

# Northeast Multispecies (Groundfish)

## Draft Amendment 23/Groundfish Monitoring

*Council Staff*

**AP/Cmte Meeting**  
**January 21/23, 2020**  
**Wakefield, MA**



# For Today

1. Review updates from December Council meeting – **NO ACTION NEEDED**
  - Vessel specific coverage levels added as framework item (4.1.5).
  - Clarify that a process will be used for setting and evaluating EM video review rates – Council supports GARFO guidance for audit model EM.
2. Review draft analysis and potentially select preliminary preferred alternatives – **POSSIBLE MOTION(S)**

# Amendment 23 Meeting Documents

## Draft Amendment 23

- 3a. Part 1 – Sections 1-5 and Section 8  
Background, Alternatives, Glossary of key terms
- 3b. Part 2 – Section 6 - Affected Environment
- 3c. Part 3a – Section 7 – Biological and Physical Impacts
- 3d. Part 3b - Section 7 – Economic and Social Impacts
- 3e. Part 4 – Appendices
- 3f. Draft decision document
- 3g. Presentation – Council staff
- 3h. Presentation – NMFS and Council staff
- 3i. Presentation – NMFS and Council staff

# A23 Timeline - Milestones

Date	Action
January 23, 2020	Committee meeting - review Draft A23 and potentially select preliminary preferred alternative recommendations.
January 29, 2020	NEFMC reviews Draft A23 and votes whether to submit to NMFS for publication and public comment, potentially selects preliminary preferred alternatives.
Spring 2020	Public Comment Period and Public Hearings.
Mid June 2020	Committee meeting - review public comments and recommend final recommendations.
June 24, 2020	NEFMC final vote on A23 and whether to submit to NMFS for publication and public comment.
Fall 2020	Public Comment Period on A23 proposed rule.
Winter 2021	Final decision on A23 and final rule published.

# A23 Goals and Objectives

## Goals of the GF Monitoring Program

1. Improve documentation of catch
2. Reduce cost of monitoring
3. Incentivize reducing discards
4. Provide additional data streams for stock assessments
5. Enhance safety of monitoring program
6. Perform periodic review of monitoring program effectiveness.

## Goal of Amendment 23

Goal – Maintain current goals but better address Goal #1: *improve documentation of catch (or catch accounting)*.

Objectives – 1) determine total catch and effort; 2) achieve coverage level sufficient to minimize effects of potential monitoring bias to the extent possible while maintaining as much flexibility as possible to enhance fleet viability.

# A23 Alternatives

4.1.1	Sector monitoring standard (target coverage level)
4.1.1.1	Option 1 (No Action)
4.1.1.2	Option 2 (Fixed total at-sea monitoring coverage level based on <u>% of trips</u> ) (25%-100% sub-options)
4.1.1.3	Option 3 (Fixed total at-sea monitoring coverage level based on <u>% of catch</u> ) (25%-100% sub-options)

**Note 1: Option 3 text has been clarified (p.18 of Doc.#3a)**

*Background on simulation work added – to achieve target % of catch, overall coverage must be higher. In practice, would monitor % of trips and would require annual review to verify % of total catch for each stock is monitored.*

# A23 Alternatives (cont.)

4.1.2	Sector monitoring tools (options for meeting monitoring standards)
4.1.2.1	Option 1 – EM in place of human at-sea monitors
4.1.2.2	Option 2 – Approve use of Audit model EM
4.1.2.3	Option 3 – Approve use of Maximized retention EM

**Note 2: Option 2 updated to reflect Dec. motion (p. 20 of Doc# 3a)**  
*NMFS has ultimate authority to set EM video review rate, alternative supports initial rates provided in NMFS guidance.*

# A23 Alternatives (cont.)

4.1.3	Total Monitoring Coverage Level Timing
4.1.3.1	Option 1 (No Action)
4.1.3.2	Option 2 –Knowing coverage level at a time certain
4.1.4	Review process for sector monitoring coverage
4.1.4.1	Option 1 (No Action)
4.1.4.2	Option 2 – Establish review process
4.1.5	Addition to list of framework items

**Note 3: Section 4.1.5 updated to reflect Dec. motion (p. 24 of Doc# 3a)**  
*Vessel specific coverage levels would be added to the list of framework items – future action could consider.*



# A23 Alternatives (cont.)

4.2	Commercial Groundfish Monitoring Program Revisions
4.2.1	Dockside monitoring program (DSM) (Sectors + Common Pool)
4.2.1.1	DSM Option 1 (No Action)
4.2.1.2	DSM Option 2 – Mandatory DSM for entire commercial fishery
4.2.2	Dockside monitoring program structure and design
4.2.2.1	DSM funding responsibility (Option A – dealer and Option B – vessel)
4.2.2.2	DSM program administration (Option A – contracts with providers, Option B – NMFS admin.)

Note 4: Some vessels are currently not required to carry at-sea monitors (e.g. ELM), under Option 2, these vessels would be required to have DSM (p. 25 of Doc# 3a).

*Option 2 would apply to all gf vessels, could decide to remove vessels from DSM based on fishing location under different alternatives (Section 4.6).*

# A23 Alternatives (cont.)

4.2.2.3	Options for lower DSM coverage levels (20% coverage)
4.2.2.3.1	Option A –for ports with low volume of gf landings
4.2.2.3.2	Option B –for vessels with total gf landings in 5 <sup>th</sup> percentile
4.2.2.4	Options for DSM safety and liability associated with fish hold
4.2.2.4.1	Option A – DSM fish hold inspections required
4.2.2.4.2	Option B – Approve use of cameras
4.2.2.4.3	Option C – No fish hold inspection, captain signs affidavit

**Note 5: Option A for lower DSM coverage clarified – final list of major ports equals nine – all others at lower coverage level (p. 28 of Doc# 3a)**  
*Cmte expanded list from original 5<sup>th</sup> percentile list (top 4 ports) to address concerns about landings of individual stocks (Figures 25 & 26 on p.57-58 in Doc#3c).*

# Alternatives (cont.)

<b>4.3</b>	<b>Sector Reporting</b>
4.3.1	Option 1 (No Action)
4.3.2	Option 2 – RA authority to streamline
<b>4.4</b>	<b>Funding/Operational provisions of gf monitoring program</b>
4.4.1	Option 1 (No Action) – Industry pays
4.4.2	Option 2 – Provisions for an increase or decrease in funding
4.4.2.1	Sub-option 2A – Higher coverage levels if NFMS funds available (Sectors Only)
4.2.2.2	Sub-option 2B – waivers for monitoring requirements allowed (Sectors and Common Pool)

# Alternatives (cont.)

4.5	Management uncertainty buffers for the commercial groundfish fishery (Sectors only)
4.5.1	Option 1 (No Action) <i>(Table 1 on p. 35 of Doc #3a)</i>
4.5.2	Option 2 – Elimination of management uncertainty buffer for Sector ACLs with 100% monitoring of all sector trips

# Alternatives (cont.)

4.6	Remove commercial groundfish monitoring program requirements for certain vessels fishing under certain conditions
4.6.1	Option 1 (No Action) – maintain existing measures that remove some vessels from coverage requirements
4.6.2	Option 2 – Vessels fishing exclusively west of <u>72 30 W</u> would not be subject to monitoring requirements on trips in that area
4.6.2.1	Option 2A (Remove at-sea monitoring requirements) (Sectors only)
4.6.2.2	Option 2B (Remove dockside monitoring requirements) (Sectors and Common Pool)
4.6.3	Option 3 – Vessels fishing exclusively west of <u>71 30 W</u> would not be subject to monitoring requirements on trips in that area
4.6.3.1	Option 3A (Remove at-sea monitoring requirements) (Sectors only)
4.6.3.2	Option 3B (Remove dockside monitoring requirements) (Sectors and Common Pool)
4.6.4	Review process for vessels removed from commercial groundfish monitoring program requirements
4.6.4.1	Option 1 (No Action)
4.6.4.2	Option 2: Implement a review process

# Valued Ecosystem Components (VECs)

- Biological – regulated groundfish and other species
- Essential fish habitat
- Endangered and protected species
- Economic and social (human communities)

# Biological and Physical Impacts

- **Approach for gf resource**

- 4 initial analyses prepared to evaluate aspects of gf monitoring program. SSC reviewed in April 2019.
- Impact of different coverage rates and bias on gf catch.
- Explored potential magnitude of missing catch (GOM cod example).

- **Approach for EFH**

- Indirect, related to whether change in monitoring system influences magnitude or location of effort.

- **Approach for protected resources**

- Indirect, monitoring provides additional info on interactions. Any expected change in effort could have direct impacts.

# Economic and Social Impacts

- 3 components for adjustments to sector program and buffers
  1. Quantitative *static* costs
  2. Quantitative *dynamic* costs
  3. Qualitative assessment of risk of non-compliance and enforcement
- 2 models used:
  - cost efficiency model – quantifies costs from existing pilots
  - quota change model – (QCM) analyzes combination of measures; models fishery-wide behavioral changes from A23 measures.
- Impacts for 6 metrics: gross revenues, costs, profits, etc.
- Impacts not uniform – summarized by days absent, homeport, vessel size and sector.



# Economic and Social Impacts

- Additional *blended* dynamic analysis – model vessel’s selection into one of the 3 possible tools.
- For buffers – higher sub-ACLs put in QCM for 3 scenarios: human observers only, blended EM options without subsidy and blended EM options with subsidy.
- A subsidy scenario was considered to account for possible funding support.
- Econ analyses have “No Action” (industry funded) and “Status Quo” (federal compensation) runs.

# Economic and Social Impacts

- Dockside monitoring: quantitative static costs and qualitative assessment of risk of non-compliance.
- Various assumptions about offload times etc. incorporated.
- Specific analyses completed for alternatives that would remove monitoring requirements for certain vessels that fish in certain locations in SNE/MA only.
- Social impacts – Qualitative assessment based on 6 social factors, crew survey results incorporated.

**Break**

**Move to Economic Impact Presentations**

***Chad Demarest, NEFSC***

***Melissa Errend, NEFMC***

# Draft Decision Document (Doc. #3f)

- Purpose and Need – Goals of A23 (p.1)
- Table 1 – Summary of alternatives (p.2-6)–*see Sec. 4.0*
- Summary of methods for impact analyses
  - Bio and Physical impacts – p.7
  - Eco and Social impacts – p. 8-10
- What is No Action GF Monitoring program (p. 11)
- Table 2 – Summary of impacts – *See Sec. 7.0*  
*Does not capture everything – high points only*
- Following slides boil that down even further

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.1.1	Sector monitoring standard (target coverage level)		
4.1.1.1	Option 1 (No Action)	--	<b>Cost: o/--</b> <b>C&amp;E: --</b>
4.1.1.2	Option 2 (Fixed target based on <u>% of trips</u> ) (25%-100% sub-options)	<b>o/++</b>	<b>Cost: o/--</b> <b>C&amp;E: +/+++</b>
4.1.1.3	Option 3 (Fixed target based on <u>% of catch</u> ) (25%-100% sub-options)	<b>+ / ++</b>	<b>Cost: -/--</b> <b>C&amp;E: +/+++</b>

+++ is high positive

++ is positive

+ is low positive

0 is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.1.2	Sector monitoring tools (options for meeting monitoring standards)		
4.1.2.1	Option 1 (EM in place of human at-sea monitors)	0	Cost: -- C&E: --
4.1.2.2	Option 2 (Audit Model EM)	++	Cost: --/--- C&E: +++
4.1.2.3	Option 3 (Maximized Retention EM)	++	Cost: --/--- C&E: +++

+++ is high positive  
 ++ is positive  
 + is low positive

0 is neutral

--- is high negative  
 -- is negative  
 - is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.1.3	Total Monitoring Coverage Level Timing		
4.1.3.1	Option 1 (No Action)	o	Cost: -
4.1.3.2	Option 2 (Knowing coverage level at a time certain)	o	Cost: indirect ++
4.1.4	Review process for sector monitoring coverage		
4.1.4.1	Option 1 (No Action)	o	Cost: o
4.1.4.2	Option 2 (Establish review process)	indirect ++	Cost: ++
4.1.5	Addition to list of framework items	o	Cost: o

+++ is high positive

++ is positive

+ is low positive

o is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.2.1	Dockside Monitoring Program (DSM) (Sectors + Common Pool)		
4.1.2.1	Option 1 (No Action)	--	<b>Cost: 0</b> <b>C&amp;E: --</b>
4.1.2.2	Option 2 (Mandatory DSM program for commercial groundfish fishery)	++	<b>Cost: -</b> <b>C&amp;E: ++</b>

+++ is high positive  
 ++ is positive  
 + is low positive

0 is neutral

--- is high negative  
 -- is negative  
 - is low negative



# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.2.2	Dockside monitoring program structure and design		
4.2.2.1	DSM funding responsibility		
4.2.2.2.1	Option A (dealer funded)	o	<b>Cost: uncertain</b> <b>C&amp;E: o</b>
4.2.2.2.2	Option B (vessel funded)	o	<b>Cost: uncertain</b> <b>C&amp;E: o</b>
4.2.2.2	DSM program administration		
4.2.2.2.1	Option A (contracts with providers)	o	<b>Cost: o/+</b> <b>C&amp;E: o</b>
4.2.2.2.2	Option B (NMFS administered program)	o	<b>Cost: o/-</b> <b>C&amp;E: o</b>

+++ is high positive

++ is positive

+ is low positive

o is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.2.2.3	Options for lower DSM coverage levels (20% coverage)		
4.2.2.3.1	Option A (for ports with low volume of gf landings)	++	<b>Cost: -</b> <b>C&amp;E: +/++</b>
4.2.2.3.2	Option B (for vessels with total gf landings in 5 <sup>th</sup> percentile)	++	<b>Cost: -/--</b> <b>C&amp;E: +/++</b>
4.2.2.4	Options for DSM safety and liability associated with fish hold		
4.2.2.4.1	Option A (DSM fish hold inspections required)	++	<b>Cost: -</b> <b>C&amp;E: +</b>
4.2.2.4.2	Option B (Approve use of cameras)	+ / ++	<b>Cost: 0/--</b> <b>C&amp;E: +</b>
4.2.2.4.3	Option C (No fish hold inspection, captain signs affidavit)	+	<b>Cost: 0/+</b> <b>C&amp;E: --</b>

+++ is high positive

++ is positive

+ is low positive

0 is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.3	Sector Reporting		
4.3.1	Option 1 (No Action)	o	Cost: o/-
4.3.2	Option 2 (RA authority to streamline)	o	Cost: o/+

+++ is high positive

++ is positive

+ is low positive

o is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.4	Funding/Operational provisions of gf monitoring program		
4.4.1	Option 1 (No Action)	<b>o</b>	<b>Cost: o/---</b>
4.4.2	Option 2 (Provisions for an increase or decrease in funding)		
4.4.2.1	Sub-option 2A (Higher coverage levels if NFMS funds available)	<b>indirect ++</b>	<b>Cost: o/+++</b>
4.2.2.2	Sub-option 2B (Waivers for monitoring requirements allowed)	<b>indirect -</b>	<b>Cost: ++</b>

+++ is high positive

++ is positive

+ is low positive

**o** is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.5	Management uncertainty buffers for the commercial groundfish fishery (Sectors only)		
4.5.1	Option 1 (No Action)	o/+	<b>Cost: o/-</b> <b>C&amp;E: o/-</b>
4.5.2	Option 2 (Elimination of management uncertainty buffer for sector ACLs with 100% monitoring of all sector trips)	-/++	<b>Cost: -/--</b> <b>C&amp;E: +++</b>

+++ is high positive

++ is positive

+ is low positive

0 is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.6	Remove commercial gf monitoring program requirements for certain vessels fishing under certain conditions		
4.6.1	Option 1 (No Action)	-	<b>Cost: +</b> <b>C&amp;E: o/-</b>
4.6.2	Option 2 (Vessels fishing exclusively west of <u>72 30 W</u> would not be subject to monitoring requirements on trips in that area)		
4.6.2.1	Option 2A (Remove at-sea monitoring requirements) (Sec	-	<b>Cost: o</b> <b>C&amp;E: o/++</b>
4.6.2.2	Option 2B (Remove dockside monitoring requirements)	-	<b>Cost: +/++</b> <b>C&amp;E: --</b>

+++ is high positive

++ is positive

+ is low positive

0 is neutral

--- is high negative

-- is negative

- is low negative

# Summary of Impacts

	Alternative	Biological impacts (regulated groundfish)	Economic and social impacts
4.6.3	Option 3 – Vessels fishing exclusively west of <u>71 30 W</u> would not be subject to monitoring requirements on trips in that area		
4.6.3.1	Option 3A (Sectors only)	-	<b>Cost: +</b> <b>C&amp;E: o/--</b>
4.6.3.2	Option 3B (Sectors and Common Pool)	-	<b>Cost: +/++</b> <b>C&amp;E: --</b>
4.6.4	Review process for vessels removed from commercial groundfish monitoring program requirements		
4.6.4.1	Option 1 (No Action)	<b>o</b>	<b>indirect --</b>
4.6.4.2	Option 2: Implement a review process	<b>indirect ++</b>	<b>Cost: o</b> <b>C&amp;E: o/+</b>

+++ is high positive

++ is positive

+ is low positive

**o** is neutral

--- is high negative

-- is negative

- is low negative

# For Today

1. Review updates from December Council meeting – **NO ACTION NEEDED**
  - Vessel specific coverage levels added as framework item (4.1.5).
  - Clarify that a process will be used for setting and evaluating EM video review rates – Council supports GARFO guidance for audit model EM.
2. Review draft analysis and potentially select preliminary preferred alternatives – **POSSIBLE MOTION(S)**