Timeline

Dates	Meeting/Deadline	Action
September 2015	Herring and Observer Policy Committee Meetings	
September 11, 2015	NEFMC Briefing book deadline	Revised EA
September 29, 2015	NEFMC Meeting	NEFMC reviews updated analysis of alternatives
October 8, 2015	MAFMC Meeting	MAFMC reviews updated analysis of alternatives
January 26-28, 2016	NEFMC Meeting	NEFMC considers selecting preferred alternatives and recommending EA for public comment
February 9-11, 2016	MAFMC Meeting	MAFMC considers selecting preferred alternatives and recommending EA for public comment
April 2016		30-day public comment period