

directly from vessels in their reports. Data reconciliation occurs regularly between the sectors and NMFS to improve monitoring accuracy.

A more efficient process might be developed that would still involve timely monitoring and reconciliation of data sources between sectors and NMFS. If deemed sufficient by the Regional Administrator, an alternative to the process currently prescribed in the regulations may satisfy the need to:

- Summarize trips validated by dealer reports;
- Oversee the use of electronic monitoring equipment and review of associated data;
- Maintain a database of VTR, dealer, observer, and electronic monitoring reports;
- Determine all species landings by stock areas;
- Apply discard estimates to landings;
- Deduct catch from ACEs allocated to sectors; and
- Determine sector catch and ACE balances.

Additional changes to streamline sector reporting could include such items as¹:

- Using NMFS reconciled data to determine when the trigger for sector daily catch reporting has been reached (required when 90 percent of any ACE has been caught), rather than using sector self-reported data. As described above, sector data is not any timelier and the reconciled data is more accurate, so using NMFS reconciled data would be more efficient and reliable than relying solely on sector reports.
- Modifying trip end hauls to accommodate catch reporting and to eliminate redundancy.

Rationale: Streamlining the sector reporting process would reduce reporting redundancies, provide flexibility to sectors and sector managers, and improve timeliness of data processing.

4.1.1.2 Knowing the Total Monitoring Coverage Level at a Time Certain

4.1.1.2.1 Option 1: No Action

The timeline for when total monitoring coverage level information is available has varied throughout the years of the groundfish monitoring program (Table 1). Currently, NMFS publishes the total monitoring coverage level once the necessary analysis is completed. Typically, analysis to determine the at-sea monitoring (ASM) coverage level is available sooner than the Standardized Bycatch Reporting Methodology (SBRM) analysis used to determine the Northeast Fisheries Observer Program (NEFOP) coverage level.

Current regulations set December 1 as the deadline for sectors to submit preliminary rosters, but give NMFS flexibility to set other dates. For example, in FY 2013, managers asked for a later date, and they agreed on March 29, 2013. Beginning in FY 2014, NMFS established a standard deadline of four weeks after potential sector contribution (PSC) letters are sent out, although in several years, there have been agreed-upon extensions.

¹ These items were initially included in a letter from NMFS to the Council: “Bullard to NEFMC re sector reporting streamlining”, dated August 14, 2013.

Table 1 - Target and realized observer (NEFOP and ASM) coverage levels for the groundfish fishery and dates when analyses to determine coverage rates available for Fishing Years 2010-2018 (GARFO 2017). “n/a” indicates that the information is not available.

Fishing Year	NEFOP target coverage level	ASM target coverage level	Total target coverage level	Realized coverage level	Date analysis posted by GARFO to determine total coverage rate	Date total coverage rate announced	Date sector rosters were due
FY 2010	8 %	30 %	38 %	32 %			
FY 2011	8 %	30 %	38 %	27 %			12/1/2010
FY 2012	8 %	17 %	25 %	22 %			12/1/2011
FY 2013	8 %	14 %	22 %	20 %	4/12/2013	3/14/2013	3/29/2013
FY 2014	8 %	18 %	26 %	25.7%	2/21/2014	2/18/2014	3/6/2014
FY 2015	4 %	20 %	24 %	19.8%	3/2/2015	2/26/2015	2/25/2015
FY 2016	4 %	10 %	14 %	14.8%	5/6/2016	3/22/2016	3/15/2016
FY 2017	4 %	12 %	16 %	14.1%	3/15/2017	3/15/2017	3/16/2017
FY 2018	5%	10%	15 %	n/a*	1/25/2018	1/25/2018	3/26/2018
FY 2019	n/a	n/a	31 %		3/28/2019	3/28/2019	3/8/2019

*Realized coverage not available; fishing year still underway.

Source: Summary of analyses conducted to determine at-sea monitoring requirements for multispecies sectors, FY2018, GARFO; and personal communication with GARFO staff

Option 1/No Action would continue the current process of making the total monitoring coverage level available once the necessary analysis is completed.

4.1.1.2.2 Option 2: Administrative Measure for Knowing Total Monitoring Coverage Level at a Time Certain

This measure identifies knowing the target monitoring coverage level at a specific date in advance of the start of the fishing year to facilitate business planning by permit holders and sectors. Groundfish fishery participants need this information in advance of the fishing year in order to decide whether to participate in sectors for the upcoming year and to finalize their business planning. Knowing the target monitoring coverage levels for the upcoming fishing year is also important information for fishery participants to have as sectors negotiate with at-sea monitoring providers. The feasibility of setting a fixed date is related to the method used for setting coverage rates and the desired timeliness of the underlying data used in the analysis.

Certain alternatives for determining target monitoring coverage levels may not require extensive analysis to determine target coverage levels for the upcoming fishing year. For example, alternatives for fixed target coverage levels would provide sectors a clear understanding of the target monitoring coverage level for upcoming years. However, alternatives that base the coverage rate on an analysis of past years' data must trade off timeliness of the data available in time to complete the analysis by the deadline. This includes the current coefficient of variation (CV) method for determining total coverage levels (section 4.2.2.1.1 Option 1/No Action). A desire to know the total monitoring coverage level at an earlier date will require the use of less recent data in order to complete the analysis by an earlier deadline.

This alternative would consider a time certain for knowing the total monitoring coverage level as a target date of three weeks prior to the annual sector enrollment deadline set by NMFS.

Rationale: Knowing the target monitoring coverage level at a specific date in advance of the start of the fishing year would provide flexibility to groundfish fishery participants by making the necessary information available for participants to decide whether to participate in sectors for the upcoming year, to finalize their business planning, and to negotiate with at-sea monitoring providers.

4.1.1.3 Funding for the Groundfish Monitoring Program

4.1.1.3.1 Option 1: No Action

Beginning in 2012, Amendment 16 required that the at-sea monitoring program would be industry funded. However, since then NMFS has had sufficient funding to be able to pay for all or some of the sampling costs of the groundfish at-sea monitoring program. From FY 2012 through FY 2014, NMFS fully covered the sampling costs of the at-sea monitoring program. In FY 2015, NMFS fully covered sampling costs for the at-sea monitoring program until funds were expended in March 2016, at which point industry became responsible for the cost of at-sea monitoring. From July 2016 through April 2018, NMFS partially reimbursed sector participants for at-sea monitoring costs through a grant with the Atlantic States Marine Fisheries Commission.

Since May 1, 2018, NMFS is reimbursing industry for 100 percent of its at-sea monitoring costs for fishing year 2018, and has set aside additional funds for industry reimbursement for future years. It is anticipated that once these appropriated funds are used, sampling costs of at-sea monitoring would be fully paid for by industry, unless additional NMFS funds are available.

Option 1/No Action would continue to require industry to fund at-sea monitoring costs.

4.1.1.3.2 Option 2: Additional Funding for Increased Monitoring

This alternative, if chosen, would allow for at-sea monitoring at higher coverage levels than the minimum target coverage required, up to 100 percent, provided that NMFS has determined funding is available to cover the additional costs to industry in a given year. The No Action for industry-funded at-sea monitoring costs at the selected minimum target coverage level would remain in place in years in which additional funds to cover industry costs are not available.

Rationale: Monitoring coverage at 100 percent, or as close to 100 percent, increases the accuracy of catch estimates and reduces the potential for bias. Higher coverage levels, even on a limited basis, may inform understanding of the magnitude of bias if present, and inform future actions on the value of higher monitoring coverage levels. Higher levels of coverage require substantial increase in costs, and given that industry is responsible for monitoring costs, pursuing funding from NMFS or other entities to support increased monitoring on a limited term basis could improve cost-effectiveness of the current and future monitoring system over the long term.

